Greenstone Mine
2023 Fish and Fish Habitat
Federal EIS Follow-Up Monitoring Report

(To satisfy Federal EIS Conditions 3.15, 3.16, 3.17, 3.2, 5.4, and 5.5.1)

HP-MG003-EV-136-0053_0

December 28, 2023

Date	Rev	Status		Prepared By	Checked By	Approved By
12/28/2023	**0**		Signature:	N/A	N/A	<original signed by>
			Name:	Stantec	Stantec	Kendra Button Greenstone Mine

Table of Contents

1 Introduction 8
1.1 Goldfield Creek Realignment Channel 9
1.2 Purpose 9
2 Follow-Up Monitoring 10
2.1 Erosion and Sediment Control 10
2.2 Surface Water Quality 12
2.2.1 Methods 12
2.2.2 Results 20
2.2.3 Adaptive Management 22
2.3 Groundwater 27
2.3.1 Methods 31
2.3.2 Results 40
2.3.3 Recommended Adaptive Management 47
2.4 Use of Explosives in or Near-Water 49
2.4.1 Adaptive Management 52
2.5 Concentration of Mercury and Methylmercury in Water 53
2.5.1 Methods 53
2.5.2 Results 55
2.5.3 Adaptive Management 55
2.5.4 Methods 56
2.5.5 Results 61
2.5.6 Conclusions 76
2.5.7 Adaptive Management 77
2.6 Fish Tissue Monitoring - Kenogamisis Lake 78
3 Closing 79
4 References 80

List of Tables

Table 1-1: Objectives for Federal Conditions of Decision Statement Related to Fish and Fish Habitat 9
Table 2-1: Surface Water Quality Monitoring Locations, Frequency, and Rationale 15
Table 2-2: Surface Water Trigger Threshold Monitoring Stations 17
Table 2-3: Dissolved Oxygen and Water Temperature Profile Monitoring Locations, Frequency, and Rationale 19
Table 2-4: Dissolved Oxygen and Water Temperature Profile Monitoring Completion 21
Table 2-5: Groundwater Trigger Threshold Monitoring Locations, Frequency, Parameters, and Rationale 33
Table 2-6: Summary of Analytical Parameters for Groundwater Quality Samples 39
Table 2-7: Groundwater Quality Trigger Threshold Summary 47
Table 2-8: Summary of Blast Events that Exceeded Established Thresholds 51
Table 2-9: Receiving Environment Surface Water Quality Monitoring Locations, Frequency, and Rationale 53
Table 2-10: Mercury and Methylmercury Trigger Threshold Monitoring Stations 55
Table 2-11: Boat Electrofishing Effort of Sampling Areas from 2018 to 2023 59
Table 2-12: Statistical Analyses for Comparisons of Total Mercury and Methylmercury Concentrations Between Reference and Exposure Sampling Areas from 2018 to 2023 60
Table 2-13: Statistical Analyses for Comparisons of Total Mercury and Methylmercury Concentrations Across Years for Each Sampling Area from 2018 to 2023 61
Table 2-14 Summary of Total Mercury Concentrations (mg/kg ww) of Age 1 Yellow Perch Tissue Composites from Sampling Areas, 2018 and 2023 64
Table 2-15: Summary of Methylmercury Concentrations (mg/kg ww) of Age 1 Yellow Perch Tissue Composites from Sampling Areas, 2018 and 2023 64
Table 2-16: Summary of Before-After Statistical Comparisons of Total Mercury Concentrations (mg/kg ww) of Age 1 Yellow Perch Tissue Composites from Reference and Exposure Areas 65
Table 2-17: Summary of Before-After Statistical Comparisons of Methylmercury Concentrations (mg/kg ww) of Age 1 Yellow Perch Tissue Composites from Reference and Exposure Areas 66
Table 2-18: Summary of Control-Impact Statistical Comparisons of Total Mercury Concentrations (mg/kg ww) of Age 1 Yellow Perch Tissue Composites from Reference and Exposure Areas 70
Table 2-19: Summary of Control-Impact Statistical Comparisons of Methylmercury Concentrations (mg/kg ww) of Age 1 Yellow Perch Tissue Composites from Reference and Exposure Areas 73
Table 2-20: Summary of Composite Samples and Duplicates used to Calculate Relative Percent Difference 76

List of Figures

Figure 2-1: Surface Water Quality Monitoring Locations 14
Figure 2-2: Surface Water Quality Trigger Threshold Monitoring Locations 18
Figure 2-3: Groundwater Quantity Monitoring Locations – Overview 28
Figure 2-4: Groundwater Quantity Monitoring Locations – Open Pit Area 29
Figure 2-5: Groundwater Quality Monitoring Locations 30
Figure 2-6: Blast Locations, Fish Habitats and Monitoring Location FH02 50
Figure 2-7: Age 1 Yellow Perch Sampling Areas 58
Figure 2-8: Boxplot of Total Mercury (THg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from all Sampling Areas Between 2018 and 2023 62
Figure 2-9: Boxplot of Methylmercury (MeHg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from all Sampling Areas Between 2018 and 2023 63
Figure 2-10: Boxplot of Total Mercury (THg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Southwest Arm in 2018 and Area 5 in 2021 and 2023 67
Figure 2-11: Boxplot of Total Mercury (THg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Area 3 in 2019 and 2021 67
Figure 2-12: Boxplot of Total Mercury (THg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Gamsby Lake and Area 1B Between 2018 and 2023 68
Figure 2-13: Boxplot of Methylmercury (MeHg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Southwest Arm in 2018 and Area 5 in 2021 and 2023 68
Figure 2-14: Boxplot of Methylmercury (MeHg) Concentration (mg/kg ww) of age 1 Yellow Perch Tissue from A3 in 2019 and 2021 69
Figure 2-15: Boxplot of Methylmercury (MeHg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Gamsby Lake and Area 1B between 2018 and 2023 69
Figure 2-16: Boxplot of Total Mercury (THg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Sampling Areas in 2023 71
Figure 2-17: Boxplot of Total Mercury (THg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Sampling Areas in 2021 71
Figure 2-18: Boxplot of Total Mercury (THg) Concentration (mg/kg ww) of Age 1 Yellow Perch tissue from Sampling Areas in 2019 72
Figure 2-19: Boxplot of Total Mercury (THg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Sampling Areas in 2018 72
Figure 2-20: Boxplot of Methylmercury (MeHg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Sampling Areas in 2023 74
Figure 2-21: Boxplot of Methylmercury (MeHg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Sampling Areas in 2021 74
Figure 2-22: Boxplot of Methylmercury (MeHg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Sampling Areas in 2019 75
Figure 2-23: Boxplot of Methylmercury (MeHg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Sampling Areas in 2018 75

List of Appendices

Appendix A Erosion Sediment Control Inspection Reports
Appendix A.1 GGM ESC Reports
Appendix A.2 Stantec ESC Reports
Appendix A.3 CSL ESC Reports

Appendix B Surface Water Data
Appendix B.1 Monthly Surface Water Data
Appendix B.2 Surface water Analytical Results
Appendix B.3 Seasonal Trigger Threshold Data
Appendix B.4 In-situ Dissolved Oxygen and Water Temperature
Appendix B.5 Trigger Exceedance Investigation Reports

Appendix C Groundwater Data
Appendix C.1 Monitoring Summary
Appendix C.2 Well Completion Table
Appendix C.3 Pumping Data and Hydrographs
Appendix C.4 Groundwater Certificates and Water Quality Tables

Appendix D Blast Monitoring Data

Appendix E Morphometric and Catch Summary Data
Appendix E.1 Goldfield Creek Realignment Catch Results
Appendix E.2 Goldfield Creek Realignment Fish Morphometric Data
Appendix E.3 Goldfield Creek Realignment Fish Tissue Laboratory Data
Appendix E.4 Kenogamisis Lake Catch and Effort Results
Appendix E.5 Kenogamisis Lake Fish Morphometric Data
Appendix E.6 Kenogamisis Lake Fish Tissue Laboratory Data

Appendix F Fish Tissue Monitoring Report

List of Abbreviations

2023 Monitoring Period	October 1, 2022 through September 30, 2023
BACI	before-after-control-impact
BV	Bureau Veritas
CALA	Canadian Association for Laboratory Accreditation
COC	chain of custody
DFO	Fisheries and Oceans Canada
DO	dissolved oxygen
EA	Environmental Assessment
ECA	Environmental Compliance Approval
EIS	Environmental Impact Statement
ESC	erosion and sediment control
ESCP	Erosion and Sediment Control Plan
ETP	effluent treatment plant
GFC	Goldfield Creek
GGM	Greenstone Gold Mines GP Inc.
ICP-MS	inductively coupled plasma mass spectrometry
ISW	industrial sewage works
MDL	method detection limits
MDMER	Metal and Diamond Mining Effluent Regulations
MHT	MacLeod high tailings
O.Reg.	Ontario Regulation
PDA	Project Development Area
PHCs	Petroleum Hydrocarbons

Plan	Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan
PTTW	Permit to Take Water
QA/QC	quality assurance / quality control
RPD	relative percent difference
STP	sewage treatment plant
SWAT	Southwest Arm Tributary
TMF	Tailings Management Facility
WRSA	waste rock storage area
YOY	young-of-the-year

1 Introduction

Greenstone Gold Mines GP Inc. (GGM) is in the process of constructing and commissioning the Greenstone Mine (the Mine). The Mine is located just south of Geraldton, Ontario, within the municipality of Greenstone, at the intersection of Highway 11 and Highway 584. Greenstone Mine (formerly Hardrock Project) was subject to a federal environmental assessment (EA) (Stantec 2017) under the *Canadian Environmental Assessment Act, 2012*. The federal Decision Statement for the Greenstone Mine's Environmental Impact Statement (EIS) was issued on December 13, 2018, and amended on February 10, 2021. The federal Decision Statement contained various Conditions of Approval. A Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan (the Plan) (GGM 2021a) was prepared to address seven specific federal Conditions of Approval related to monitoring potential effects of the Mine on fish and fish habitat (Conditions 3.14, 3.15, 3.16, 3.17, 3.2, 5.4, and 5.5.1). This 2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report describes activities undertaken during the period of October 1, 2022, through September 30, 2023 (i.e., the 2023 monitoring period) to satisfy the requirements of the Plan.

Construction activities started on March 1, 2021, and continued through 2022 and 2023. During the 2023 monitoring period, most critical mine infrastructure was constructed in preparation for mine operations to commence in 2024. These infrastructure components include:

A. Completion of the highway realignment

B. Completion of the Tailings Management Facility (TMF) starter dams (Phase 1) and seepage collection systems

C. Completion and commissioning of Water Collection Ponds M1, B1

D. Commissioning of Goldfield Creek (GFC) diversion and construction of grade control structures along the Southwest Arm Tributary (SWAT)

E. Stockpiling of material in Waste Rock Storage Area (WRSA) C

F. Starter pit advanced and mill grade ore stockpiled for operations

G. Completion of mechanics shop and truck wash facility

H. Completion of the exterior of the mill and conveyor system

I. Demolition and relocation of the Ontario Ministry of Transportation (MTO) Patrol Yard

J. Construction of the construction and demolition landfill

K. Commissioning of the effluent treatment plant and associated discharge line and diffuser with discharge to the Southwest Arm of Kenogamisis Lake

L. Aggregate extraction from the S4 and T2 pits for use in construction

1.1 Goldfield Creek Realignment Channel

In 2022, GFC was realigned to facilitate the creation of a TMF for the Greenstone Mine. The realigned channel was a component of offsetting works to compensate for lost and altered fish habitat under the *Fisheries Act*. During spring freshet in 2023, portions of the new channel destabilized and eroded, resulting in the transport of sediment downstream. The sediment was observed as a turbidity plume that extended from the realigned channel downstream through five downstream ponds (Southwest Pond 1 (SWP1) through Southwest Pond 5 (SWP5) and into the Southwest Arm of Kenogamisis Lake. Sediment deposition from this event is documented in a report prepared by Stantec entitled *Greenstone Gold Mines Diversion Channel Corrective Measures Report: An Assessment of Sediment Deposition Downstream of Failed Offsetting Works in Goldfield Creek* (Stantec 2023). Turbidity and sedimentation in the study area has potential to influence the results of this monitoring program and is considered in the interpretation of results. Redesign, reconstruction, and rehabilitation of the failed channel and areas of sediment deposition is currently underway, in consultation with regulatory agencies and Indigenous partners.

1.2 Purpose

The purpose of this Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report is to describe monitoring activities for the 2023 monitoring period, which is defined as October 1, 2022, through September 30, 2023. The monitoring activities were undertaken to assess the accuracy of the EIS as it pertains to federal Conditions of the Decision Statement related to fish and fish habitat, and to determine the effectiveness of related mitigation measures. The overall objectives related to each Condition are provided in Table 1-1, which also references the applicable section of this 2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report.

Table 1-1: Objectives for Federal Conditions of Decision Statement Related to Fish and Fish Habitat

Federal Condition	Report Section	Objective (from federal Decision Statement, December 13, 2018, and Amended February 10, 2021)
3.14	2.1	*develop, prior to construction, and implement, during all phases of the Designated Project and in a manner consistent with the Fisheries Act and its regulations, measures to control erosion and sedimentation in the project development area. The Proponent shall submit these measures to the Agency before implementing them. Among other measures, the Proponent shall maintain stream bank stability using ditches and diversion berms.*
3.15	2.4	*determine the effectiveness of the mitigation measures as it pertains to the adverse environmental effects of blasting on fish and fish habitat*

Federal Condition	Report Section	Objective (from federal Decision Statement, December 13, 2018, and Amended February 10, 2021)
3.16	2.2	*verify the accuracy of the environmental assessment and to determine the effectiveness of the mitigation measures as it pertains to adverse environmental effects on fish and fish habitat caused by changes in water quality in Kenogamisis Lake, Mosher Lake and the Southwest Arm Tributary*
3.17	2.3	*verify the accuracy of the environmental assessment and to determine the effectiveness of the mitigation measures as it pertains to the adverse environmental effects on fish and fish habitat of from changes in groundwater quality*
3.2	2.4	*develop, prior to the start of blasting activities in or near water, and implement, during blasting activities in or near water, mitigation measures to avoid or prevent adverse effect on fish and fish habitat from the use of explosives*
5.4	2.5 (water) 2.6 (fish)	*verify the accuracy of the environmental assessment as it pertains to the adverse environmental effects on the health of Indigenous Peoples of changes in concentrations of contaminants in water and fish**
5.5.1	2.7	*verify the accuracy of the environmental assessment and to determine the effectiveness of the mitigation measures as it pertains to the adverse environmental effects on the health of Indigenous Peoples of changes in concentrations of contaminants in fish tissue*

* Note that an objective of this Plan is to document potential changes to the concentration of parameters of potential concern in fish tissue. The assessment of risk to human health will be described under the reporting requirements of the Indigenous Peoples Health Risk Assessment Follow-Up Plan (GGM 2020a).

2 Follow-Up Monitoring

Sections 2.1 through 2.7 provide a description of follow-up monitoring activities undertaken in the 2023 monitoring period to satisfy Conditions 3.14, 3.15, 3.16, 3.17, 3.2, 5.4, and 5.5.1.

2.1 Erosion and Sediment Control

As per the requirements of federal Condition 3.14, GGM has developed and implemented measures to control erosion and sedimentation in the Project Development Area (PDA) (GGM 2020b). Work that occurred in and around water during the 2023 monitoring period included the construction of the:

- Highway realignment
- Grade Control Structures in the SWAT
- Roads and culverts on site
- Newly realigned section of GFC

- Full scale effluent discharge pipeline.

The Erosion and Sediment Control Plan (ESCP) (GGM 2020b) was implemented to mitigate potential effects of erosion and sedimentation on fish and fish habitat. Erosion and sediment control (ESC) measures are presented in the ESCP and include the following main components:

- Completing work in and around fish habitat during the appropriate timing window (no in-water work April 1 to June 20) to avoid spawning times and times when eggs and juvenile fish may be more susceptible to potential effects of increased turbidity and sedimentation.
- Limiting the area of ground disturbance and vegetation clearing
- Reducing the duration of in-water work
- Use of silt fencing, straw bales, fiber mats, filter bags, silt curtains, turbidity data loggers and other ESC tools to reduce erosion and sedimentation
- Revegetation of disturbed areas.

Erosion and sediment controls were regularly inspected to verify the effectiveness of the mitigation measures (Appendix A). Management practices were implemented to protect the environment, and to determine whether new management strategies and/or mitigation measures were required. The following activities were undertaken as part of the regular erosion and sediment control monitoring:

- Work sites were inspected and monitored periodically for compliance with the ESCP (GGM 2020b).
- Earthworks were inspected to look for evidence of erosion and sedimentation and corrective measures were taken as necessary.
- Where required, work activities were stopped, and potential erosion and sediment control issues were addressed.
- Silt fence barriers were inspected routinely and following rainfall events.
- Silt fence was repaired or replaced if it was not functioning as intended.
- Stand-by material of prefabricated silt fence barrier was maintained on the construction site and was available for rapid deployment.
- Erosion control structures were reinforced when significant rainfall events were forecasted.
- Sediment erosion control monitoring program was implemented for the realigned GFC post-commissioning which included visual inspections, collection of turbidity data, and surface water quality monitoring.
- ESC training was introduced in 2023 for construction and mine workers, and designated environmental staff completed ESC training through an online training program
- Following the channel failure, silt curtains were installed downstream of the realigned GFC channel with guidance from Department of Fisheries and Oceans Canada (DFO).

2.2 Surface Water Quality

The following section describes the measures carried out to satisfy federal Condition 3.16 of the EIS Decision Statement by presenting surface water quality monitoring, completed by GGM, to evaluate the identified mitigation measures to reduce adverse effects on fish and fish habitat. Section 2.2.1 presents the Plan as it relates to surface water quality with the results of the October 2022 through September 2023 water quality monitoring in Kenogamisis Lake, Mosher Lake, and the SWAT (Condition 3.16) presented in Section 2.2.2. Results of surface water quality adaptive management are presented in Section 2.2.3.

There are two components of surface water quality monitoring presented herein:

1. Surface water quality monitoring
2. Dissolved oxygen and water temperature profiling.

2.2.1 Methods

2.2.1.1 Surface Water Quality Monitoring Methods

The surface water monitoring locations, sampling frequency, sampling methods, analytical parameters, and data analyses are presented in the following sections.

2.2.1.1.1 Data Collection

Surface water quality in lakes and streams may potentially be affected by the full-scale Effluent Treatment Plant (ETP) discharging to the Southwest Arm of Kenogamisis Lake or by groundwater seepage from the WRSAs, TMF, and historical tailings.

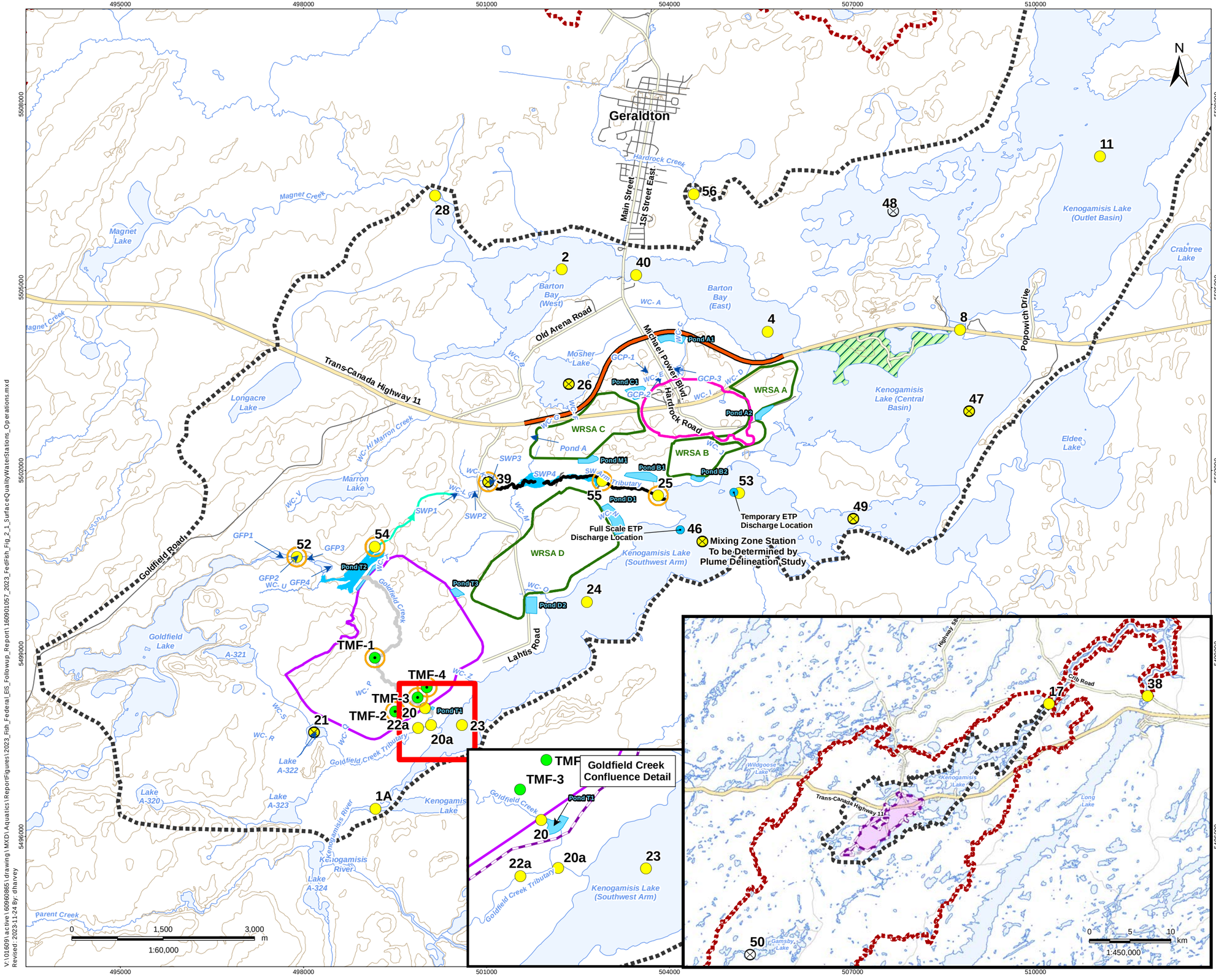
Surface water quality sampling locations are presented in Figure 2-1. Surface water monitoring locations are reviewed throughout the adaptive management process presented in the Plan (GGM 2021a). Monitoring locations may be added or removed from the monitoring program in accordance with their utility in monitoring potential effects of the Mine.

Table 2-1 presents the frequency of sampling and rationale for each monitoring station for surface water quality. Surface water quality monitoring includes:

- Monthly water quality monitoring of the Southwest Arm of Kenogamisis Lake within the full scale ETP effluent mixing zone.
- Monthly water quality monitoring in Barton Bay, Central Basin, and Outflow Basin of Kenogamisis Lake, and downstream of Kenogamisis Lake at the locations indicated on Figure 2-1 to document changes in water quality.

- Monthly water quality monitoring in the GFC Tributary, GFC diversion channel, SWAT inflow to the Southwest Arm of Kenogamisis Lake, Magnet Creek, and Mosher Lake to document changes in water quality.

Twenty-six (26) surface water quality monitoring stations were sampled during 2023. Twenty-five of the stations were established in previous monitoring years. Station 56 is located along the Hardrock Creek channel, which discharges into Barton Bay (East). Monitoring at station 56 began in March 2023. The surface water quality monitoring locations were monitored monthly, when it was safe to do so, to assess seasonal fluctuations in water quality. Data from monthly monitoring was used to monitor potential trends in surface water quality and to evaluate whether fluctuations in quality were due to natural variability or from a Mine-related effect. The surface water quality monitoring stations are shown in Figure 2-1.



Stantec

Legend

- Local Assessment Area
- Regional Assessment Area
- Discharge Location
- Routine Water Quality Monitoring
- TMF Surface Water Stations
- Temperature/ DO Profile
- Mercury and Methylmercury Monitoring

Site Plan Revised Post Final EA/EIS

- New Highway 11 Alignment
- Diversion Channel
- Collection Ponds
- Tailings Management Facility
- Grade Control Structure
- Inundated Area ; Backwater effect
- Open Pit- Full Extent
- Waste Rock Storage Area

Existing Features

- Highway
- Major Road
- Local Road
- Existing SW Arm Tributary Channel
- Existing Portion of Goldfield Creek (to be overprinted)
- Watercourse
- Provincial Park
- Waterbody

Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

November 2023
160901057

Client/Project

Greenstone Gold Mines GP Inc. (GGM)
Greenstone Mine

Figure No.
2-1

Title

Surface Water Quality Monitoring Locations

V:\101609\active\60960865\drawing\MXD\Aquatics\ReportFigures\2023_Fish_Federal_EIS_Followup_Report\160901057_2023_FedFish_Fig_2_1_SurfaceQualityWaterStations_Operations.mxd
Revised: 2023-11-24 By: dharvey

Table 2-1: Surface Water Quality Monitoring Locations, Frequency, and Rationale

Station	Frequency	Rationale
1A	Monthly	Background station, upstream of Southwest Arm
2	Monthly	Monitor potential effects of historical Little Long Lac tailings seepage discharge
4	Monthly	Monitor for potential effects of historical MacLeod tailings seepage discharge and Geraldton sewage treatment plant (STP) discharge on Barton Bay East
8	Monthly	Monitor for potential effects downstream of the Kenogamisis Lake Central Basin near the outlet to the Outlet Basin
11	Monthly	Monitor for potential effects midway through the Outlet Basin
17	Monthly	Kenogamisis Dam. End of surface water quality Local Assessment Area
20	Monthly	Monitor for potential effects of the TMF on GFC, upstream of confluence of GFC and GFC Tributary and upstream of Kenogamisis Lake
20A	Monthly	Monitor for potential effects of the TMF on GFC, downstream of confluence of GFC and GFC Tributary and upstream of Kenogamisis Lake
21	Monthly	Monitor potential effects of TMF on Lake A-322.
22A	Monthly	Monitor for potential effects of the TMF on Goldfield Creek Tributary, upstream of confluence of GFC and GFC Tributary.
23	Monthly	Monitor potential effects of the TMF on the Southwest Arm of Kenogamisis Lake
24	Monthly	Monitor for potential effects of the TMF and/or WRSA D on the Southwest Arm of Kenogamisis Lake
25	Monthly	Monitor for potential effects of mining activities at the mouth of the SWAT
26	Monthly	Monitor for potential effects of WRSA C on Mosher Lake. Requirement of Condition 3.16 of Decision Statement
28	Monthly	Background station. Magnet Creek, upstream of Barton Bay
38	Monthly	Downstream of Outlet Basin upstream of Long Lake
39	Monthly	Southwest Pond 3 (SWP3) of SWAT, downstream of Goldfield Creek Diversion
40	Monthly	Barton Bay East. Upstream of historical MacLeod tailings seepage discharge and Geraldton STP
46	Monthly	Monitor full scale ETP mixing zone; station location post discharge to be determined/confirmed by plume delineation study.
47	Monthly	Monitor for potential effects in the Central Basin
49	Monthly	Monitor for potential effects where Southwest Arm outlets to Central Basin
52	Monthly	Background station upstream of GFC Diversion
53	Monthly	Monitor water quality at the end of the mixing zone for the temporary ETP
54	Monthly	Monitor for potential effects at the outlet of the Goldfield Creek Diversion Pond
55	Monthly	Monitor potential effects of the Project in the Southwest Am Tributary (SWAT), including the Goldfield Creek realignment
56	Monthly	Monitor water quality of Hardrock Creek discharging into Barton Bay (East)

Surface water sampling was completed by grab sampling, using bottles provided by the laboratory that contained appropriate preservatives, where required. Samples for dissolved forms of metals were filtered using a 0.45 µm membrane filter. Water quality samples were taken just below the surface of the water (0.1 m deep). Water quality samples were collected by an experienced technician using suitable sampling equipment. Samples were preserved (if applicable) and transported in appropriate containers to maintain the integrity of sample temperatures and hold times. Samples were submitted to a Canadian Association for Laboratory Accreditation (CALA) accredited laboratory under chain of custody (COC) documentation.

2.2.1.1.2 Laboratory Analysis

The accredited CALA laboratory used the authorized analytical methods set out in the industrial sewage works (ISW) environmental compliance approvals (ECAs), permits to take water (PTTWs), and regulations (i.e., Metal and Diamond Mining Effluent Regulations [MDMER] and Ontario Regulation [O.Reg.] 560/94).

The surface water quality samples were analyzed for general chemistry, nutrients, and total and dissolved metals (including arsenic), total suspended solids (TSS), nitrate (as N), total kjeldahl nitrogen (as N), pH, total phosphorus, and sulphate. Unionized ammonia was calculated based on total ammonia, field pH, and field temperature measurements.

In situ temperature, pH, conductivity, turbidity, and dissolved oxygen (DO) were measured at the water surface during sample collection using a multi-parameter water quality meter. A sample log book was used to record *in situ* parameters and to record current weather (i.e., air temperature, raining, snowing) and flow conditions (i.e., low flows, high flows, ice cover conditions).

Quality assurance (QA) / quality control (QC) principles for sampling and laboratory analysis outlined in Metal Mining Technical Guidance for Environmental Effects Monitoring (EC 2012) were followed. Duplicate samples were collected from a subset of samples collected to quantify environmental variability and analytical consistency, with a minimum of one duplicate for every 10 parent samples. A minimum of one travel and one field blank was collected per sampling event to detect potential sources of contamination. Field instruments were calibrated regularly according to the manufacturer's specifications, and calibration logs were maintained.

Water quality data from the laboratory were uploaded into an electronic database and validated against the original laboratory certificate of analysis.

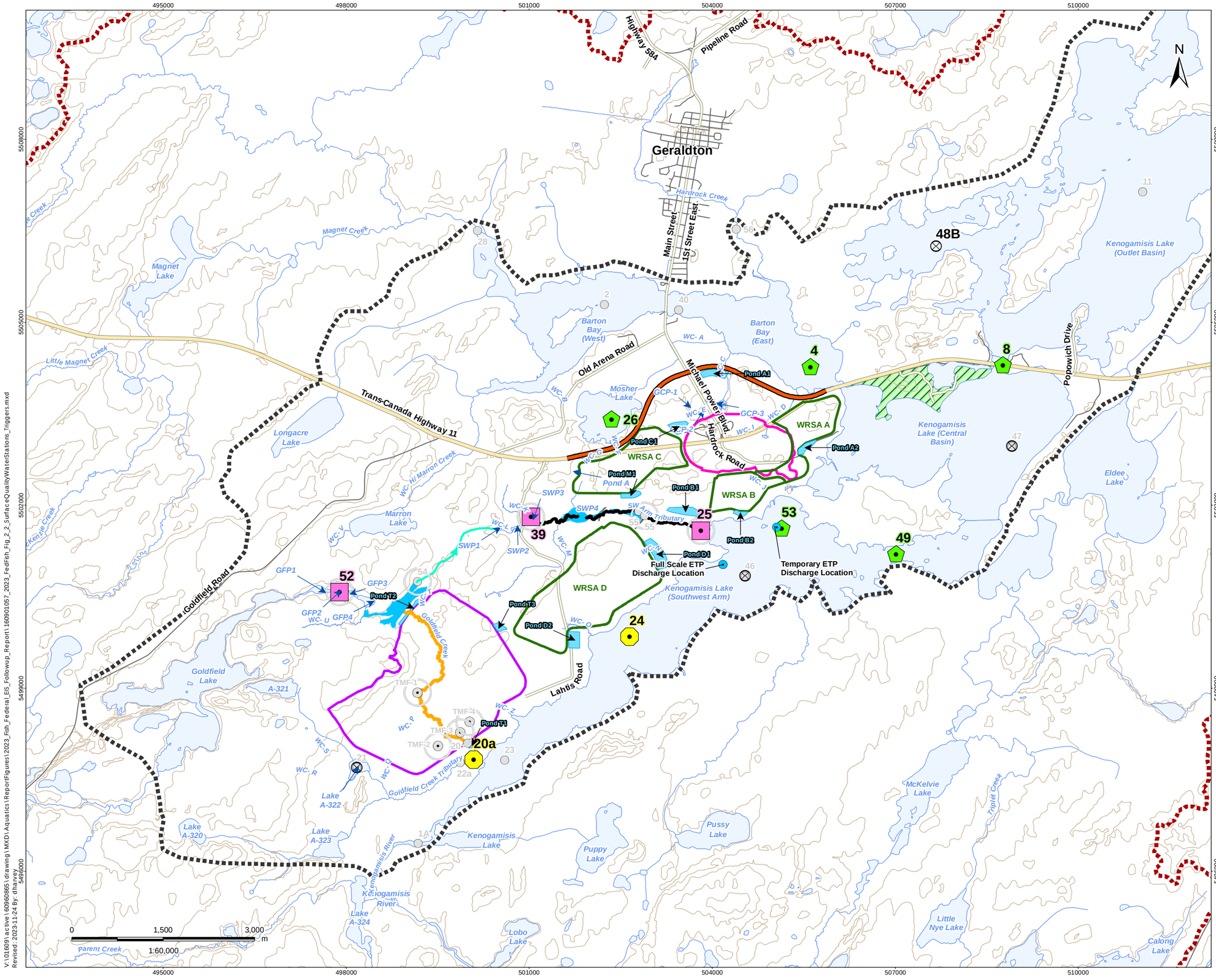
2.2.1.1.3 Data Analysis

The data set for each parameter at each station was compiled into a spreadsheet to present the monitoring completed for the 2023 monitoring period. The data in this report are representative of the construction phase of mine life.

For the 2023 monitoring period, the monthly data was compared to trigger thresholds for surface water quality defined in the Plan (GGM 2021a). The trigger monitoring stations, indicator parameters, and rationale are presented in Table 2-2. The locations of the trigger monitoring stations are presented in Figure 2-2.

Table 2-2: Surface Water Trigger Threshold Monitoring Stations

Trigger Threshold Monitoring Station	Frequency of Measurement	Indicator Parameter	Rationale
4	Monthly	As, Co, Fe, P, Sb, U	Monitor for potential effects of the historical tailings and WRSAs seepage and Geraldton STP discharge on Barton Bay East.
8	Monthly	As, Co, Fe, P, Sb, U	Monitor for potential Project effects downstream of the Kenogamisis Lake Central Basin near the outlet to the Outlet Basin.
20A	Monthly	As, Co, Cu, Fe, P, Sb, U, CN free & total	Monitor for potential effects of the TMF on GFC, downstream of confluence of GFC and GFC Tributary and upstream of Kenogamisis Lake
24	Monthly	As, Co, Cu, Fe, P, Sb, U, CN free & total	Monitor for potential effects of the TMF and/or WRSA D on the Southwest Arm of Kenogamisis Lake
25	Monthly	As, Co, Fe, P, Sb, U, Hg, MeHg	Monitor for potential effects of mining activities on the water at the mouth of the SWAT
26	Monthly	As, Co, Fe, P, Sb, U	Monitor for potential effects of WRSA C on Mosher Lake
39	Monthly	As, Co, Fe, P, Sb, U, Hg, MeHg	Monitor for potential effects of mining activities on SWAT, downstream of GFC Diversion
49	Monthly	As, Co, Fe, P, Sb, U	Monitor for potential effects where Southwest Arm outlets to Central Basin
52	Monthly	As, Co, Fe, P, Sb, U, Hg, MeHg	Background station upstream GFC Diversion
53	Monthly	As, Co, Fe, P, Sb, U	Monitor for potential effects beyond the temporary ETP mixing zone



V:\01609\active\60960865\drawing\MXD\Aquatics\ReportFigures\2023_Fish_Federal_EIS_Followup_Report\160901057_2023_FedFish_Fig_2_2_SurfaceQualityWaterStations_Triggers.mxd
Revised: 2023-11-24 By: dharvey

Stantec

Legend

- Local Assessment Area
- Regional Assessment Area
- Discharge Location
- Temperature/ DO Profile
- Mercury and Methylmercury Monitoring
- Routine Water Quality Monitoring
- TMF Surface Water Stations

Trigger Threshold Surface Water Quality Stations and Routine Monitoring

- Monthly Sampling for As, Co, P, Sb, U, Hg, Fe and MeHg
- Monthly Sampling for As, Co, Cu, Fe, P, Sb, U, CN Free and CN Total
- Monthly Sampling for As, Co, Fe, P, Sb, U

Site Plan Revised Post Final

- New Highway 11 Alignment
- Diversion Channel
- Collection Ponds
- Tailings Management Facility
- Open Pit- Full Extent
- Grade Control Structure
- Inundated Area ; Backwater effect
- Waste Rock Storage Area

Existing Features

- Highway
- Major Road
- Local Road
- Existing SW Arm Tributary Channel
- Existing Portion of Goldfield Creek (to be overprinted)
- Watercourse
- Provincial Park
- Waterbody

Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

November 2023
160901057

Client/Project

Greenstone Gold Mines GP Inc. (GGM)
Greenstone Mine

Figure No.

2-2

Title

Surface Water Quality Trigger Threshold Monitoring Locations

2.2.1.2 Dissolved Oxygen and Water Temperature Profile Monitoring Methods

2.2.1.2.1 Data Collection

The DO and water temperature profile monitoring locations are presented in Figure 2-1. Temperature and DO water column profile sampling was completed quarterly (February, June, August, and October) at eight surface water monitoring locations. Table 2-3 presents the location, frequency of profile sampling, and rationale for each temperature and DO water column profile sampling location.

Table 2-3: Dissolved Oxygen and Water Temperature Profile Monitoring Locations, Frequency, and Rationale

Station	Frequency	Rationale
21	Quarterly	Deepest point in Lake A-322
26	Quarterly	Deepest point in Mosher Lake
39	Quarterly	Deepest point in Southwest Pond 3 (SWP3) of SWAT
46	Quarterly	Southwest Arm near proposed effluent discharge location
47	Quarterly	Deepest point in Central Basin
48	Quarterly	Deepest point in Outlet Basin, Hardrock Bay
49	Quarterly	Deep location at narrows where Southwest Arm outlets to Central Basin
50	Quarterly	Gamsby Lake – Reference area, 25 km southwest of the Project, no known historical mine influences

DO and temperature were measured at 1 m intervals from the surface of the water column at the profile sampling locations. DO and temperature were measured using a handheld multi-parameter water quality meter with an extended cable for the probe, sufficient to reach the full depth of the water column. The meter was calibrated prior to use according to the manufacturer's specifications using the appropriate calibration standards. The probe was lowered with a graduated tape measure to confirm the depth of the probe. The probe was allowed to equilibrate prior to taking a reading.

2.2.1.2.2 Data Analysis

The data set for each parameter at each station was compiled into a spreadsheet to present the monitoring completed for the 2023 period. Each quarterly monitoring event was plotted on a graph comparing the depth of the water column to the water temperature and DO levels for a visual representation of observed conditions.

2.2.2 Results

A summary of the surface water sampling results for routine surface water quality monitoring and DO and temperature profiling from October 2022 through September 2023 is presented in the subsequent sections below.

2.2.2.1 Routine Surface Water Quality Monitoring

2.2.2.1.1 Data Collection

Surface water quality data was collected for the required parameters monthly at the 26 monitoring stations from October 2022 to September 2023 with some exceptions. In December 2022, none of the 26 monitoring stations were sampled as sampling sites could not be accessed due to unsafe ice conditions. Sampling at station 38 was not completed in January, February, March, and April 2023 and sampling at station 20 was not completed in February due to unsafe access. In April 2023, stations 2, 4, 11, 21, 26, 28, 47, and 53 were also not sampled due to unsafe conditions. For the October 2022 sampling period, the field parameter of oxidation-reduction potential (ORP) was not collected at some stations as the ORP probe on the handheld water quality sonde was malfunctioning. Additionally, sampling was not conducted at station 26 in May due to access issues.

Copies of the completed monthly surface water quality sampling field sheets for the period of October 2022 to September 2023 are provided as Appendix B1.

Monthly surface water quality sampling is expected to continue for the stations in Table 2-1 for the next monitoring period.

2.2.2.1.2 Data Analysis

A summary of surface water analytical results is provided in Appendix B2.

The seasonal surface water quality trigger thresholds for the 10 stations and parameters identified in Table 2-2 were calculated using available baseline data up to September 8, 2021, prior to the start of the temporary ETP discharge, and are presented in Appendix B3. The four seasonal periods were defined as winter (January to March), spring (April to June), summer (July to September), and fall (October to December).

The 2023 surface water quality monitoring data for the 10 stations and parameters identified in Table 2-2 were compared to the seasonal trigger thresholds. The results of this comparison are presented in Appendix B3. Surface water quality results above their respective seasonal 95th percentile concentrations, or >10% above the predicted surface water quality concentration from the EIS/EA (for those stations where the seasonal 95th percentile baseline concentration is less than

the predicted surface water quality concentration from the EIS/EA), and five times the detection limit are highlighted in Appendix B3.

Prior to January 2022, the baseline surface water quality samples were analyzed by ALS. In January 2022, GGM contracted Testmark Laboratories to complete the water analyses for the Mine. Given the number of elevated concentrations of parameters observed since January 2022 compared to baseline concentrations, GGM undertook an investigation into the results of the laboratory analyses. In October 2022, the investigation involved collecting triplicate samples for analyses by Testmark Laboratories, ALS, and Bureau Veritas (BV). Preliminary analytical results showed a difference in concentrations between laboratories, particularly in iron which was consistently elevated in the results from Testmark Laboratories versus ALS and BV. The reported results of the other parameters appeared similar across the three labs. As a result of this investigation, GGM has secured an analytical contract with BV to undertake the laboratory analysis of water samples associated with the Mine. The transition in laboratories commenced in the March 2023 sampling period, such that samples collected in the month of March and subsequent months were analyzed by BV.

2.2.2.2 Dissolved Oxygen and Water Temperature Profile

2.2.2.2.1 Data Collection

The quarterly DO and water temperature profile monitoring was completed, when safe to do so, at least once per quarter. The summary of monitoring completion is presented in Table 2-4.

Table 2-4: Dissolved Oxygen and Water Temperature Profile Monitoring Completion

Year	Sampling Season	In-Situ Water Quality Profile Station Number							
		21	26	39	46	47	48	49	50
2022	Fall	✓	✓	✓	✓	✓	✓	✓	✓
2023	Winter	✓	✓	✓	✓	✓	✓	✓	-
	Spring	✓	✓	✓	✓	✓	✓	✓	✓
	Summer	✓	✓	✓	✓	✓	✓	✓	✓

Quarterly profile sampling was completed at eight surface water monitoring stations.

Quarterly DO and water temperature profile monitoring is expected to continue for the stations in Table 2-4 for the October 2023 through September 2024 monitoring period.

2.2.2.2.2 Data Analysis

In situ temperature and DO profile data from October 2022 through September 2023 are presented in Appendix B4. Temperature and DO profile graphs are presented in Appendix B4.

2.2.3 Adaptive Management

2.2.3.1 Surface Water Quality

As written in the Plan (GGM 2021a), two trigger thresholds for surface water quality were defined, each with a varying level of sensitivity and associated level of response.

Surface water quality Trigger Threshold 1 is defined as three consecutive monthly parameter concentration exceedances above the seasonal 95th percentile baseline concentration AND five times the detection limit. For stations and indicator parameters where the 95th percentile is less than the predicted surface water quality concentrations from the EIS/EA, Trigger Threshold 1 is defined as 10% above the predicted surface water quality concentration from the EIS/EA for the surface water feature at a given monitoring station AND five times the detection limit.

Surface water quality Trigger Threshold 2 is defined as a confirmed exceedance of Trigger Threshold 1 and a statistically significant upward trend for a given indicator parameter, or for stations that have a statistically significant upward trend for baseline data, an increase in the magnitude of the trend compared to baseline.

Surface water quality data collected in the 2023 monitoring period for the 10 stations and parameters identified in Table 2-2 were compared to the seasonal site-specific surface water quality trigger thresholds. The following presents a summary of the Trigger Threshold 1 and Trigger Threshold 2 exceedances documented during the October 2022 to September 2023 monitoring period.

Station 4:

- There were no recorded Trigger Threshold 1 or 2 exceedances during the period of October 2022 to September 2023.

Station 8:

- Trigger Threshold 1 exceedance of iron in July 2022. Resampling of iron occurred in August 2022, which also exceeded the seasonal 95th percentile baseline concentration and five times the analytical detection limit. Therefore, the Trigger Threshold 1 exceedance for iron was confirmed in August 2022. Trigger Threshold 2 evaluation was completed and concluded that there was a statistically significant upward trend for iron at station 8 and therefore Trigger Threshold 2 was exceeded. Iron at station 8 continued to exceed the trigger in September and October 2022. An investigation report was completed in September 2022 and is attached as Appendix B5- 1. The investigation was inconclusive as to the source of the increased iron concentrations relative to baseline conditions. In 2022, GGM contracted Testmark Laboratories, and after changing the lab, GGM noted that iron concentrations in many stations were elevated. Therefore, the iron spikes in 2022 could be attributed to inconsistent

lab results. The concentration of iron at station 8 has been less than Trigger Threshold 1 and 2 for the remainder of the 2023 monitoring period.

Station 20A:

- There were no recorded Trigger Threshold 1 or 2 exceedances during the period of October 2022 to September 2023.

Station 24:

- Trigger Threshold 1 exceedance of iron in August 2022. Resampling of iron occurred in September 2022, which also exceeded the seasonal 95th percentile baseline concentration and five times the analytical detection limit. Therefore, the exceedance of Trigger Threshold 1 for iron was confirmed in September 2022. Trigger Threshold 2 evaluation was completed in October 2022 and concluded that there was a statistically significant upward trend for iron at station 24, and therefore, Trigger Threshold 2 was exceeded. An investigation report for the Trigger Threshold 2 exceedance was completed in November 2022 and attached as Appendix B5-2. The investigation was inconclusive as to the source of the increased iron concentrations relative to baseline conditions, but it suggested the elevated concentrations of iron at station 24 may be related to either natural variability or laboratory analyses affecting the results for iron. Since the concentrations of iron at station 24 were notably below the PWQO, the monitoring plan was recommended to continue with no modifications. The concentration of iron at station 24 has been less than Trigger Threshold 1 and 2 for the remainder of the 2023 monitoring period.

Station 25:

- Trigger Threshold 1 exceedance of arsenic in August 2022. Resampling of arsenic was completed in September 2022, which also exceeded the seasonal 95th percentile baseline concentration and five times the detection limit. Therefore, exceedance of Trigger Threshold 1 for arsenic was confirmed in September 2022. Trigger Threshold 2 evaluation was completed and concluded that there was a statistically significant upward trend for arsenic at station 25 and therefore Trigger Threshold 2 was exceeded. Arsenic at station 25 continued to exceed the trigger in October and November 2022 and January 2023. An investigation report was completed in November 2022 and is attached as Appendix B5-3. The investigation concluded that the source of elevated arsenic was likely related to SWAT in-water works that may have resulted from the use of ESC measures implemented during construction. No modifications to the monitoring plan were recommended.
- Trigger Threshold 1 exceedance of iron and methylmercury in January 2023. Resampling of both parameters was completed as part of the February 2023 monitoring event. Neither parameter exceeded the seasonal 95th percentile baseline concentration in the confirmatory resampling event (February 2023), and therefore Trigger Threshold 1 was not confirmed, and no further action was required.
- Trigger Threshold 1 exceedance of mercury in May 2023. Resampling of mercury occurred in June 2023, which also exceeded the seasonal 95th percentile baseline concentration and five times the analytical detection limit. Therefore, the exceedance of Trigger Threshold 1 for

mercury was confirmed in June 2023. Trigger Threshold 2 evaluation was completed and concluded that there was a statistically significant upward trend for mercury at station 25 and therefore Trigger Threshold 2 was exceeded. An investigation report was completed in August 2023 and is attached as Appendix B5-5. The investigation concluded that mercury exceedances may be related to the use of grade control structures and the diversion of flow from the GFC through the SWAT. The concentrations of mercury at Station 25 are consistent with those predicted for the SWAT in the EIS/EA Amendment after the diversion of the GFC. Consistent with the EIS/EA Amendment predictions for the SWAT, it is expected that mercury concentrations will decrease as flow through the GFC diversion stabilizes, the diversion is remediated, and after spring flooding has abated. No modifications to the monitoring plan were recommended.

- Trigger Threshold 1 exceedance of total phosphorus, iron, and uranium in June 2023. Resampling of total phosphorus and uranium occurred in July 2023. Phosphorus and uranium did not exceed the seasonal 95th percentile baseline concentration in the resample, and therefore, Trigger Threshold 1 was not confirmed, and no further action was required for total phosphorus or uranium. Resampling of iron also occurred during the July 2023 monitoring period and also exceeded the seasonal 95th percentile baseline concentration and five times the analytical detection limit, therefore Trigger Threshold 1 was exceedance for iron was confirmed. Trigger Threshold 2 evaluation was completed and concluded that there was a statistically significant upward trend for iron at station 25, and therefore Trigger Threshold 2 was exceeded. An investigation report was completed in September 2023 and is attached as B5-4. The investigation concluded that iron exceedances were likely caused by the diversion of flow from the GFC, the release of sediments, the inundation of land along the SWAT. It is expected that iron concentrations will decrease as flow through the GFC diversion stabilizes and the diversion is remediated after spring flooding. No modifications to the monitoring plan were recommended.

Station 26:

- Trigger Threshold 1 exceedance of iron in July 2022. Resampling of iron occurred in August 2022, which also exceeded the seasonal 95th percentile baseline concentration and five times the analytical detection limit. Therefore, the exceedance of Trigger Threshold 1 for iron was confirmed in August 2022. Trigger Threshold 2 evaluation was completed and concluded there was a statistically significant upward trend for iron at station 26 and therefore Trigger Threshold 2 was exceeded. Iron at station 26 continued to exceed Trigger Threshold 2 in September and October 2022. An investigation report was completed in October 2022, attached as Appendix B5-6. The investigation concluded that iron exceedances at station 26 were not mine related but can be attributed to natural variability and inconsistent lab results for iron in 2022. As the Trigger Threshold 2 exceedance of iron at station 26 was not mine related, the monitoring plan was recommended to continue with no modifications.

Station 39:

- Trigger Threshold 1 exceedance of iron in June 2022. Resampling of iron occurred in July 2022, which also exceeded the seasonal 95th percentile baseline concentration and five times the detection limit. Therefore, the exceedance of Trigger Threshold 1 for iron was confirmed in July 2022. Trigger Threshold 2 evaluation was completed and concluded that there was a statistically significant upward trend for iron at station 39, therefore Trigger Threshold 2 was exceeded. Station 39 continued to record a Trigger Threshold 2 exceedance of iron until January 2023. An investigation report was completed for iron at station 39 in August 2022, attached as Appendix B5-8. The investigation concluded that iron exceedances at station 39 were not mine related but can be attributed to natural variability and inconsistent lab results for iron in 2022. As the Trigger Threshold 2 exceedance of iron at station 39 was not mine related, the monitoring plan was recommended to continue with no modifications.
- Trigger Threshold 1 exceedance of arsenic in August 2022. Resampling of arsenic occurred in September 2022, which also exceeded the seasonal 95th percentile baseline concentration and five times the detection limit. Therefore, the exceedance of Trigger Threshold 1 for arsenic was confirmed in September 2022. Station 39 arsenic concentrations continued to exceed the seasonal 95th percentile and 5 times the detection limit until November 2022. Trigger Threshold 2 evaluation was completed and concluded that there was no statistically significant upward trend for arsenic at station 39 and therefore Trigger Threshold 2 was not exceeded. No further action was required.
- Trigger Threshold 1 exceedance of uranium in February 2023. Resampling of uranium occurred in March 2023, which also exceeded the seasonal 95th percentile baseline concentration and five times the analytical detection limit. Therefore, the exceedance of Trigger Threshold 1 for uranium was confirmed in March 2023. Trigger Threshold 2 evaluation confirmed there was a statistically significant increasing trend in the concentration of uranium at station 39 and therefore a Trigger Threshold 2 exceedance was confirmed. Station 39 concentration of uranium continued to exceed the seasonal 95th percentile and 5 times the detection limit through to September 2023. The Trigger Threshold 2 investigation report, submitted in May 2023 and provided as attachment B5-7, concluded that the potential source of exceedance of uranium at station 39 during the November 2022 through May 2023 reporting period was related to the construction of the GFC diversion, associated soil disturbance, and subsequent erosion of the GFC Diversion channel. The continual Trigger Threshold 2 exceedance of uranium during the period of June to September 2023 is thought to be attributed to construction of the diversion and associated sediment disturbance and the failure of the Goldfield Creek diversion channel, which occurred in May 2023. The construction and subsequent failure of the diversion channel exposed and subsequently mobilized local sediment from the bed and banks of the diversion channel, much of which deposited in Southwest Pond 3 (SWP3) which likely contributed to increased concentrations of uranium at station 39. The continuing elevation of uranium through the summer to October September 2023 is thought to be the result of seasonal natural patterns, and continued exposure of uranium-containing sediments mobilized during the GFC failure. Due to the concentrations of uranium (the highest being 0.26 µg/L in September) being well below the Provincial Water Quality Objective (5 µg/L), no modifications to the monitoring plan were recommended.

Station 49:

- Trigger Threshold 1 exceedance of iron in August 2022. Resampling of iron occurred in September 2022, which also exceeded the seasonal 95th percentile baseline concentration and five times the analytical detection limit. Therefore, the exceedance of Trigger Threshold 1 for iron was confirmed in September 2022. Trigger Threshold 2 evaluation was completed, and it was concluded that there was a statistically significant upward trend for iron at station 49 and therefore Trigger Threshold 2 was exceeded. Station 49 continued to record a Trigger Threshold 2 exceedance of iron in October 2022. An investigation report for the Trigger Threshold 2 exceedance was completed in November 2022, attached as Appendix B5-2. The investigation was inconclusive as to the source of the increased iron concentrations relative to baseline conditions but suggested the elevated concentrations of iron at station 49 may be related to either natural variability or laboratory analyses affecting the results for iron. As the concentrations of iron at station 49 were notably below the PWQO, the monitoring plan was recommended to continue with no modifications.
- Trigger Threshold 1 exceedance of arsenic in January 2023. Resampling of arsenic occurred in February 2023, which also exceeded the seasonal 95th percentile baseline concentration and five times the analytical detection limit. Therefore, the exceedance of Trigger Threshold 1 for arsenic was confirmed in February 2023. Trigger Threshold 2 evaluation was completed and concluded that there was no statistically significant upward trend for arsenic at station 49 and therefore Trigger Threshold 2 was not exceeded. No further action was required.

Station 52:

- Trigger Threshold 1 exceedance of iron in December 2022. Resampling of iron occurred in January 2023 and iron concentrations did not exceed the seasonal 95th percentile baseline concentration and therefore Trigger Threshold 1 exceedance was not confirmed, resulting in no further action being required.

Station 53:

- Trigger Threshold 1 exceedance of iron in August 2022. Resampling of iron occurred in September 2022, which also exceeded the seasonal 95th percentile baseline concentration and five times the analytical detection limit. Therefore, the exceedance of Trigger Threshold 1 for iron was confirmed in September 2022. Trigger Threshold 2 evaluation was completed and concluded that there was a statistically significant upward trend for iron at station 53 and therefore Trigger Threshold 2 was exceeded. An investigation report for the Trigger Threshold 2 exceedance was completed in November 2022 and attached as Appendix B5-2. Station 53 continued to record a Trigger Threshold 2 exceedance of iron until October 2022. The investigation was inconclusive as to the source of the increased iron concentrations relative to baseline conditions but suggested the elevated concentrations of iron at station 53 may be related to either natural variability or laboratory analyses affecting the results for iron. As the concentrations of iron at station 53 were notably below the PWQO and not likely to be mine related, the monitoring plan was recommended to continue with no modifications.

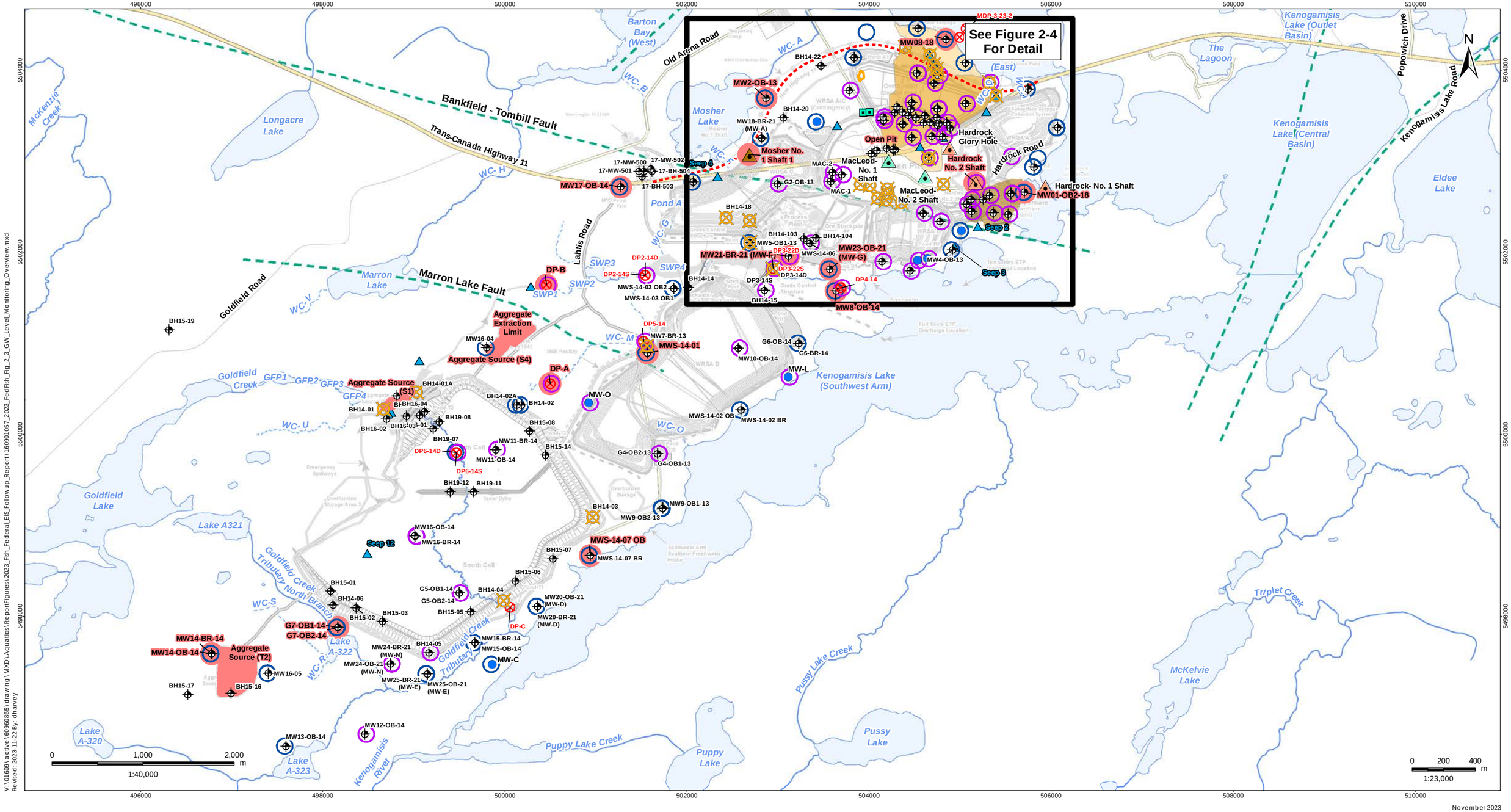
In summary, surface water quality Trigger 1 and Trigger 2 exceedances were documented in the 2023 monitoring period. The triggers were assessed as per the Adaptive Management Plan. Based on the information presented above and within Appendix B-5, no changes to the existing monthly water quality monitoring stations/locations have been recommended. Therefore, the existing monitoring program (stations, locations, frequency) will be continued for the 2024 reporting year.

2.3 Groundwater

The following section describes methods and results of groundwater monitoring during the 2023 monitoring period that was undertaken to address federal Condition 3.17 of the federal EIS Decision Statement, which relates to mitigating and monitoring potential adverse effects on fish and fish habitat with respect to groundwater. There were three main groundwater monitoring components:

1) Pumped Volume Monitoring
2) Water Level Monitoring
3) Water Quality Monitoring

Methods and results for groundwater monitoring are described herein, along with recommendations for adaptive management. An overview of the groundwater quantity and quality monitoring locations is presented in Appendix C-1, Table C-1-1. The groundwater quantity monitoring locations are shown in Figure 2-3 and Figure 2-4 and the groundwater quality locations are shown on Figure 2-5.



V:\01609\active\609608651\drawing\MXD\Aquatics\ReportFigures\2023_Fish_Federal_EIS_Followup_Report\160901057_2023_FedFish_Fig_2_3_GW_Level_Monitoring_Overview.mxd
Revised: 2023-11-22 By: dharvey

November 2023
160901057

Stantec

Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

Legend

- Monitoring Well
- Groundwater Quantity Trigger Threshold Monitoring Locations
- Drive Point
- Proposed Monitoring Location
- Manual Groundwater Level Measurement
- Data Logger
- Monitoring Location Overprinted by Mine Infrastructure
- Seep
- Former Gas Station
- Faults
- New Highway 11 Alignment
- Watercourse- Permanent
- Watercourse- Intermittent
- Former Macleod Landfill Site
- Wetland (Eco-Site Based)

Historic Tailings Areas

- Hardrock Tailings
- Hardrock Reactive Tailings Area
- MacLeod High Tailings
- MacLeod Low Tailings

Historical Tailings Areas Mine Shafts

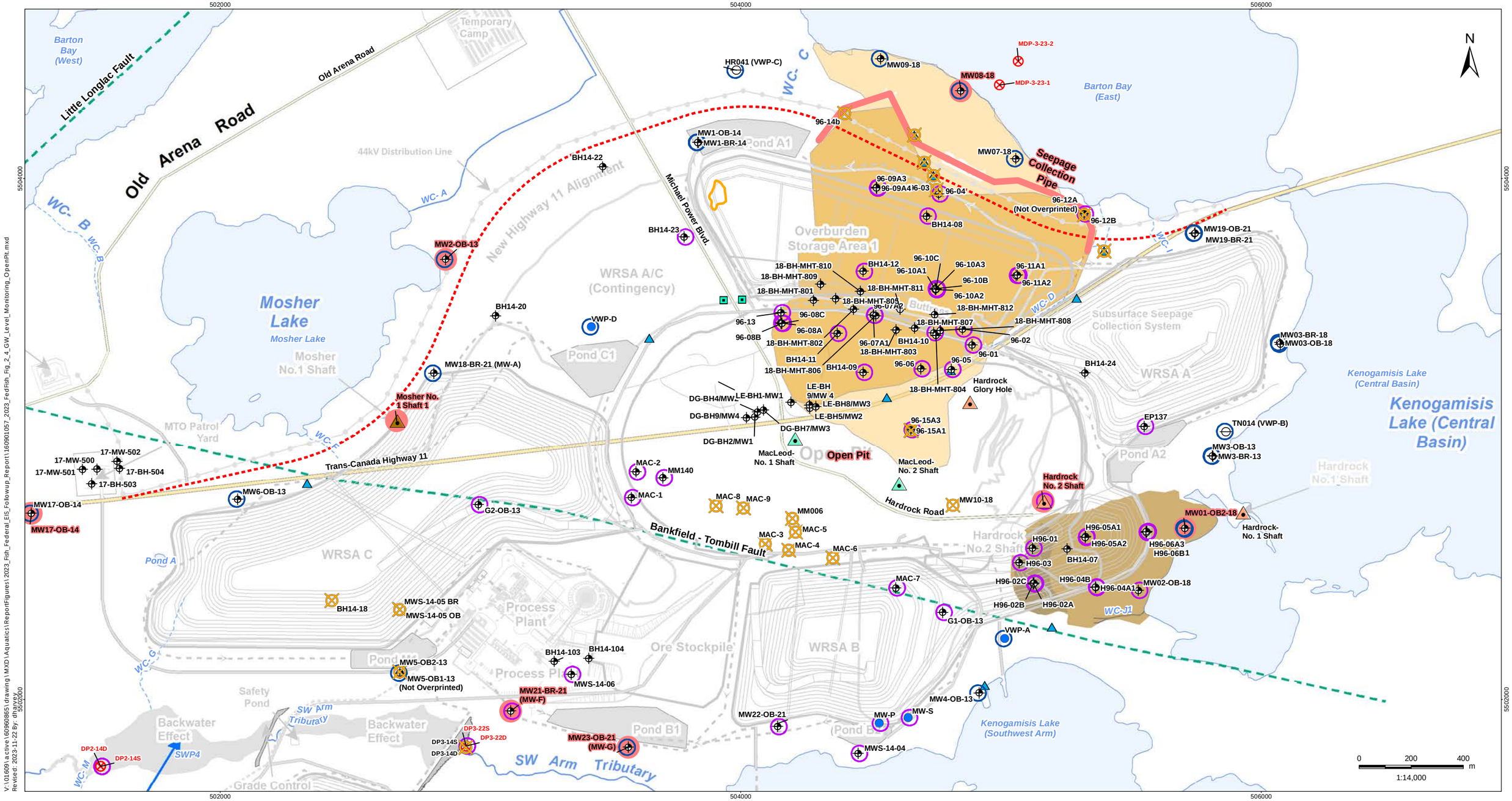
- Consolidated Mosher Long Lac Shaft
- Hard Rock Gold Mine Shaft
- Little Longlac Mine Shaft
- MacLeod-Cockshutt Mine Shaft

Client/Project

Greenstone Gold Mines GP Inc (GGM)
Greenstone Mine

Figure No.
2-3

Title
Groundwater Quantity Monitoring Locations (Overview)



V:\01609\active\160960857\drawing\MXD\Aquatics\ReportFigures\2023_Fish_Federal_EIS_Followup_Report\160901057_2023_FedFish_Fig_2_4_GW_Level_Monitoring_OpenPit.mxd
Revised: 2023-11-22 By: dhavey

November 2023
160901057

Stantec

Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

Legend

- Monitoring Well
- Vibrating Wire Piezometer
- Groundwater Quantity Trigger Threshold Monitoring Locations
- Drive Point
- Proposed Monitoring Location
- Manual Groundwater Level Measurement
- Data Logger
- Monitoring Location Overprinted by Mine Infrastructure
- Seep
- Former Gas Station
- Faults
- New Highway 11 Alignment
- Watercourse- Permanent
- Watercourse- Intermittent
- Former Macleod Landfill Site
- Wetland (Eco-Site Based)

Historic Tailings Areas

- Hardrock Tailings
- Hardrock Reactive Tailings Area
- MacLeod High Tailings
- MacLeod Low Tailings

Historical Tailings Areas Mine

- Consolidated Mosher Long Lac Shaft
- Hard Rock Gold Mine Shaft
- Little Longlac Mine Shaft
- MacLeod-Cockshutt Mine Shaft

Client/Project

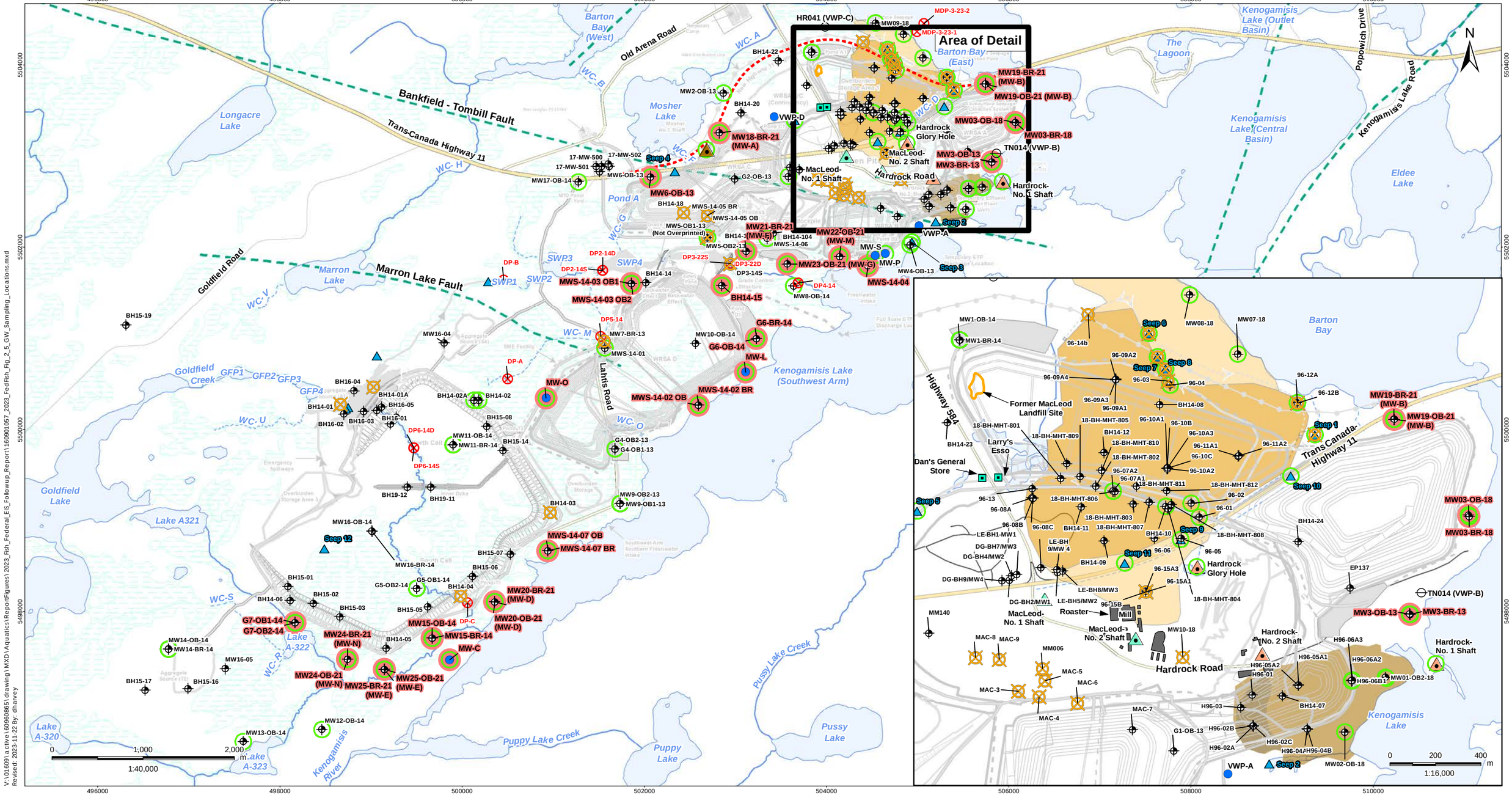
Greenstone Gold Mines GP Inc (GGM)
Greenstone Mine

Figure No.

2-4

Title

Groundwater Quantity Monitoring Locations (Open Pit Area)



Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

Legend

- Monitoring Well
- Vibrating Wire Piezometer
- Trigger Threshold Groundwater Quality Monitoring Location
- Drive Point
- Proposed Monitoring Location
- Groundwater Sampling Location
- Monitoring Location Overprinted by Mine Infrastructure
- Seep
- Former Gas Station
- Faults
- New Highway 11 Alignment
- Watercourse- Permanent
- Watercourse- Intermittent
- Former Macleod Landfill Site
- Wetland (Eco-Site Based)

Historic Tailings Areas

- Hardrock Tailings
- Hardrock Reactive Tailings Area
- MacLeod High Tailings
- MacLeod Low Tailings

Historical Tailings Areas Mine Shafts

- Consolidated Mosher Long Lac Shaft
- Hard Rock Gold Mine Shaft
- Little Longlac Mine Shaft
- MacLeod-Cockshutt Mine Shaft

Client/Project

Greenstone Gold Mines GP Inc (GGM)
Greenstone Mine

Figure No.

2-5

Title

Groundwater Quality Monitoring Locations

November 2023
160901057

V:\01609\active\60960865\drawing\MXD\Aquatics\ReportFigures\2023_Fish_Federal_EIS_Followup_Report\160901057_2023_FedFish_Fig_2_5_GW_Sampling_Locations.mxd
Revised: 2023-11-22 By: dharvey

2.3.1 Methods

The following section presents the methods and a summary of the required data analysis, consistent with the Plan (GGM 2021a) and program recommendations provided in the 2021 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report (GGM 2021b) and 2022 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report (GGM 2022).

2.3.1.1 Pumped Volume Monitoring

2.3.1.1.1 Data Collection

The Plan includes measuring the water pumped from the open pit, historical shafts, MHT seepage collection system, and aggregate pits and quarry, when occurring. In addition to these operational features, the water pumped from excavations during the construction of some of the Mine features, including the TMF, GFC diversion, process plant, culverts, and water management ponds, when occurring, is measured and tracked.

The frequency of sampling for each of the groundwater monitoring locations presented in Table C-1-1 of Appendix C-1 is described as follows:

- Water quantity (flow rate and total daily volume) pumped from the historical shafts during dewatering of historical underground workings and open pit.
- Water quantity (flow rate and total daily volume) pumped from the MHT seepage collection system (east pumping chamber discharge).
- Water quantity (flow rate and total daily volume) pumped from the aggregate pits (S1, S4, and T2) and TMF Quarry.
- Water quantity (flow rate and total daily volume) pumped from construction excavations in the process plant area.

The pumped volume from the historical workings, the open pit, and the aggregate pits, when occurring, are monitored using a flow meter or totalizer so that the pumped volume may be measured or calculated based on flow rate and duration of pumping on a daily basis. For construction dewatering from excavations, the pumped volume is monitored directly or estimated based on pump capacity and daily run times.

2.3.1.1.2 Data Analysis

The pumped volume from the open pit and historical underground workings, when pumping is occurring, are compared to the predicted dewatering rate to assess whether there is potential for drawdown greater than that predicted in the EIS/EA (Stantec 2017) which can potentially result in changes in baseflow in nearby surface water features.

Select locations where water is pumped were chosen as trigger threshold monitoring locations under the adaptive management plan for groundwater (GGM 2021a). Table 2-5 presents a summary of the groundwater pumped volume trigger threshold monitoring locations and associated rationale. The pumped volume for trigger threshold monitoring locations are reviewed with respect to the trigger threshold quarterly.

In the case of construction dewatering, the volume of water is recorded as a single pumped volume but is required to be reported as a separate groundwater taking and surface water taking, in accordance with the relevant issued PTTWs. It is not possible to separate groundwater and surface water flow from the total flow in the field. Therefore, in the analysis of the pumped volume data, the division of groundwater and surface water is considered and divided on a consistent percentage basis.

2.3.1.2 Groundwater Water Level Monitoring

2.3.1.2.1 Data Collection

The Plan includes monitoring of groundwater levels within the vicinity of the open pit, TMF, WRSAs, aggregate pits, Kenogamisis Lake, SWAT, and Goldfield Creek to assess potential effects of the Project on groundwater quantity. Figure 2-3 and Figure 2-4 show the groundwater level monitoring locations. Well completion details are presented in Table C-2-1 in Appendix C-2.

Groundwater level monitoring was to be completed in 2023 at up to 133 existing monitoring wells (91 locations) as well as 22 proposed monitoring wells, drive-point piezometers, and/or vibrating wire piezometers (11 locations) for a total of 155 monitoring points (102 locations). Data loggers are installed in up to 56 existing monitoring points (39 locations) and will be installed in up to 11 proposed monitoring points at four locations. Proposed monitoring locations will be added to the monitoring program once installation has been completed. Table C-1-1 in Appendix C-1 presents the groundwater level monitoring program. The total number of locations monitored during the reporting period is described in Section 2.3.2.2.1.

Water levels at the monitoring wells and drive-point piezometers are monitored using a combination of manual and automated techniques. Manual water level measurements are collected using a battery-operated probe and calibrated tape, water depths were measured in meters below the top of casing (BTOC) and recorded.

Monitoring wells instrumented with a data logger record pressure and frequency. If the data logger is not vented, then the atmospheric pressure is recorded at the site so that the data logger readings may be corrected for atmospheric pressure to obtain the actual height of water above the data logger. The data loggers are set to record at a frequency that is sufficient to understand the variability in the groundwater level at the given monitoring well (minimum 1-hour intervals).

2.3.1.2.2 Data Analysis

The groundwater levels in monitoring wells are compared to baseline conditions and to those predicted in the EIS/EA (Stantec 2017) once related pumping activities commence. The purpose is to assess whether there is potential for a change in associated baseflow to nearby surface water features that is greater than that predicted in the EIS/EA (Stantec 2017) and to confirm the reversal of the horizontal hydraulic gradient between the historical MacLeod and Hardrock tailings and Kenogamisis Lake.

Select locations, where groundwater levels are monitored, were chosen as trigger threshold monitoring locations for groundwater level and/or horizontal hydraulic gradient under the adaptive management plan for groundwater (Stantec 2020). Table 2-5 presents a summary of the groundwater level and horizontal hydraulic gradient trigger threshold monitoring locations and associated rationale. The groundwater level and horizontal hydraulic gradient for trigger threshold monitoring locations are reviewed with respect to the trigger thresholds in spring, summer, and fall of a given year.

Table 2-5: Groundwater Trigger Threshold Monitoring Locations, Frequency, Parameters, and Rationale

Trigger Threshold Monitoring Location	Frequency of Measurement and Comparison to Trigger Threshold	Trigger Threshold Parameter	Rationale
Groundwater Quantity			
Historical shafts and Open Pit	Daily Compared to Trigger Threshold – Quarterly	Pumped Volume	Indirectly monitor potential effects of dewatering the open pit on groundwater levels.
Open Pit	Compared to Trigger Threshold – Quarterly	Pumped Volume	
Aggregate Pit S1	Daily Compared to Trigger Threshold - Quarterly	Pumped Volume	Indirectly monitor potential effects of dewatering the aggregate pits on groundwater levels.
Aggregate Pit T2	Daily Compared to Trigger Threshold - Quarterly	Pumped Volume	
Aggregate Pit S4	Daily Compared to Trigger Threshold - Quarterly	Pumped Volume	

Trigger Threshold Monitoring Location	Frequency of Measurement and Comparison to Trigger Threshold	Trigger Threshold Parameter	Rationale
BH14-01 G7-OB1-14 G7-OB2-14 MW14-OB-14 MW14-BR-14 MWS-14-01 MWS-14-07 OB DP-A (Proposed Drive-Point Piezometer DP-A in Federal Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan (GGM 2021a)) (Central Wetland)	Manual - Spring, Summer, and Fall Data Logger – 1-hour Intervals Compared to Trigger Threshold – Spring, Summer, and Fall	Water Level	Monitor potential changes in groundwater levels associated with the TMF and/or dewatering of the aggregate pits to be protective of wetlands and baseflow to surface water features.
DP-B (Proposed Drive-Point Piezometer DP-B in Federal Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan (GGM 2021a)) (GFC Diversion)	Manual - Spring, Summer, and Fall Data Logger – 1-hour Intervals Compared to Trigger Threshold – Spring, Summer, and Fall	Water Level	Monitor potential changes in groundwater levels associated with the GFC diversion on a wetland located in the upper reaches of the SWAT.
MW2-OB-13 MW8-OB-14 MW17-OB-14 MW01-OB2-18 MW08-18	Manual - Spring, Summer, and Fall Data Logger – 1-hour Intervals Compared to Trigger Threshold – Spring, Summer, and Fall	Water Level	Monitor potential changes in groundwater levels associated with dewatering the open pit to be protective of wetlands and baseflow to surface water features.
MW21-BR-21 (Proposed Monitoring Well MW-F in Federal Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan (GGM 2021a)) MW23-OB-21 (Proposed Monitoring Well MW-G in Federal Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan (GGM 2021a))	Manual - Spring, Summer, and Fall Data Logger – 1-hour Intervals Compared to Trigger Threshold – Monthly during Construction Dewatering of process plant	Horizontal Hydraulic Gradient toward the SWAT	Monitor potential changes in groundwater levels associated with temporary construction dewatering of the process plant area to be protective of wetlands and baseflow to surface water features. Confirm there is a horizontal hydraulic gradient toward the SWAT.

Trigger Threshold Monitoring Location	Frequency of Measurement and Comparison to Trigger Threshold	Trigger Threshold Parameter	Rationale
MHT Seepage Collection Drain	Manual - Spring, Summer, and Fall Data Logger – 1-hour Intervals Compared to Trigger Threshold – Spring, Summer, and Fall	Horizontal Hydraulic Gradient	Confirm that an inward horizontal hydraulic gradient is maintained toward the MHT seepage collection drain and/or toward the open pit. The horizontal hydraulic gradient will be interpreted based on water level measurements at nearby and surrounding monitoring locations ((via access holes in the drain, 96-03, 96-04, 96-09A1, 96-09A2, 96-09A3, 96-09A4, 96-11A1, 96-11A2, 96-12A, 96-12B, 96-14B, MW07-18, MW08-18, MW09-18, MW-H, MW-I, MW-J, and/or MW-K)
Reversal in horizontal hydraulic gradient between the historical MacLeod and Hardrock tailings and Kenogamisis Lake.	Manual – Spring, Summer, and Fall Data Logger – 1-hour Intervals at select wells Compared to Trigger Threshold – Fall starting in year 5 of open pit development	Horizontal Hydraulic Gradient	Monitor timing of reversal in hydraulic gradient between historical tailings and Kenogamisis Lake to reduce mass loading from historical tailings to Kenogamisis Lake. The horizontal hydraulic gradient will be interpreted based on water level measurements at monitoring wells completed within and surrounding the historical MacLeod and Hardrock tailings that will be monitored as per the groundwater sampling program (Section 2.3.1.4.1, Figure 2-3 and Figure 2-4)
Groundwater Quality			
G7-OB1-14 G7-OB2-14	Spring, Summer, and Fall	CN- (free), SO4, and dissolved Sb, As, Co, Fe, and Ur	Monitor for potential effects of seepage from the TMF on Lake A-322
MW15-OB-14 MW15-BR-14 MW25-BR-21 and MW25-OB-21 (Proposed Monitoring Well MW-E in Federal Fish and Fish	Spring, Summer, and Fall	CN- (free), SO4, and dissolved Sb, As, Co, Fe, and Ur	Monitor for potential effects of seepage from the TMF prior to discharge to GFC Tributary

Trigger Threshold Monitoring Location	Frequency of Measurement and Comparison to Trigger Threshold	Trigger Threshold Parameter	Rationale
Habitat Federal EIS Follow-Up Monitoring Plan (GGM 2021a)) MW24-BR-21 and MW24-OB-21 (Proposed Monitoring Well MW-N in Federal Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan (GGM 2021a))			
MWS-14-07 OB MWS-14-07BR MW20-BR-21 and MW20-OB-21 (Proposed Monitoring Well MW-D in Federal Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan (GGM 2021a)) Proposed Monitoring Wells MW-C	Spring, Summer, and Fall	CN- (free), SO4, and dissolved Sb, As, Co, Fe, and Ur	Monitor for potential effects of seepage from the TMF prior to discharge to Southwest Arm
MWS-14-02 OB MWS-14-02-BR G6-BR-14 G6-OB-14 Proposed Monitoring Well MW-L	Spring, Summer, and Fall	SO_4, and dissolved Sb, As, Co, Fe, and Ur	Monitor for potential effects of seepage from WRSA D prior to discharge to Southwest Arm
BH14-15 MWS-14-03 OB1 MWS-14-03 OB2	Spring, Summer, and Fall	SO_4, and dissolved Sb, As, Co, Fe, and Ur	Monitor for potential effects of seepage from WRSA D prior to discharge to SWAT
MWS-14-04 MW22-OB-21 (Proposed Monitoring Well MW-M in Federal Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan (GGM 2021a)) Proposed Monitoring Well MW-O	Spring, Summer, and Fall	SO_4, and dissolved Sb, As, Co, Fe, and Ur	Monitor for potential effects of seepage from WRSA B and/or Ore Stockpile prior to Discharge to Southwest Arm

Trigger Threshold Monitoring Location	Frequency of Measurement and Comparison to Trigger Threshold	Trigger Threshold Parameter	Rationale
MW6-OB-13 MW18-BR-21 (Proposed Monitoring Well MW-A in Federal Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan (GGM 2021a))	Spring, Summer, and Fall	SO_4, and dissolved Sb, As, Co, Fe, and Ur	Monitor for potential effect of seepage from WRSA C prior to discharge to Mosher Lake
MW3-OB-13 MW3-BR-13 MW03-OB-18 MW03-BR-18 MW19-BR-21 and MW19-OB-21 (Proposed Monitoring Well MW-B in Federal Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan (GGM 2021a))	Spring, Summer, and Fall	SO_4, and dissolved Sb, As, Co, Fe, and Ur	Monitor for potential effects of seepage from WRSA A prior to discharge to Central Basin and Barton Bay
MW21-BR-21 (Proposed Monitoring Well MW-F in Federal Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan (GGM 2021a)) MW23-OB-21 (Proposed Monitoring Well MW-G in Federal Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan (GGM 2021a))	Spring, Summer, and Fall	SO_4, and dissolved Sb, As, Co, Fe, Ur, BTEX, and PHCs	Monitor for potential effects of the process plant and associated facilities (fuel storage) on groundwater quality as well as potential effects of seepage from upgradient WRSAs.

2.3.1.3 Groundwater Water Quality Monitoring

2.3.1.3.1 Data Collection

The Plan includes monitoring of groundwater quality upgradient, cross gradient, and downgradient of the TMF, WRSAs, and historical MacLeod and Hardrock tailings to monitor for changes in groundwater quality due to Project development. Figure 2-5 shows the groundwater quality monitoring locations. A summary of the groundwater quantity and quality monitoring locations is presented in Table C-1-1 of Appendix C-1.

Groundwater quality monitoring was to be completed in 2023 at up to 97 existing monitoring points (67 locations). Eight monitoring wells (5 locations) are proposed for future installation. Proposed monitoring locations will be added to the monitoring program once installation has been completed.

Newly installed (2021) monitoring wells (included in the 97 locations described above) for groundwater quality are sampled in spring, summer, and fall until 10 sampling events are completed, then sampling frequency will change to fall, unless the new monitoring well is associated with a trigger threshold monitoring location as per the Plan (Section 2.3.3) then frequency will remain as spring, summer, and fall.

Groundwater samples are collected in laboratory supplied bottles containing appropriate preservatives. Samples that require filtering (e.g., samples for metals analysis) are filtered in the field using a dedicated 0.45 µm filter.

Groundwater quality sampling for general chemistry and metals analysis is completed by purging the monitoring wells prior to sample collection. Where feasible, the monitoring wells are purged by removing a minimum of three well casing volumes of water, or until the well is purged dry three times. Monitoring wells are sampled using dedicated tubing and peristaltic pumps. Field parameters comprising temperature, pH, conductivity, oxidation-reduction potential (ORP), and DO are measured during purging using a multi-parameter water quality meter and flow through cell where feasible. The meter is calibrated prior to use according to the manufacturer's specifications using the appropriate calibration standards.

QA/QC samples are collected as a check on the field methodology, laboratory analytical methods, and on sample precision in accordance with Environment Canada (2012). A minimum of one field blank and trip blank are collected per sampling event in addition to one blind field duplicate for approximately 10% of groundwater samples per sampling event.

Groundwater quality samples are placed on ice and sent, under COC documentation, to an analytical laboratory that is accredited under CALA.

2.3.1.3.2 Data Analysis

Select locations were chosen as trigger threshold monitoring locations for groundwater quality under the adaptive management plan for groundwater (GGM 2021a). Table 2-5 presents a summary of the groundwater quality trigger threshold monitoring locations and associated rationale. The groundwater quality trigger threshold monitoring locations are reviewed with respect to the trigger thresholds in spring, summer, and fall of a given year.

2.3.1.3.3 Laboratory Analysis

Groundwater quality samples collected as part of the Plan are analyzed for general chemistry, nutrients, and metals as listed in Table 2-6. Four monitoring wells located downgradient of the fuel storage location (MW5-OB1-13, MW5-OB2-13, MW21-BR-21 (MW-F) and MW23-OB-21 (MW-G)) are also sampled for organic parameters listed in Table 2-6.

Dissolved metals analysis is considered appropriate for groundwater samples and is more representative of metals chemistry in the aquifer than total metals since the suspended solids are generally not transported through aquifer materials and water supply wells are typically designed and developed to a state to reduce the potential for sediment in the pumped water. Therefore, the dissolved metals fraction is analyzed and compared to regulatory criteria and/or the trigger thresholds as per the Plan.

Table 2-6: Summary of Analytical Parameters for Groundwater Quality Samples

Parameter	
Alkalinity	Copper
Ammonia (as N)	Iron
Chloride	Lead
Electrical Conductivity	Magnesium
Cyanide (free and total)	Manganese
Fluorine	Mercury
Hardness	Molybdenum
Nitrite (as N)	Nickel
Nitrate (as N)	Potassium
pH	Selenium
Phosphorus	Silver
Sulfate	Sodium
Total Dissolved Solids (TDS)	Thallium
Total Suspended Solids	Tungsten
Turbidity	Uranium
Aluminum	Vanadium
Antimony	Zinc
Arsenic	Zirconium
Beryllium	Benzene *
Boron	Toluene *
Calcium	Ethylbenzene *

Parameter	
Cadmium	Xylenes *
Chromium (total)	Petroleum Hydrocarbons (PHCs) Fraction 1 (F1) to 4 (F4) *
Cobalt	

* Benzene, Toluene, Ethylbenzene, Xylenes, and PHCs sampled at monitoring wells located downgradient of fuel storage locations (MW5-OB1-13, MW5-OB2-13 and MW21-BR-21 (MW-F), and MW23-OB-21 (MW-G))

2.3.2 Results

The following sections present the results of the groundwater quantity and quality monitoring program including comparisons of data to groundwater trigger thresholds as required by the AMP. As required by the Plan, monitoring began March 1, 2021, corresponding with the start of construction of the Mine. The current reporting period is from October 1, 2022, until September 30, 2023. The groundwater monitoring results presented in this report include the spring and summer 2023 monitoring events. The fall 2022 event was included in GGM (2022) to avoid splitting seasonal groundwater sampling events over multiple annual reports. The fall 2023 monitoring event did not begin until after this 2023 monitoring period.

2.3.2.1 Pumped Volume Monitoring

2.3.2.1.1 Data Collection

The following list provides a summary of the pumped volume monitoring locations for the 2023 monitoring period:

- Historical Shafts – MacLeod No.1 Shaft pumping consistently
- Open Pit – No pumping occurred
- Aggregate Pit T2 - Aggregate extraction from the T2 till borrow area is ongoing but did not require dewatering as the extraction was above the water table
- Process Plant Construction Dewatering – No construction dewatering of groundwater or surface water occurred in the area of the process plant
- MHT seepage collection system – Collection occurred consistently.

Pumping from the historical underground workings began on August 5, 2022. The original Plan indicated pumping of the historical underground workings would be via Hardrock No. 2 Shaft and Mosher No. 1 Shaft. Based on detailed design, pumping from MacLeod No 1. Shaft instead of Hardrock No. 2 Shaft was predicted to be more efficient at limiting groundwater inflow to the starter pit. Therefore, pumping of the historical underground workings in the 2023 monitoring period was completed via MacLeod No. 1 Shaft. Quarterly averaged pumped volume data for the historical underground workings is presented in Figure C-3-1 in Appendix C-3. Pumped volume data between

August 5, 2022, and September 19, 2022, was unavailable at the time of GGM (2022) report preparation but has been included in Figure C-3-1 for completeness.

During GGM (2022) report preparation, no process plant construction dewatering data was available between April 11, 2022, and August 10, 2022. Pumping data over this period is presented in Appendix C, Figure C-3-2 for completeness. No additional construction dewatering related to the process plant area is expected.

2.3.2.1.2 Data Analysis

One of the five groundwater quantity trigger thresholds described in the Plan is related to pumping. Groundwater quantity trigger threshold 2, which compares measured pumped volumes from the open pit, historical shafts, and/or aggregate pits in relation to the predicted dewatering rates in the EIS/EA, is evaluated quarterly. Quarterly average pumped volume data for the historical shafts are presented in Figure C-3-1 (Appendix C-3) along with the applicable pumped volume trigger threshold of 14,860 m^3/day. Pumping from MacLeod Shaft No. 1 occurred consistently throughout the monitoring period. Quarterly average pumped volumes were below the trigger threshold of 14,860 m^3/day. There was no exceedance of groundwater quantity trigger threshold 2.

2.3.2.2 Groundwater Water Level Monitoring

2.3.2.2.1 Data Collection

For this reporting period, groundwater level monitoring was completed in spring and summer 2023 at most required locations. The fall 2022 event was included in GGM (2022) to avoid splitting seasonal groundwater sampling events over multiple annual reports. The fall 2023 monitoring event did not begin until after the 2023 monitoring period. Where data loggers were installed, downloading occurred during each water level monitoring event.

Groundwater level monitoring and data logger downloading was completed during each seasonal monitoring event according to Table C-1-1 in Appendix C with following exceptions:

Spring 2023 (June 5, 2023, to July 6, 2023):

- BH14-01 was overprinted by mine infrastructure. No manual groundwater level could be taken and data logger data for BH14-01 was not available. Monitoring well BH14-01 was identified by the Plan as a groundwater quantity trigger threshold, monitoring potential changes in groundwater levels associated with the TMF and/or dewatering of the aggregate pits to be protective of wetlands and baseflow to surface water features. BH14-01 is scheduled for replacement during the next drilling program in fall 2023 (after the current reporting period) and will be reported on in subsequent monitoring reports.
- 96-03 was overprinted by mine infrastructure. No manual groundwater levels could be taken. Monitoring well 96-03 is part of the Plan for monitoring hydraulic gradients in and around the

historical MacLeod tailings as well as additional proposed monitoring wells. Monitoring well 96-03 is scheduled for replacement during the next drilling program in fall 2023 (after the current reporting period) and will be reported on in subsequent monitoring reports.

- BH14-01A, BH14-18, MAC-3, MAC-4, MAC-6, MAC-8, and MAC-9 were overprinted by mine infrastructure. No manual groundwater levels could be taken. These monitoring wells were identified in the Plan as locations that would be removed from the Plan as construction progresses as they were located within the footprint of mine infrastructure. BH14-01A, BH14-18, MAC-3, MAC-4, MAC-6, MAC-8, and MAC-9 will be removed from the monitoring program.
- In late March 2023, monitoring location MW7-BR-13 was noted to be damaged. MW7-BR-13 is located downgradient of WRSA D and is included in the monitoring program for spring, summer, and fall manual groundwater level measurements and logger data download, and a fall groundwater quality sample. MW7-BR-13 is not a trigger monitoring location for quantity or quality. Well replacement is planned for fall 2023 (after the current reporting period) and will be reported on in subsequent monitoring reports.
- The water level meter and pressure transducer cable were stuck in Mosher No. 1 Shaft. Equipment was lost and no data could be obtained.
- Faulty data loggers were observed in G6-OB-14 and MW6-OB-13 in early August, 2023. Replacement occurred in September summer 2023.
- There was a data logger programming error at MW19-BR-21 (MW-B). No automated continuous groundwater level data is available however manual measurements are available for the monitoring period. The data logger was reprogrammed to continue logging.

Summer 2023 (August 1, 2023 to August 29, 2023):

- MW10-18 was overprinted by mine infrastructure. MW10-18 is located within the footprint of open pit, south of the historical MacLeod tailings and included in the monitoring program for manual groundwater level measurements and groundwater quality samples, until such time the well is overprinted by mine construction and/or infrastructure. MW10-18 will be removed from the monitoring program.
- Manual groundwater level at DP2-14S was not collected because the location was inaccessible due to high water levels.
- No manual groundwater level or data logger data could be obtained from the Mosher No. 1 Shaft. Mosher No. 1 Shaft was being prepared for pump installation.
- G5-OB1-14 and G5-OB2-14 were inaccessible due to flooding. No manual groundwater measurements could be taken.
- No logger data is available for MW6-OB-13 for the period of August 2 to September 27, 2023.
- There was a data logger programming error at MW19-BR-21 (MW-B). No automated continuous groundwater level data are available.

There are 12 remaining proposed monitoring wells (9 locations) in the Plan that were not installed at the time of the report completion. Details of the additional monitoring locations are provided in Section 2.3.1.1 and Appendix C-2, Table C-2-1. Proposed monitoring wells are tentatively scheduled to be installed in the fall of 2023 but are dependent on construction schedules. The two proposed vibrating wire piezometers are located in areas currently under active construction. Installation timing will be reviewed following each upcoming monitoring event.

2.3.2.2.2 Data Analysis

Manual groundwater level measurements collected during the reporting period are presented in Appendix C-3, Table C-3-1. Groundwater level data collected via data loggers are presented in hydrographs in Appendix C-3.

Of the five trigger thresholds for groundwater quantity described in the Plan, one trigger threshold is related to groundwater level and three trigger thresholds are related to horizontal hydraulic gradients. The thresholds are related to dewatering of mine features (open pit, aggregate pits, historical underground workings) and/or infrastructure such as the MHT seepage collection system and GFC diversion. A review of the applicable groundwater trigger thresholds for the reporting period is presented as follows.

Groundwater quantity trigger threshold 1 monitors impacts related to groundwater level declines below the predicted minimum groundwater level elevations at select groundwater trigger threshold locations as presented in Table 2-5. There are two areas where trigger threshold 1 was applicable during this monitoring period as follows.

Potential changes in groundwater levels on a wetland located in the upper reaches of the SWAT are monitored at DP-B. A groundwater trigger threshold for DP-B was developed incorporating the lowest groundwater elevation recorded during baseline data collection less the predicted drawdown of 0.5 m. Both manual groundwater levels and datalogger data were used. The groundwater trigger threshold for DP-B of 332.61 m AMSL is presented in Figures C-3-5 in Appendix C along with historical monitoring data. DP-B groundwater elevations were above the trigger threshold throughout the monitoring period.

Dewatering of the open pit area began on September 19, 2022. Monitoring locations MW2-OB-13, MW8-OB-14, MW17-OB-14, MW01-OB2-18, and MW08-18 are trigger threshold 1 monitoring locations to monitor for potential changes in groundwater levels associated with dewatering the open pit and historical underground workings. Figure C-3-5 presents groundwater elevation data collected in spring and summer 2023 compared to groundwater quantity trigger thresholds for MW2-OB-13, MW8-OB-14, MW17-OB-14, MW01-OB2-18, and MW08-18. Groundwater elevations at the open pit dewatering trigger threshold locations were above their respective groundwater trigger

threshold during this reporting period. No exceedances of groundwater quantity trigger threshold 1 occurred in this monitoring period.

Groundwater quantity trigger threshold 3 requires the maintenance of an inward horizontal hydraulic gradient toward the SWAT from monitoring wells MW21-BR-21 (MW-F) and MW23-OB-21 (MW-G) during construction dewatering associated with the process plant. Construction dewatering for the process plant ceased by August 10, 2022. Therefore, groundwater quantity trigger threshold 3 is not applicable during the 2023 monitoring period. As groundwater dewatering associated with excavations in the process plant area has ceased, groundwater quantity trigger threshold 3 is not required in subsequent reports unless construction dewatering of the process plant recommences.

Groundwater quantity trigger threshold 4 requires an inward horizontal hydraulic gradient to be maintained toward the MHT seepage collection drain. The trigger threshold is to be evaluated in spring, summer, and fall at monitoring wells presented in Table 2-5. Construction of the MHT seepage collection system commenced on April 6, 2022, with operation of the drain commencing in May 2022. Figure C-3-3 (Appendix C) presents available groundwater level monitoring data for the monitoring locations associated with the MHT seepage collection system along with the lowest invert elevation of the MHT seepage collection drain (at the east pumping station). Groundwater monitoring location 96-12B (manual groundwater level and logger data) was to be used in trigger threshold review but was overprinted by mine infrastructure in spring 2022. Instead, manual and data logger data was collected from 96-12A. Details of monitoring well 96-12A are presented in Table C-2 (Appendix C). Additional monitoring wells are proposed in the Plan to allow the monitoring of water levels near the drain as well as upgradient and downgradient of the drain to understand horizontal hydraulic gradient around the drain. As stated in the Plan, the proposed monitoring wells would not be installed until construction of the MHT drain was complete. The drain has been constructed but the associated north berm and Highway 11 realignment, a portion of which overlies the MHT drain, is ongoing and it has not been possible to install the monitoring wells as access is limited and there is high risk the wells would be damaged or overprinted with ongoing construction. The wells are scheduled to be installed in fall 2023 (after the current monitoring period) as construction of the MHT drain and associated infrastructure is complete.

The available groundwater levels of the MHT seepage collection system monitoring locations show the groundwater levels upgradient of the drain (96 series monitoring wells) were higher than the invert elevation of the MHT east pumping station and the groundwater levels downgradient of the drain (MW07-18 through MW09-18) were lower than the invert elevation of the MHT east pumping station indicating groundwater flow from the MHT is toward the drain. In addition, the drain is being actively pumped, which means an inward hydraulic gradient to the drain would result from pumping. Therefore, there were no exceedances of the groundwater quantity trigger threshold 4 criteria during this reporting period.

Groundwater trigger threshold 5 monitors the reversal and timing of reversal of the horizontal hydraulic gradient between the historical tailings and Kenogamisis Lake as a result of open pit dewatering. Trigger threshold monitoring is scheduled to start in year 5 of dewatering. Since open pit dewatering and/or dewatering of the historical underground workings commenced in late 2022, trigger threshold 5 will be reviewed in 2026.

During the 2023 monitoring period, there were no exceedances of the groundwater level and horizontal hydraulic gradient trigger thresholds for groundwater quantity as defined in the Plan.

2.3.2.3 Groundwater Water Quality Monitoring

2.3.2.3.1 Data Collection

Groundwater quality monitoring is to be completed in the spring, summer and fall at select locations. This reporting period covers water quality sampling results from spring and summer 2023. Groundwater quality monitoring was completed during each seasonal monitoring event according to Table C-1-1 in Appendix C with following exceptions:

Spring 2023 (June 5, 2023, to July 6, 2023):

- Seep 11, DP-C, and MW10-18 did not have enough water to collect a sample.

Summer 2023 (August 1, 2023, to August 29, 2023):

- MW10-18 was overprinted by mine infrastructure. MW10-18 is located within the footprint of open pit, south of the historical MacLeod tailings and included in the monitoring program for manual groundwater level measurements and groundwater quality samples, until such time the well is overprinted by mine construction and/or infrastructure. MW10-18 will be removed from the monitoring program.
- Seep 11 and MW20-OB-21 did not have enough water to collect a sample.

The remaining proposed monitoring wells that were not installed at the time of the report completion are scheduled to be installed in the fall 2023 or following construction activities occurring in the immediate vicinity of the proposed locations. Details of the additional monitoring locations are provided in Section 2.3.1.1 and Appendix C-2, Table C-2-1.

As part of the AMP recommendations in GGM (2022), a status review of monitoring locations seep 1, seep 6, seep 7, and seep 8 was completed. It was concluded that following the commissioning of the MHT seepage collection system seep 1, seep 7, and seep 8 were no longer flowing and have been overprinted by mine infrastructure. Seep 1, seep 7, and seep 8 are likely dry as result of the effective operation of the MHT seepage collection system. Seep 6 was impacted by mine infrastructure development so the sampling location for seep 6 was relocated approximately 30 m west of the original location.

Prior to January 2022, the baseline surface water quality samples were analyzed by ALS. In January 2022, GGM contracted Testmark Laboratories to complete the water analyses for the Mine. Given the number of elevated concentrations of parameters observed since January 2022 compared to baseline concentrations, GGM undertook an investigation into the results of the laboratory analyses. In October 2022, the investigation involved collecting triplicate samples for analyses by Testmark Laboratories, ALS, and Bureau Veritas (BV). Preliminary analytical results showed a difference in concentrations between laboratories, particularly in iron which was consistently elevated in the results from Testmark Laboratories versus ALS and BV. The reported results of the other parameters appeared similar across the three labs. As a result of this investigation, GGM has secured an analytical contract with BV to undertake the laboratory analysis of water samples associated with the Mine. The transition in laboratories commenced in the March 2023 sampling period, such that samples collected in the month of March and subsequent months were analyzed by BV. Therefore, water analytical data analyzed between January 2021 and January 2023 should be viewed with this in mind.

2.3.2.3.2 Data Analysis

Table C-4-1 (Appendix C-4) presents the groundwater quality results for the 2023 monitoring period. Laboratory Certificates of Analysis for spring and summer 2023 sampling events are provided in Appendix C-4.

Groundwater quality trigger thresholds were chosen to alert to changing groundwater quality downgradient of the TMF, WRSAs, and ore stockpile prior to discharge to surface water features. Storage of material within the TMF, WRSAs, and ore stockpile has not commenced except within WRSA C. The groundwater quality data collected during the 2023 monitoring period are considered baseline data except for monitoring wells associated with monitoring seepage from WRSA C. Due to the storage of material within WRSA C, the groundwater quality trigger monitoring locations associated with WRSA C were evaluated as defined in the Federal Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan (GGM 2021a).

Table 2-7 presents a summary of the groundwater quality trigger threshold review. Trigger Threshold 1 is defined as a statistically significant upward trend for a given indicator parameter or for stations that have a statistically significant upward trend in the baseline data, an increase in the magnitude of the trend compared to baseline.

Groundwater quality trigger threshold parameters at WRSA C monitoring locations showed a downward or neutral trend in indicator parameter concentrations, except for arsenic and iron at MW6-OB-13. Groundwater quality trigger threshold parameters with a downward or neutral trend do not require further review. Arsenic and iron concentrations at MW6-OB-13 show upward trends in both baseline dataset and the full dataset. A review for the full dataset and baseline dataset for both arsenic and iron concentrations indicate similar order of magnitude trendlines, therefore,

trigger threshold 1 is not exceeded. No groundwater quality trigger thresholds were exceeded in this reporting period.

Table 2-7: Groundwater Quality Trigger Threshold Summary

WRSA C				
Monitoring Location	**Trigger Threshold Parameter**	**Mann-Kendall Analysis Result: Baseline Data**	**Mann-Kendall Analysis Result: All Data**	**Groundwater Quality Trigger Threshold 1 Exceedance**
MW6-OB-13	Sulfate	Downward trend	Downward trend	No
	Antimony	Downward trend	Decreasing trend	No
	Arsenic	Upward trend	Upward trend - similar magnitude to baseline data	No
	Cobalt	Downward trend	Downward trend	No
	Iron	Upward trend	Upward trend - similar magnitude to baseline data	No
	Uranium	Neutral trend	Neutral trend	No
MW18-BR-21	Sulfate	Insufficient baseline data to complete analysis. Monitoring location installed 24-Jun-21	Downward trend	No
	Antimony		Downward trend	No
	Arsenic		Downward trend	No
	Cobalt		Downward trend	No
	Iron		Downward trend	No
	Uranium		Downward trend	No

2.3.3 Recommended Adaptive Management

The groundwater quantity and quality trigger locations were evaluated as per the AMP. The following sections present recommendations and/or updates to the Plan and associated groundwater monitoring and trigger monitoring locations, frequency, thresholds, and/or rationale. Recommended changes to the water quantity and water quality monitoring programs are detailed below and will be incorporated into monitoring activities and reporting for 2024.

Pumped Volume Monitoring

No changes to the pumped volume monitoring program are recommended during this monitoring period.

Groundwater Level Monitoring

The following changes to the groundwater level monitoring program are recommended:

- Evaluation of monitoring well network associated with groundwater quantity trigger threshold 4 and the maintenance of an inward horizontal hydraulic gradient to the MHT seepage collection drain. The need to replace 96-12B and/or 96-14B with respect to groundwater quantity trigger threshold 4 should be part of the evaluation. Up to four new monitoring wells (MW-H, MW-I, MW-J, and MW-K) will be installed once construction of the north berm and Highway 11 realignment is complete due to issues with access and risk of new monitoring wells being damaged during construction.
- Installation of replacement monitoring wells for BH14-01, 96-03, and MW7-BR-13 with monitoring to be continued according to the Plan.
- Removal of BH14-01A, BH14-18, MAC-3, MAC-4, MAC-6, MAC-8, MAC-9, and MW-18 from monitoring program. As indicated in the Plan, these monitoring wells were overprinted by mine infrastructure and are no longer required by the Plan.

Groundwater Quality Monitoring

The following changes to the groundwater quality monitoring program are recommended:

- Installation of a replacement monitoring well for MW5-OB2-13 with monitoring to be continued according to the Plan.
- Removal of overprinted seep 1, seep 7, and seep 8 from the monitoring program and seep 6 sampling location be moved 30 m west of the original location.
- Headers and notes on Table C-1-1 in Appendix C will be updated to remove VOC water quality sampling to align with report text which requires only BTEX and PHC sampling at select locations.
- Groundwater level trigger thresholds will be updated once the baseline data collection period ends for a given mine feature. Baseline data collection period will end for monitoring wells associated with monitoring effects of the open pit and/or aggregate pits when dewatering of these features commences. For monitoring wells associated with monitoring groundwater level effects associated with the TMF and GFC diversion, the baseline data collection period will end when tailings are placed within the TMF and the GFC diversion is diverted, respectively.

The existing groundwater quantity and quality monitoring program with the above recommendations will be continued for the fall 2023 monitoring event and the 2024 reporting year.

2.4 Use of Explosives in or Near-Water

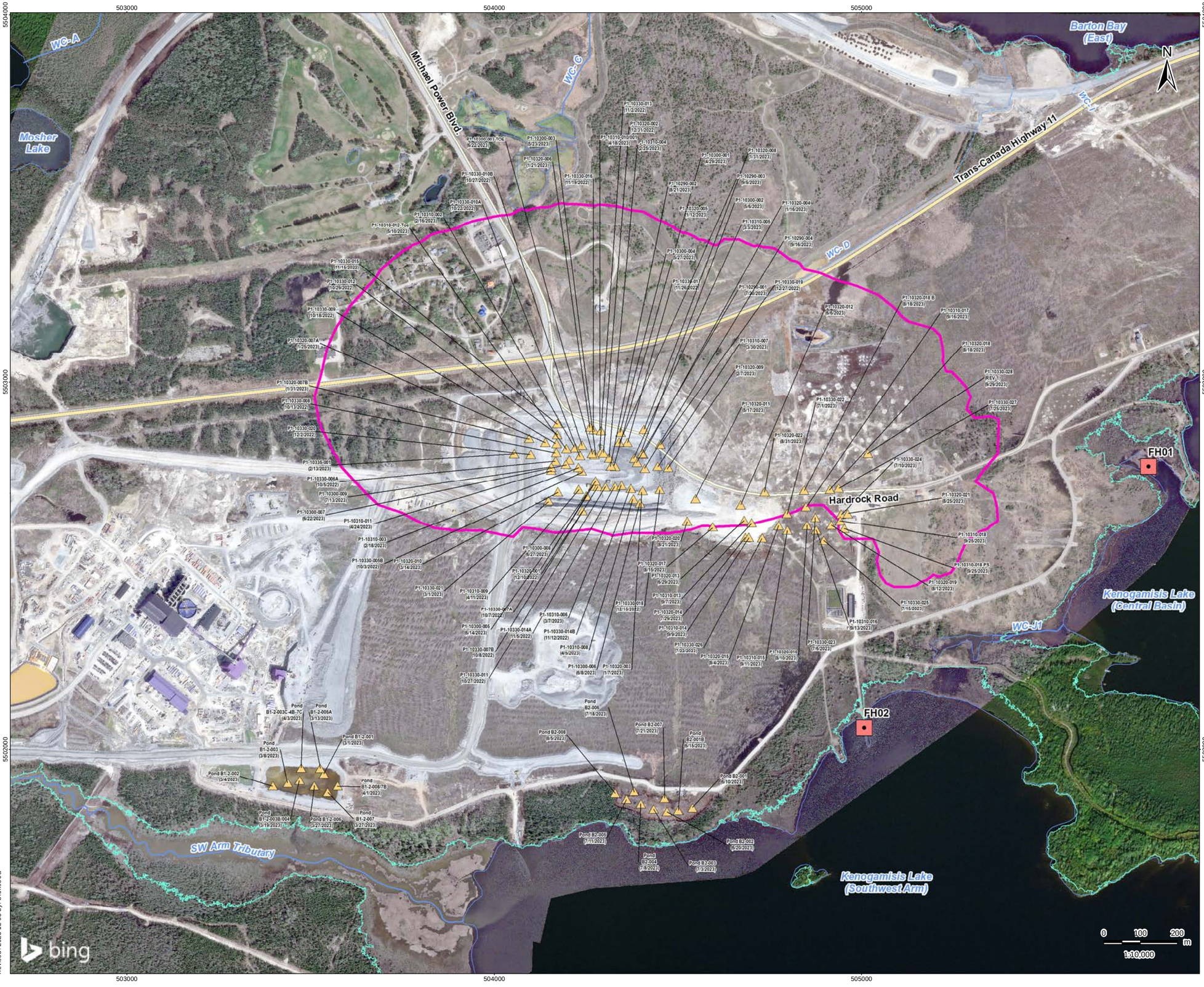
This section describes the monitoring results and measures implemented to mitigate potential adverse effects on fish and fish habitat from the use of explosives near water in the 2023 monitoring period to satisfy federal Condition 3.2 and 3.15 of the federal Decision Statement. The Plan (GGM 2021a) identifies an overpressure threshold of 50 kPa in water and a vibration threshold of 13mm/sec (in substrate).

Kenogamisis Lake was identified as the closest waterbody for the Mine blasting. GGM will identify and assess waterbodies that may become closer as the Mine progresses. The current blasting is ongoing for the construction and development of open pit and water management ponds south of the open pit. Blasting was conducted as close as 450 m for the pit and 60 m for the water management ponds from the Kenogamisis Lake high water mark. Figure 2-6 shows blast locations for the current monitoring period, along with the monitoring locations presented in the Plan.

The monitor at location FH02 was installed from the start of early mine construction. The monitor for location FH01 has yet to be installed; it will be when the Mine blasting progresses to the southeast end of the pit. The monitor located at FH02 was moved approximately 200 m west of the planned location based on the current blasting locations and power availability for the monitor. The relocation of FH02 also reduces the risk of damage to the monitors due to animals, such as beavers.

Table 2-8 provides details for the blast events, in the current reporting period, that caused exceedance of the limit identified in the Plan. Both pressure in water and vibration in substrate were measured at FH02 during blasting.

Appendix D includes a comprehensive listing of all explosions that took place within this reporting period, accompanied by blast details and vibration and pressure monitored.



Stantec

Legend

- Fish Blasting Monitoring Location
- Blasting Locations
- Kenogamisis Lake High Water Mark (329.85 masl)
- Kenogamisis Lake Conservative High Water Mark (330 masl)
- Open Pit- Full Extent
- Contour Line (10m intervals)
- Highway
- Major Road
- Local Road
- Watercourse- Permanent
- Watercourse- Intermittent
- Waterbody

Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.
3. Orthographic Imagery Source: © 2023 Microsoft Corporation © 2023 Maxar ©CNES (2023) Distribution Airbus DS
4. Satellite imagery source: Pleaides NEO imagery, May 26, 2023.

December 2023
160901057

Client/Project

Greentsone Gold Mines GP Inc (GGM)
Greenstone Mine Project

Figure No.
2-6

Title

Blast Locations, Fish Habitats and Monitoring Location FH02

\\Ca0004-ppfss04\work_group\01609\active\609608651\drawing\MXD\Aquatics\ReportFigures\2023_Fish_Federal_ES_Followup_Report\160901057_2023_FedFish_Fig_2_6_FishBlastMonitoringLocations_20231130.mxd
Revised: 2023-12-05 By: bfonseca

Table 2-8: Summary of Blast Events that Exceeded Established Thresholds

Mining Operation Blast ID	Date	Blast Details		UTM Coordinates (NAD 83 Zone 16N)			Measured Pressure in Water (kPa) [2]	Measured PPV (mm/s) [3]
		Total Emulsion (kg)	Charge Size/ Delay (kg)	Northing	Easting	Elevation (MASL)		
P1-10320-012	6-Jun-23 [1]	54,158	399	5502666	504671	325	0.06	18.5

Table Notes:

1. Within spawning period (April 1 to June 20). Three other exceedances outside the spawning period are recorded and they are included in Appendix D.
2. Pressure in water is measured with hydrophone.
3. Measured in PPV vector sum.

Following are observations on the data measured in the 2023 monitoring period:

- Throughout the 2023 monitoring period, a total of 102 blasts were conducted. A total of four vibration exceedances and no pressure exceedances were identified during this reporting period. One of the exceedances was during the spawning period and the other three vibration exceedances were outside the spawning period.
- Vibration levels monitored during the current reporting period were below the threshold of 13mm/sec except for those exceedances identified above. Pressure recorded for all blast events was well below the 50 kPa threshold with the highest pressure recorded being 1.1 kPa.
- There were some periods the monitor was not operating and did not record vibration levels in the substrate or pressure levels in water. Vibration and pressure levels were assessed through calculations, as per the DFO guidelines (Wright and Hopky 1998), that took into account the charge size and distance between the blast and monitoring locations for that period.
- The maximum charge size per delay identified for the period of missing data was 398 kg for pit blast and the shortest distance from the waterbody to the nearest blast location for the pit was 450 m which is greater than the minimum required setback distance to meet the vibration limit of 13 mm/s and pressure limit of 50 Kpa for fish habitat. The minimum setback distance calculated for vibration and pressure compliance for pit blasts are calculated to be 301 m and 155 m respectively.
- Similarly, the maximum charge size per delay identified for the water management pond construction was 51 kg and the shortest distance from the waterbody to the nearest blast location was 60 m which is greater than the minimum required setback distances calculated for vibration and pressure compliance for water management pond construction (56 m and 36 m respectively).
- Based on the calculations, vibration and pressure levels on fish habitat are expected to be within the limits during blasting for construction and development of the pit and water management ponds for the periods when the data was not recorded in the monitor.

2.4.1 Adaptive Management

Vibration from blasting exceeded 13mm/sec four times in the 2023 monitoring period at the monitoring location that could affect fish habitat, or fish eggs and larvae. However, the vibration threshold is only applicable to the spawning period (between April 1 and June 20). The vibration threshold criteria was therefore exceeded once. Monitoring during subsequent blasting events indicated that adjusted blast locations and blast charges did not result in additional vibration exceedances. GGM will continue to monitor blasting activities and implement the adaptive management plan to mitigate potential effects on fish and fish habitat.

2.5 Concentration of Mercury and Methylmercury in Water

The realignment of GFC occurred to facilitate the siting of the TMF and to offset predicted effects on fish and fish habitat. GFC was diverted into the existing SWAT, which increased flow in the SWAT and resulted in an increase in the permanently inundated area by approximately 15 ha. The management and monitoring measures identified in this section deal specifically with potential effects related to changes in mercury concentrations and methylmercury generation in the GFC diversion. The surface water monitoring locations, sampling frequency, and sampling methods as they pertain to mercury and methylmercury are presented in the following sections.

2.5.1 Methods

The following text provides a description of the data collection, laboratory, and data analysis methods used to assess changes in the concentration of methylmercury in surface water.

2.5.1.1 Data Collection

Surface water quality at stations 25, 39, 52, 54, and 55, presented in Figure 2-1, were monitored monthly and assessed for potential changes to mercury and methylmercury as a result of the GFC diversion and associated inundated areas.

Table 2-9 presents the frequency of sampling and rationale for each monitoring station for surface water quality. Five surface water monitoring locations were monitored monthly for mercury and methylmercury, when it was safe to do so, to assess seasonal fluctuations in water quality. Monthly monitoring data were used to conduct trend analysis of mercury and methylmercury to differentiate whether observed fluctuations are due to natural/seasonal sample variation, or if they may indicate a mine-related effect. The surface water quality monitoring stations are shown in Figure 2-1.

Table 2-9: Receiving Environment Surface Water Quality Monitoring Locations, Frequency, and Rationale

Station	Frequency	Rationale
25	Monthly	Monitor potential effects of the Project, including the GFC diversion, on mercury and methylmercury concentrations in surface water at the downstream end of the GFC diversion
39	Monthly	Monitor potential effects of the Project, including the GFC diversion, on mercury and methylmercury concentrations in surface water in SWP3 and the middle section of the channel diversion
52	Monthly	Document background mercury and methylmercury concentrations in surface water upstream of the GFC diversion

Station	Frequency	Rationale
54	Monthly	Monitor potential effects of the Project, including the GFC diversion, on mercury and methylmercury concentrations in surface water at the Pond T2 outlet into SWP1
55	Monthly	Monitor potential effects of the Project, including the Goldfield Creek realignment, on mercury and methylmercury concentrations in surface water in SWP5 and the middle section of the channel realignment

Surface water grab samples were collected using laboratory-provided bottles containing the appropriate preservatives. Water quality samples were taken just below the surface of the water (0.1 m deep). Water quality samples were collected by an experienced technician using suitable sampling equipment. Samples were preserved (if applicable) and transported in appropriate containers to maintain the integrity of sample temperatures and hold times. Samples were submitted to a CALA accredited laboratory under COC documentation.

2.5.1.2 Laboratory Analysis

The accredited CALA laboratory used the authorized analytical methods set out in the ISW ECAs, PTTWs, and applicable regulations (i.e., MDMER and O. Reg. 560/94).

The method detection limits (MDLs) used by the CALA laboratory for mercury and methylmercury have been revised since the beginning of the baseline monitoring program. MDLs for mercury and methylmercury are currently 0.0001 µg/L and 0.00005 µg/L, respectively. The current MDLs can detect the concentrations of mercury and methylmercury in surface water and have been used to develop baseline 95th percentile concentrations for surface water quality stations 25, 39, and 52.

The QA/QC principles for sampling and laboratory analysis outlined in Environment Canada (2012) were followed. Duplicate samples were collected from a subset of samples collected to quantify environmental variability and analytical consistency, with a minimum of one duplicate sample in approximately 10 surface water samples per sample set. A minimum of one travel and one field blank were collected per sampling event to detect potential sources of contamination.

Mercury and methylmercury data were entered into an electronic database and was cross-checked against the original laboratory certificate of analysis and validated.

2.5.1.3 Data Analysis

The data set for mercury and methylmercury at the applicable stations was compiled into a spreadsheet to present the monitoring completed for the 2023 monitoring period. For the 2023 monitoring period, monthly data for applicable stations were compared to trigger thresholds for surface water quality as defined in the Plan (GGM 2021a). Sampling at station 39 for mercury and methylmercury was inadvertently missed due to a sampling error during the September 2023 sampling event.

The trigger monitoring stations, indicator parameters, and rationale are presented in Table 2-10. The locations of the trigger threshold monitoring stations are presented in Figure 2-2.

Table 2-10: Mercury and Methylmercury Trigger Threshold Monitoring Stations

Trigger Monitoring Station	Frequency of Measurement	Indicator Parameter	Rationale
25	Monthly	Hg, MeHg	Monitor for potential effects of mining activities on the water at the mouth of the SWAT
39	Monthly	Hg, MeHg	Monitor for potential effects of mining activities on SWAT, downstream of GFC Diversion
52	Monthly	Hg, MeHg	Background station upstream GFC Diversion

2.5.2 Results

Mercury and methylmercury are included in the surface water quality monitoring results presented in Section 2.2.2.1. As such, Section 2.2.2.1 should be referred to for results of Condition 5.4 of the federal Decision Statement.

2.5.3 Adaptive Management

Mercury and methylmercury are included in the surface water quality monitoring adaptive management plan, as indicated in Section 2.2.2.1. As such, Section 2.2.2.1 should be referred to for changes to the adaptive management to support Condition 5.4 of the federal Decision Statement.

<u>Fish Tissue Monitoring – SWAT</u>

The management and monitoring measures described in this section deal specifically with Condition 5.4 of the federal Decision Statement and potential effects related to changes in total mercury concentrations and methylmercury generation in the Goldfield Creek realignment.

Condition 5.5.1 of the federal Decision Statement, which also relates to fish tissue, is addressed in Section 2.7 of this report.

The purpose of the fish tissue sampling was to monitor potential changes in the concentration of total mercury and methylmercury in fish tissue and, if changes were observed, to determine whether there is an adverse effect on fish health or an increased risk to human and wildlife consumers. The fish tissue methylmercury residue guideline of 0.033 mg/kg ww was established for the protection of wildlife that consume aquatic organisms (CCME 2000). An effect on fish tissue from mercury occurs when total mercury exceeds 0.5 mg/kg ww from an exposure area and is statistically different from, and higher than, the concentration of total mercury in fish tissue that is taken from a reference area (MDMER, Schedule 5, s. 1, 2023). The monitoring program documented potential changes to the concentration of mercury and methylmercury in fish tissue. The assessment of risk to human health is described under the reporting requirements of the Indigenous Peoples Health Risk Assessment Follow-Up Plan (GGM 2020a).

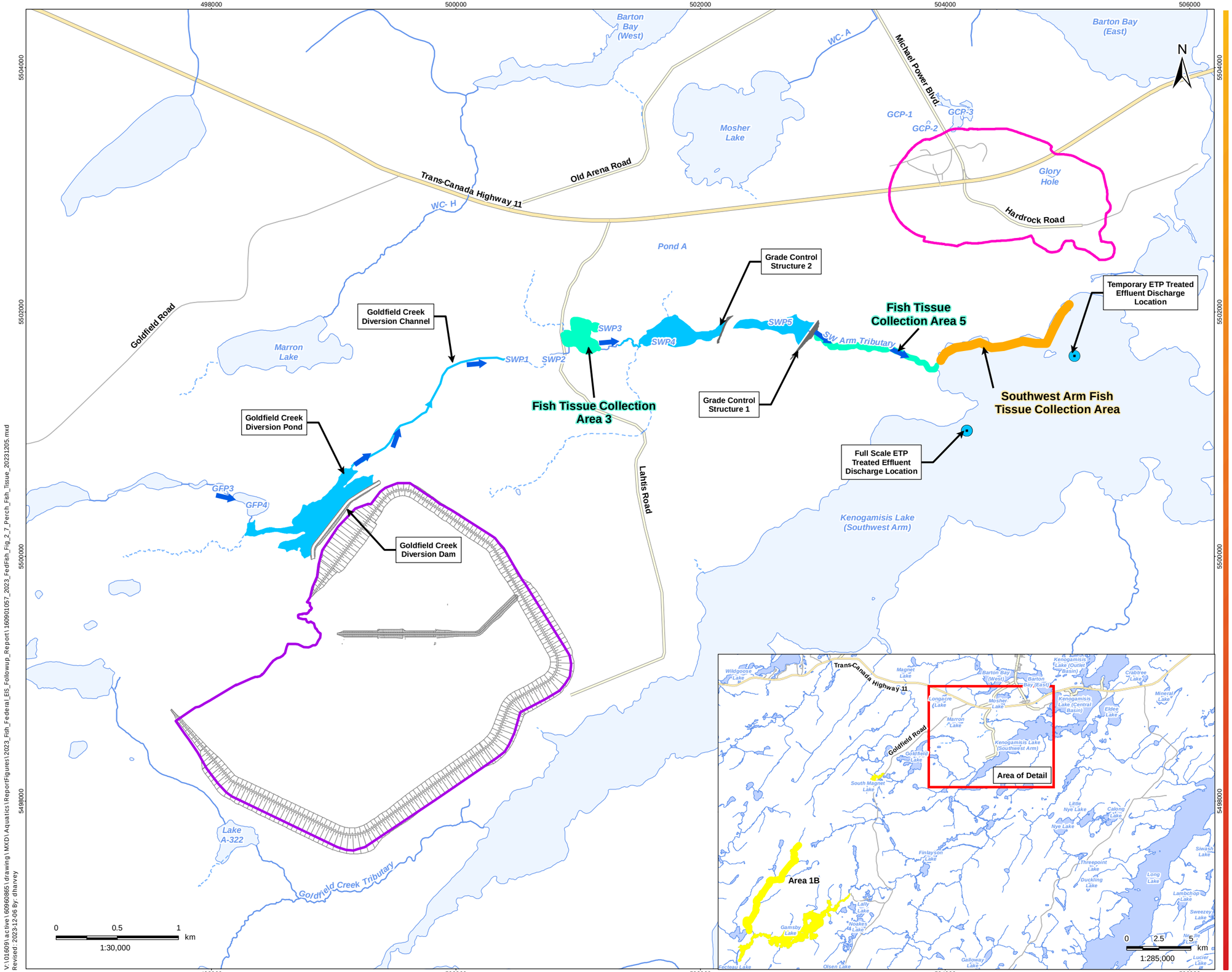
The realignment of Goldfield Creek was completed to facilitate siting of the TMF and to offset predicted effects on fish and fish habitat. During 2021 and 2022, the new channel and diversion pond was constructed, and flow was diverted from the old Goldfield Creek channel into the newly constructed Goldfield Diversion Pond (GFDP) in November 2022. The GFDP filled slowly in late 2022 and early 2023, with flow entering the new channel from the GFDP outlet in mid-January 2023. At that time, water flowed into the new Goldfield Creek Channel and then through what was previously referred to as the SWAT. Increased flow into the SWAT has resulted in the permanent inundation of approximately 15 ha of wetland habitat that was only occasionally inundated under baseline conditions. Often, newly inundated habitat and the associated decomposition of the flooded vegetation can lead to temporary increases in the amount of mercury and methylmercury in aquatic habitats (CCME 2000).

The need for this study was driven primarily by the realignment of Goldfield Creek, and the associated inundation of adjacent wetlands as described in the EIS (Stantec 2018a). Flow from Goldfield Creek has now been diverted into the new Goldfield Creek realignment and so a before/after comparison of fish tissue concentrations can be completed.

2.5.4 Methods

A before-after-control-impact (BACI) study design was initiated to examine potential changes in mercury and methylmercury concentrations in fish tissue along the Goldfield Creek realignment. Approved methods for the BACI study are presented in the Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan (GGM 2021a). Data collection was required and completed in the 2023 monitoring period, which included boat electrofishing between June 7, 2023 and June 20, 2023 to collect age 1 Yellow Perch from various sampling areas (Figure 2-7). Since 2018, age 1 Yellow Perch tissue has been collected from three test areas (Area 3, Area 5, and Southwest Arm) and three

reference areas (Gamsby Lake, Area 1B, and South Magnet Lake). Insufficient numbers of age 1 Yellow Perch were collected from Area 3 in 2023 despite an extensive sampling effort (6,692 boat electrofishing seconds) and was, therefore, unable to be used in before-after and control-impact comparisons. The collection methods used in 2023 were consistent with previous baseline data collection efforts to allow for meaningful data comparison (Stantec 2020). A summary of sampling effort for sampling areas and years used in subsequent analyses is provided in Table 2-11.



Stantec

Legend

- Fish Tissue Collection Area
- Southwest Arm Fish Tissue Collection Area
- Fish Tissue Reference Area
- Flow Direction
- Diffuser Location
- Tailings Management Facility
- Open Pit- Full Extent
- Diversion Channel
- Highway
- Major Road
- Local Road
- Watercourse- Permanent
- Watercourse- Intermittent
- Waterbody

Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

December 2023
160901057

Client/Project

Greenstone Gold Mines GP Inc (GGM)
Greenstone Mine

Figure No.

2-7

Title

Yellow Perch Collection Areas (2018, 2019, 2021 and 2023)

V:\01609\active\60960865\drawing\MXD\Aquatics\ReportFigures\2023_Fish_Federal_EIS_Followup_Report\160901057_2023_FedFish_Fig_2_7_Perch_Fish_Tissue_20231205.mxd
Revised: 2023-12-06 By: dharvey

Table 2-11: Boat Electrofishing Effort of Sampling Areas from 2018 to 2023

Sampling Area	Year	Effort (electrofishing seconds)	Voltage (V)	Frequency (Hz)	Current (Amperes)	Power (W)
Area 5/Southwest Arm	2018	5083	300	120	6	1800
	2021	4127	200	120	8	1600
	2023	4887	250	120	6	1500
Gamsby Lake/Area 1B	2018	14193	300	120	6	1800
	2019	6521	300	120	8	2400
	2021	3521	500	120	8	4000
	2023	6120	250	120	6	1500
Area 3	2019	6341	300	120	9	2700
	2021	4332	100	120	8	800
South Magnet Lake	2023	6538	250	120	6	1500

Total length, fork length, and weight were measured and recorded from fish collected for tissue analysis. Composite samples were created by combining multiple whole Yellow Perch into a single sample to achieve a minimum sample mass of 10 g wet weight (n= 3 to 12 individuals). A subset of composite samples included additional fish to achieve enough sample mass for the laboratory to complete duplicate analysis (n= 4 to 8 individuals). Aging structures were not collected from Yellow Perch to minimize fish handling and to acquire sufficient mass for the composite samples. Age was instead estimated via two methods using pre-construction samples (GGM 2020c); 1) fish lengths were plotted into length frequency histograms to identify seasonal growth trends and age/length relationships, and 2) a separate sample of otoliths was submitted for age estimation to establish length at age relationships for fish species from each waterbody.

Muscle tissue composite samples were sent to a CALA laboratory for the analysis of metals (including mercury and methylmercury) in addition to supporting parameters (percent lipid and percent moisture). The laboratory followed the MOECC (2014) “Protocol for the Collection of Fish Samples for Contaminant Analyses” and Environment Canada (2012) “Metal Mining Technical Guidance for Environmental Effects Monitoring” during tissue preparation. Where method requirements differed, the more rigorous method was used. Muscle samples were analyzed for total mercury using cold vapour atomic spectrophotometry, which achieves a lower detection limit than inductively coupled plasma mass spectrometry (ICP-MS). The detection limits were 0.001 mg/kg wet weight and 0.001 mg/kg wet weight for total mercury and methylmercury, respectively. Relative percent difference (RPD) between duplicates for total mercury and methylmercury tissue samples were calculated following Environment Canada (2012) protocols.

To determine whether mean total mercury and methylmercury concentrations of age 1 Yellow Perch tissue differed between sampling areas and years, following the Goldfield Creek realignment and inundation of adjacent wetlands, one-way ANOVAs with post-hoc Tukey tests (or nonparametric equivalents if assumptions of normality and homogeneity of variance were not met) and two-tailed independent t-tests (for comparisons between two sampling areas or years) were used at $p \leq 0.05$. Specifically, to fulfill the control-impact component of the BACI study, the mean total mercury and methylmercury concentrations were compared within years, between the sampling areas for 2023 (Area 5, Area 1B, and South Magnet Lake), 2021 (Area 5, Area 1B, and Area 3), 2019 (Gamsby Lake and Area 3), and 2018 (Gamsby Lake and Southwest Arm). In 2018, age-1 Yellow Perch could not be captured in Area 5, so fishing efforts were expanded into the Southwest Arm of Kenogamisis Lake. Although not from the same sampling area, the Southwest Arm results are presented here with the Area 5 data for context. Additionally, to fulfill the before-after component of the BACI study, fish tissue mean total mercury and methylmercury concentrations from each sampling area were compared among years to evaluate whether the concentrations changed over time. Table 2-12 and Table 2-13 outline each of the comparisons and statistical analyses performed for the control-impact and before-after components, respectively. Because South Magnet Lake was only sampled in 2023, it was excluded from the before-after comparisons.

Table 2-12: Statistical Analyses for Comparisons of Total Mercury and Methylmercury Concentrations Between Reference and Exposure Sampling Areas from 2018 to 2023

Year	Sampling Areas	Statistical Analysis
2018	Gamsby Lake (Reference) Southwest Arm (Exposure)	Two-tailed independent t-test
2019	Gamsby Lake (Reference) Area 3 (Exposure)	Two-tailed independent t-test
2021	Area 1B (Reference) Area 3 (Exposure) Area 5 (Exposure)	One-way ANOVA Post-hoc Tukey's HSD
2023	Area 1B (Reference) South Magnet Lake (Reference) Area 5 (Exposure)	One-way ANOVA Post-hoc Tukey's HSD

Table 2-13: Statistical Analyses for Comparisons of Total Mercury and Methylmercury Concentrations Across Years for Each Sampling Area from 2018 to 2023

Sampling Area	Years	Statistical Analysis
Area 5/Southwest Arm (Exposure)	2018 [2] 2021 2023	One-way ANOVA Post-hoc Tukey's HSD
Gamsby Lake/Area 1B	2018 2019 2021 2023	One-way ANOVA Post-hoc Tukey's HSD [1]Kruskal-Wallis test [1]Post-hoc Dunn's test
Area 3	2019 2021	Two-tailed independent t-test
South Magnet Lake	2023	N/A

Notes:

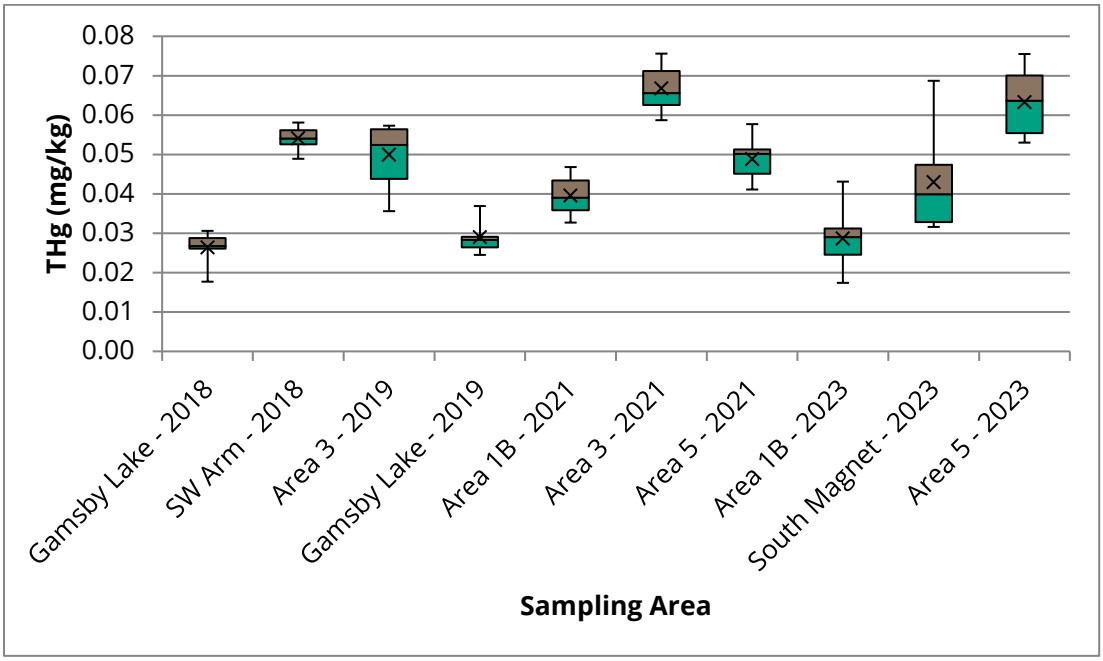
[1] Nonparametric tests were performed for methylmercury comparisons as data did not meet assumptions of normality or homogeneity of variance for one-way ANOVA.

[2] Age 1 Yellow Perch Could not be collected from Area 5 in 2018, so sampling effort was extended into the Southwest Arm of Kenogamisis Lake

2.5.5 Results

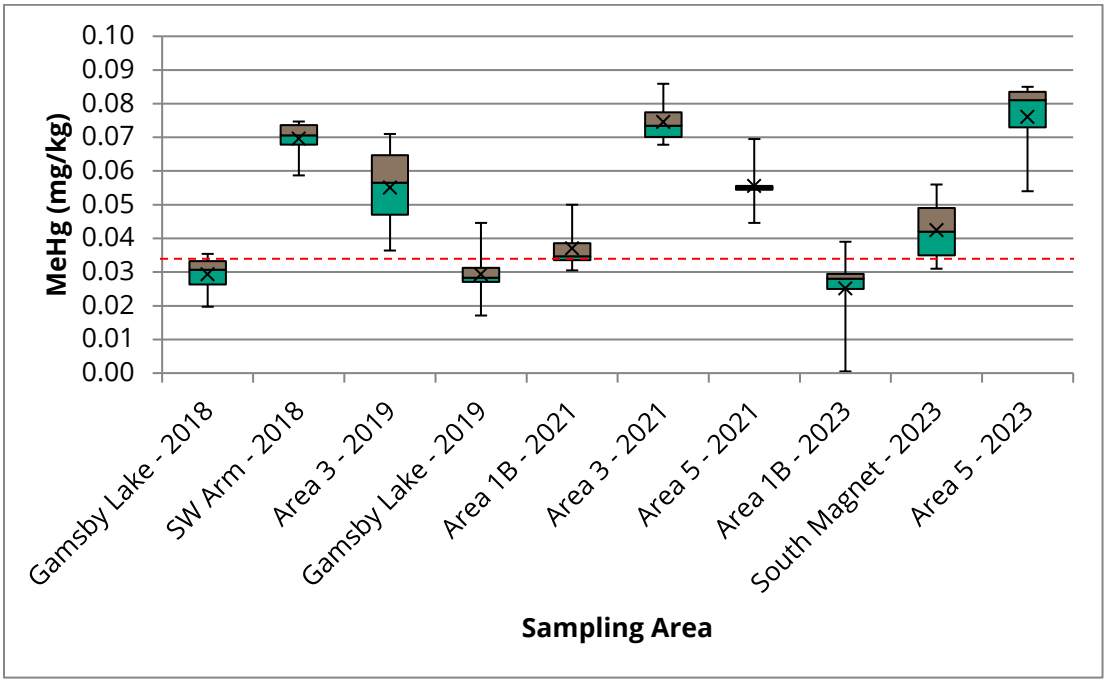
Fish tissue sampling was required (GGM 2021a) and completed during the 2023 monitoring period. The fish tissue sampling laboratory results are presented in Appendix E. Morphometric (total and fork length, total weight, and tissue sample ID of individuals) and catch summary (species diversity, catch per unit effort, number of species captured) data are also provided in Appendix E.

Total mercury and methylmercury concentrations in age 1 Yellow Perch tissue were variable spatially and temporally (Figure 2-8, Figure 2-9). Among all years and sampling areas, mean total mercury concentrations of age 1 Yellow Perch tissue ranged from 0.026 to 0.067 mg/kg ww (Table 2-14), while mean methylmercury concentrations ranged from 0.025 to 0.076 mg/kg ww (Table 2-15). The highest total mercury and methylmercury concentrations were observed in Area 3 (2021) and Area 5 (2023), whereas the lowest total mercury and methylmercury concentrations of fish tissue were observed in Gamsby Lake (2018 and 2019) and Area 1B (2023). The mean methylmercury concentrations of fish tissue from 7 of 10 sampling areas between 2018 and 2023 exceeded the tissue residue guideline (0.033 mg/kg ww) for the protection of wildlife consumers of aquatic biota (CCME 2000). Mean methylmercury concentrations of fish tissue from only Gamsby Lake (2018 and 2019) and Area 1B (2023) fell below the tissue residue guideline. However, total mercury concentrations of fish tissue did not exceed the 0.5 mg/kg ww threshold needed to establish an effect on fish tissue (MDMER, Schedule 5, s. 1, 2023).



Whiskers represent the minimum and maximum values while the box consists of first, median, and third quartile values. The mean value is also displayed with an 'X'.

Figure 2-8: Boxplot of Total Mercury (THg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from all Sampling Areas Between 2018 and 2023



Whiskers represent the minimum and maximum values while the box consists of first, median, and third quartile values. The mean value is also displayed with an 'X'. The fish tissue methylmercury residue guideline of 0.033 mg/kg ww for the protection of wildlife that consume aquatic organisms (Environment Canada 2000) is denoted with the red dashed line.

Figure 2-9: Boxplot of Methylmercury (MeHg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from all Sampling Areas Between 2018 and 2023

Table 2-14 Summary of Total Mercury Concentrations (mg/kg ww) of Age 1 Yellow Perch Tissue Composites from Sampling Areas, 2018 and 2023

Sampling Area	Number of Composites	Mean	Median	Maximum	Minimum	Standard Deviation	Standard Error
Gamsby Lake - 2018	8	0.02645	0.02670	0.03060	0.01770	0.00403	0.00142
SW Arm - 2018	8	0.05413	0.05405	0.05810	0.04890	0.00308	0.00109
Area 3 - 2019	10	0.05001	0.05240	0.05730	0.03560	0.00785	0.00248
Gamsby Lake - 2019	10	0.02898	0.02830	0.03690	0.02450	0.00393	0.00124
Area 1B - 2021	7	0.03956	0.03900	0.04680	0.03270	0.00513	0.00194
Area 3 - 2021	7	0.06679	0.06560	0.07560	0.05870	0.00638	0.00241
Area 5 - 2021	7	0.04880	0.05010	0.05770	0.04110	0.00558	0.00211
Area 1B - 2023	7	0.02871	0.02900	0.04310	0.01740	0.00809	0.00306
South Magnet - 2023	7	0.04296	0.03990	0.06870	0.03160	0.01356	0.00513
Area 5 - 2023	7	0.06330	0.06360	0.07550	0.05300	0.00885	0.00334

Table 2-15: Summary of Methylmercury Concentrations (mg/kg ww) of Age 1 Yellow Perch Tissue Composites from Sampling Areas, 2018 and 2023

Sampling Area	Number of Composites	[1]Mean	Median	Maximum	Minimum	Standard Deviation	Standard Error
Gamsby Lake - 2018	8	0.02933	0.03065	0.03540	0.01970	0.00556	0.00197
SW Arm - 2018	8	0.06963	0.07055	0.07470	0.05870	0.00530	0.00187
Area 3 - 2019	10	0.05508	0.05650	0.07100	0.03640	0.01222	0.00386
Gamsby Lake - 2019	10	0.02936	0.02835	0.04460	0.01710	0.00690	0.00218
Area 1B - 2021	7	0.03707	0.03470	0.05000	0.03050	0.00664	0.00251
Area 3 - 2021	7	0.07461	0.07340	0.08590	0.06780	0.00653	0.00247
Area 5 - 2021	7	0.05560	0.05500	0.06950	0.04460	0.00727	0.00275
Area 1B - 2023	7	0.02521	0.02800	0.03900	[2]0.00050	0.01192	0.00450
South Magnet - 2023	7	0.04243	0.04200	0.05600	0.03100	0.00941	0.00356
Area 5 - 2023	7	0.07614	0.08100	0.08500	0.05400	0.01102	0.00417

Notes:

[1] Values greater than the methylmercury tissue residue guideline (0.033 mg/kg ww) for the protection of wildlife consumers of aquatic biota are shaded.

[2] One non-detection of a composite sample from Area 1B in 2023. The value used was the detection limit divided by two.

Changes in Total Mercury and Methylmercury Over Time

Increases of total mercury in age 1 Yellow Perch tissue were observed in exposure sites across sampling years (Table 2-18). The mean total mercury concentration from Area 5 was significantly higher in 2023 than in 2021 ($p < 0.05$) and significantly higher than the Southwest Arm in 2018 ($p < 0.05$) (Figure 2-10). The mean total mercury concentration of age 1 Yellow Perch tissue from Area 3 was significantly higher in 2021 than 2019 ($p < 0.05$) (Figure 2-11). For reference area fish tissue (from Gamsby Lake and Area 1B), mean total mercury concentrations were relatively consistent among years except for a significantly higher mean total mercury concentration observed in Area 1B in 2021 relative to the other years ($p < 0.05$) (Figure 2-12).

No consistent temporal trends with respect to methylmercury concentrations in age 1 Yellow Perch tissue were observed within sampling areas (Table 2-19). The mean methylmercury concentration from Area 5 fish in 2023 was significantly higher than in 2021 ($p < 0.05$) but did not differ from the Southwest Arm fish in 2018 (Figure 2-13). In Area 3, the mean methylmercury concentration in 2021 was significantly higher than 2019 ($p < 0.05$) (Figure 2-14). No differences in mean methylmercury concentrations were observed in Area 1B or Gamsby Lake reference area fish between 2018 and 2023 (Figure 2-15).

Table 2-16: Summary of Before-After Statistical Comparisons of Total Mercury Concentrations (mg/kg ww) of Age 1 Yellow Perch Tissue Composites from Reference and Exposure Areas

Sampling Area	[1]Pairwise Comparison		Statistical Analysis	P-Value	[3]Magnitude (%)	[2]> CES	Statistical Power
Area 5/Southwest Arm (Exposure)	Area 5 (2021)	Area 5 (2023)	One-way ANOVA Tukey's HSD	8.63E-04	29.71	Yes	0.956
	Area 5 (2021)	Southwest Arm (2018)		2.43E-01	-9.85	No	0.612
	Area 5 (2023)	Southwest Arm (2018)		2.52E-02	16.94	No	0.741
Area 3 (Exposure)	Area 3 (2019)	Area 3 (2021)	Two-tailed independent t-test	3.05E-04	33.55	Yes	0.998
Gamsby Lake/Area 1B (Reference)	Area 1B (2021)	Area 1B (2023)	One-way ANOVA Tukey's HSD	3.89E-03	-27.43	Yes	0.850
	Area 1B (2021)	Gamsby Lake (2018)		3.22E-04	49.57	Yes	1.00
	Area 1B (2021)	Gamsby Lake (2019)		2.20E-03	36.51	Yes	0.996
	Area 1B (2023)	Gamsby Lake (2018)		8.46E-01	8.544	No	0.099

Sampling Area	[1]Pairwise Comparison		Statistical Analysis	P-Value	[3]Magnitude (%)	[2]> CES	Statistical Power
	Area 1B (2023)	Gamsby Lake (2019)		1.00	-0.932	No	0.030
	Gamsby Lake (2018)	Gamsby Lake (2019)		7.53E-01	9.565	No	0.267

Notes: [1]The sampling area with the significantly higher ($p \leq 0.05$) total mercury concentration is shaded.

[2]Greater than CES of ± 25% of the reference mean.

[3]Magnitude calculated as [(more recent mean – less recent mean)/less recent mean] × 100

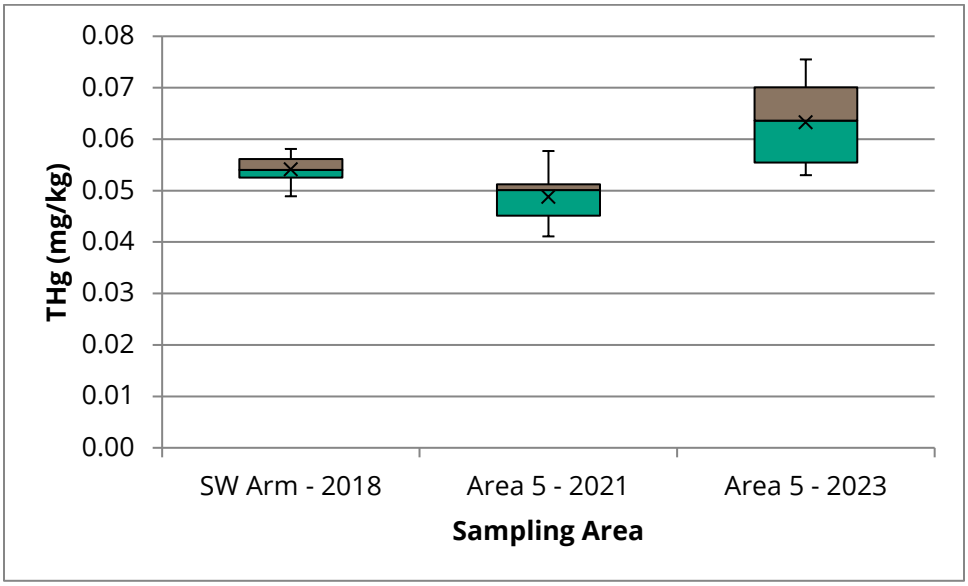
Table 2-17: Summary of Before-After Statistical Comparisons of Methylmercury Concentrations (mg/kg ww) of Age 1 Yellow Perch Tissue Composites from Reference and Exposure Areas

Sampling Area	[1]Pairwise Comparison		Statistical Analysis	P-Value	[3]Magnitude %	[2]> CES	Statistical Power
Area 5/Southwest Arm (Exposure)	Area 5 (2021)	Area 5 (2023)	One-way ANOVA Tukey's HSD	3.90E-04	36.94	Yes	0.984
	Area 5 (2021)	Southwest Arm (2018)		8.98E-03	-20.15	No	0.988
	Area 5 (2023)	Southwest Arm (2018)		2.88E-01	9.35	No	0.296
Area 3 (Exposure)	Area 3 (2019)	Area 3 (2021)	Two-tailed independent t-test	1.61E-03	35.46	Yes	0.989
Gamsby Lake/Area 1B (Reference)	Area 1B (2021)	Area 1B (2023)	Kruskal-Wallis test Dunn test	5.03E-02	-31.98	Yes	0.633
	Area 1B (2021)	Gamsby Lake (2018)		3.06E-01	26.39	Yes	0.680
	Area 1B (2021)	Gamsby Lake (2019)		8.76E-02	26.26	Yes	0.640
	Area 1B (2023)	Gamsby Lake (2018)		1.00	-14.03	No	0.131
	Area 1B (2023)	Gamsby Lake (2019)		1.00	-14.12	No	0.129
	Gamsby Lake (2018)	Gamsby Lake (2019)		1.00	0.102	No	0.026

Notes: [1]The sampling area with the significantly higher ($p \leq 0.05$) total mercury concentration is shaded.

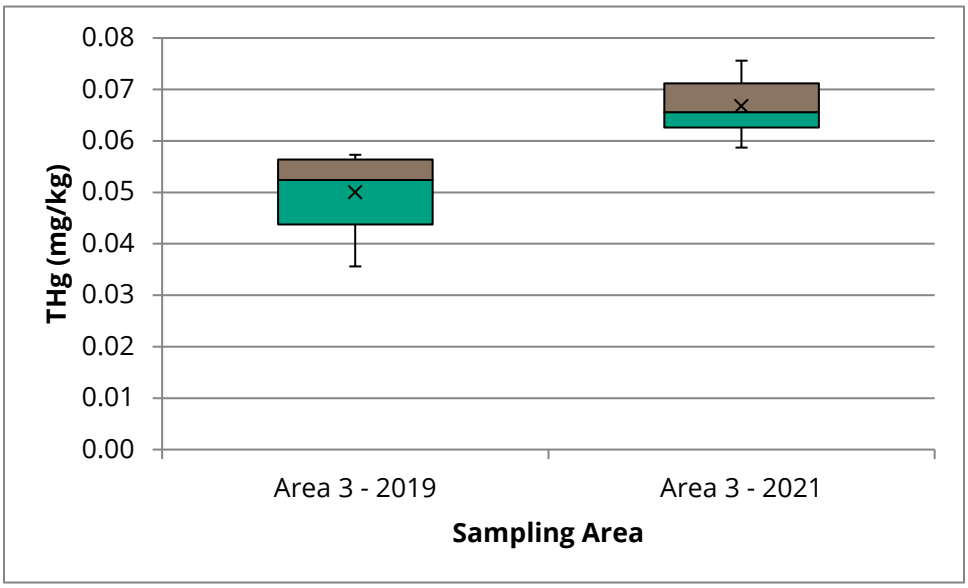
[2]Greater than CES of ± 25% of the reference mean.

[3]Magnitude calculated as [(more recent mean –less recent mean)/ less recent mean] × 100



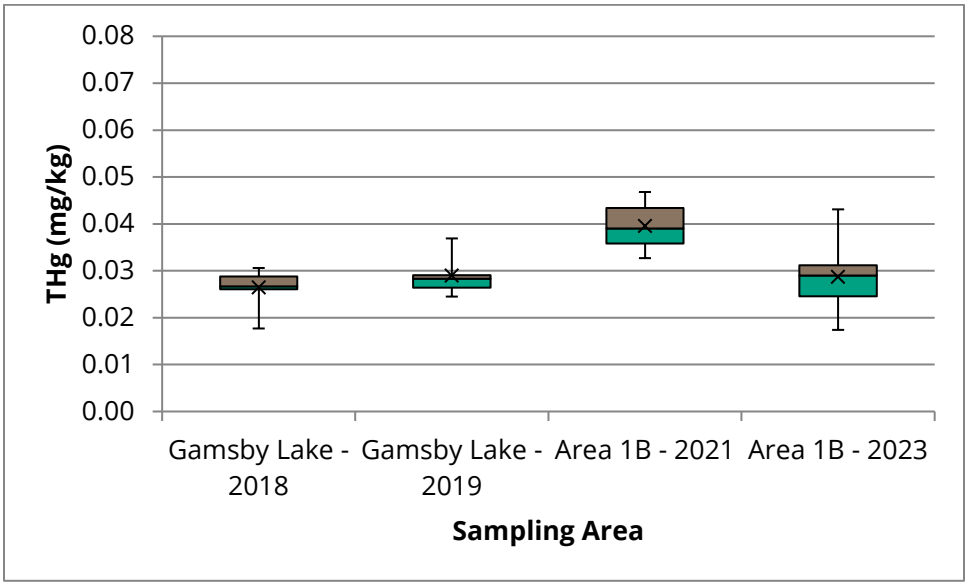
Whiskers represent the minimum and maximum values while the box consists of first, median, and third quartile values. The mean value is also displayed with an 'X'.

Figure 2-10: Boxplot of Total Mercury (THg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Southwest Arm in 2018 and Area 5 in 2021 and 2023



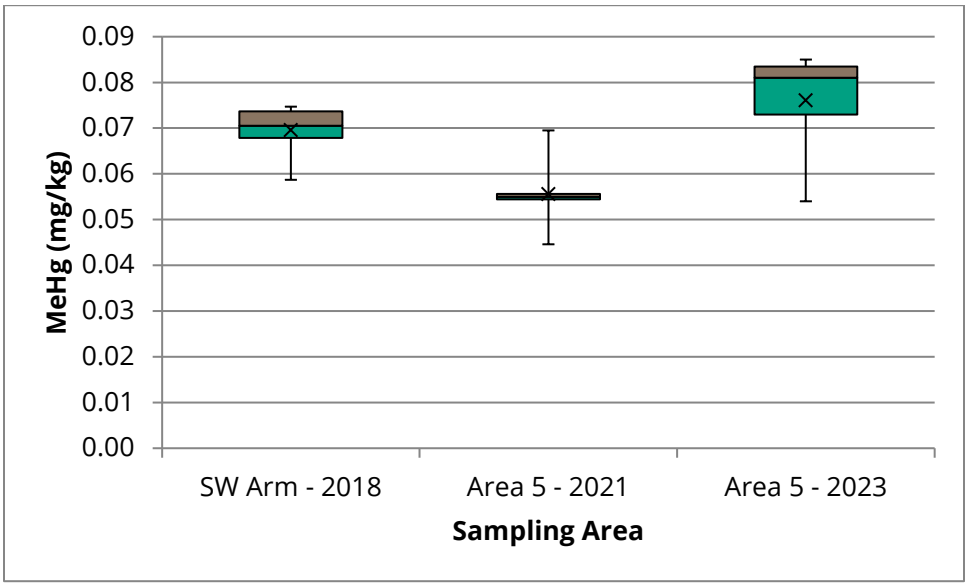
Whiskers represent the minimum and maximum values while the box consists of first, median, and third quartile values. The mean value is also displayed with an 'X'.

Figure 2-11: Boxplot of Total Mercury (THg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Area 3 in 2019 and 2021



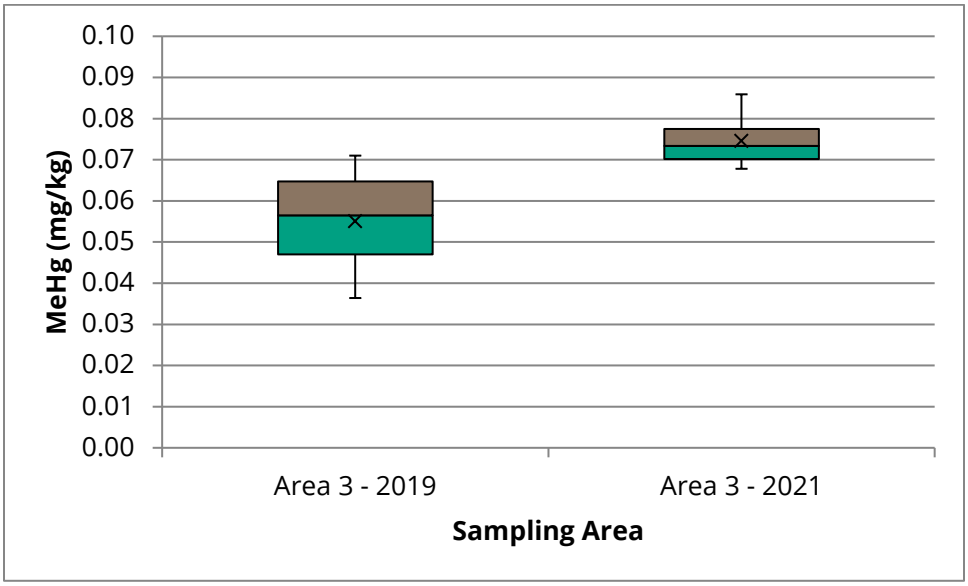
Whiskers represent the minimum and maximum values while the box consists of first, median, and third quartile values. The mean value is also displayed with an 'X'.

Figure 2-12: Boxplot of Total Mercury (THg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Gamsby Lake and Area 1B Between 2018 and 2023



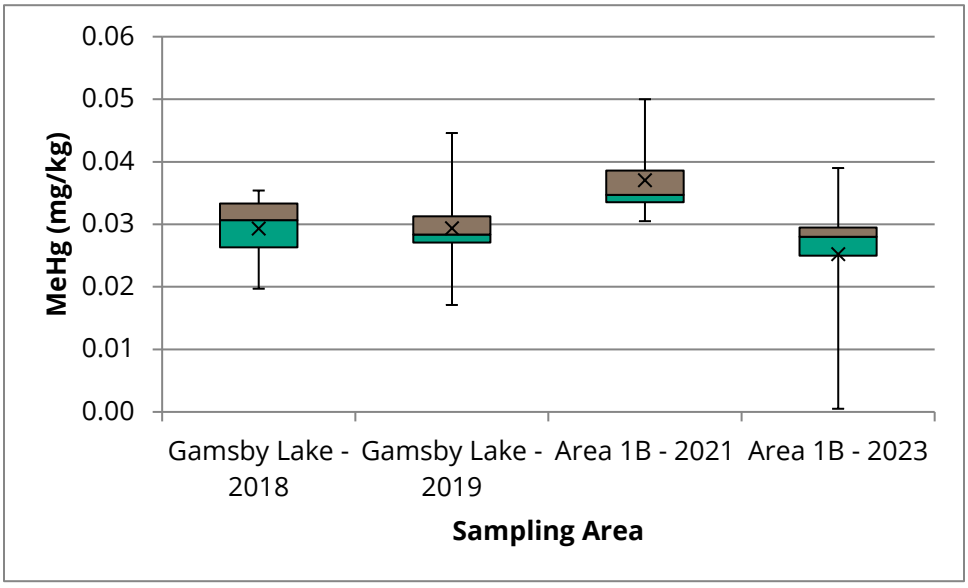
Whiskers represent the minimum and maximum values while the box consists of first, median, and third quartile values. The mean value is also displayed with an 'X'.

Figure 2-13: Boxplot of Methylmercury (MeHg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Southwest Arm in 2018 and Area 5 in 2021 and 2023



Whiskers represent the minimum and maximum values while the box consists of first, median, and third quartile values. The mean value is also displayed with an 'X'.

Figure 2-14: Boxplot of Methylmercury (MeHg) Concentration (mg/kg ww) of age 1 Yellow Perch Tissue from A3 in 2019 and 2021



Whiskers represent the minimum and maximum values while the box consists of first, median, and third quartile values. The mean value is also displayed with an 'X'.

Figure 2-15: Boxplot of Methylmercury (MeHg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Gamsby Lake and Area 1B between 2018 and 2023

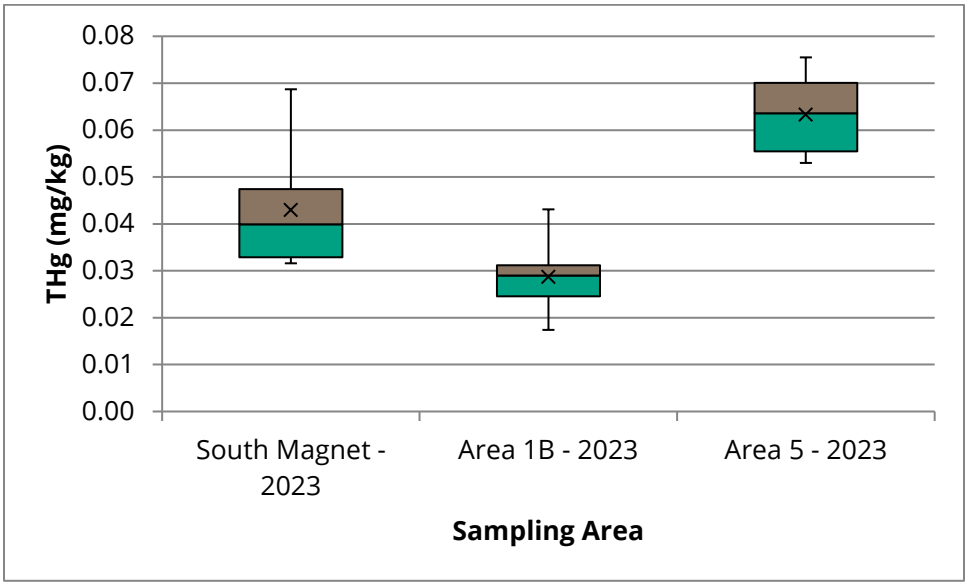
Differences in Total Mercury and Methylmercury Between Reference and Exposure Sites

Mean total mercury concentrations in tissues of age 1 Yellow Perch were higher in exposure areas relative to reference areas before and after the inundation associated with the Goldfield Creek realignment (Table 2-17). In 2023, mean total mercury concentration of age 1 Yellow Perch tissue from the exposure area (Area 5) was significantly higher ($p < 0.05$) than the two reference areas (Area 1B and South Magnet Lake) (Table 2-16). In 2021, both exposure areas (Area 3 and Area 5) had significantly higher mean total mercury concentrations ($p < 0.05$) than the reference area (Area 1B) (Figure 2-17). Area 3 also had a significantly higher mean total mercury concentration in fish tissue than Area 5 ($p < 0.05$). The mean total mercury concentration in Area 3 fish tissue was significantly higher than that of Gamsby Lake in 2019 ($p < 0.05$) (Figure 2-18), and in 2018, the exposure area (Southwest Arm) also had a significantly higher mean total fish tissue mercury concentration than Gamsby Lake ($p < 0.05$) (Figure 2-19). Patterns and differences in mean methylmercury concentrations of fish tissue between reference and exposure sampling areas were consistent with those of mean total mercury concentrations (Table 2-18, Figure 2-20, Figure 2-21, Figure 2-22, Figure 2-23).

Table 2-18: Summary of Control-Impact Statistical Comparisons of Total Mercury Concentrations (mg/kg ww) of Age 1 Yellow Perch Tissue Composites from Reference and Exposure Areas

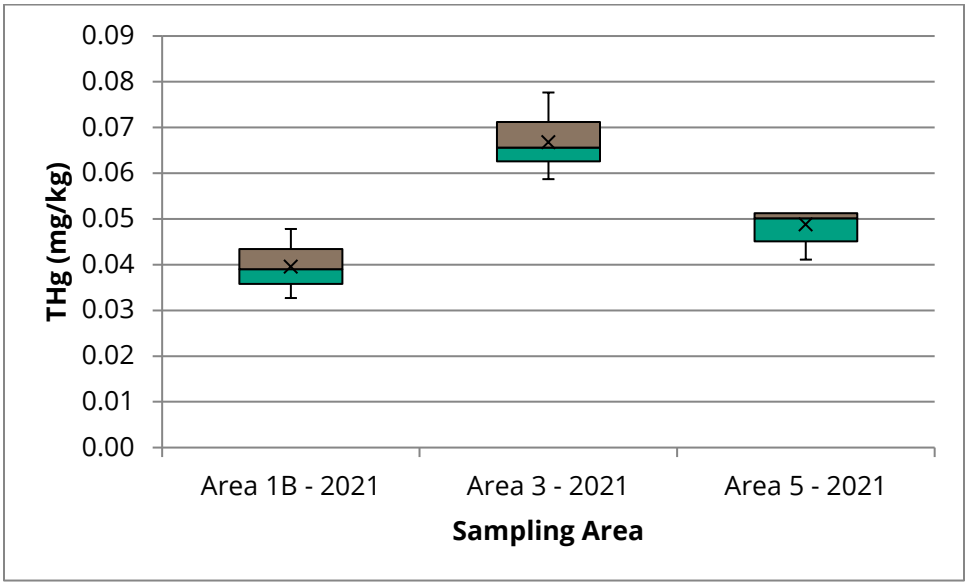
Year	[1]Pairwise Comparison		Statistical Analysis	P-Value	[3] Magnitude (%)	[2]> CES	Statistical Power
2018	Gamsby Lake (Reference)	Southwest Arm (Exposure)	Two-tailed independent t-test	3.46E-10	104.7	Yes	1.00
2019	Gamsby Lake (Reference)	Area 3 (Exposure)	Two-tailed independent t-test	5.27E-07	72.57	Yes	1.00
2021	Area 1B (Reference)	Area 3 (Exposure)	One-way ANOVA Tukey's HSD	1.50E-07	68.83	Yes	1.00
	Area 1B (Reference)	Area 5 (Exposure)		1.91E-02	23.36	No	0.897
	Area 3 (Exposure)	Area 5 (Exposure)		4.11E-05	36.86	Yes	1.00
2023	Area 1B (Reference)	Area 5 (Exposure)	One-way ANOVA Tukey's HSD	2.18E-05	69.98	Yes	1.00
	Area 1B (Reference)	South Magnet (Reference)		5.02E-02	49.63	Yes	0.660
	Area 5 (Exposure)	South Magnet (Reference)		5.04E-03	13.59	No	0.914

Notes: [1] Sampling areas with significantly higher ($p \leq 0.05$) total mercury concentration are shaded.
[2]Greater than CES of ± 25% of the reference mean.
[3]Magnitude calculated as [(Exposure mean – Reference mean)/Reference mean] × 100



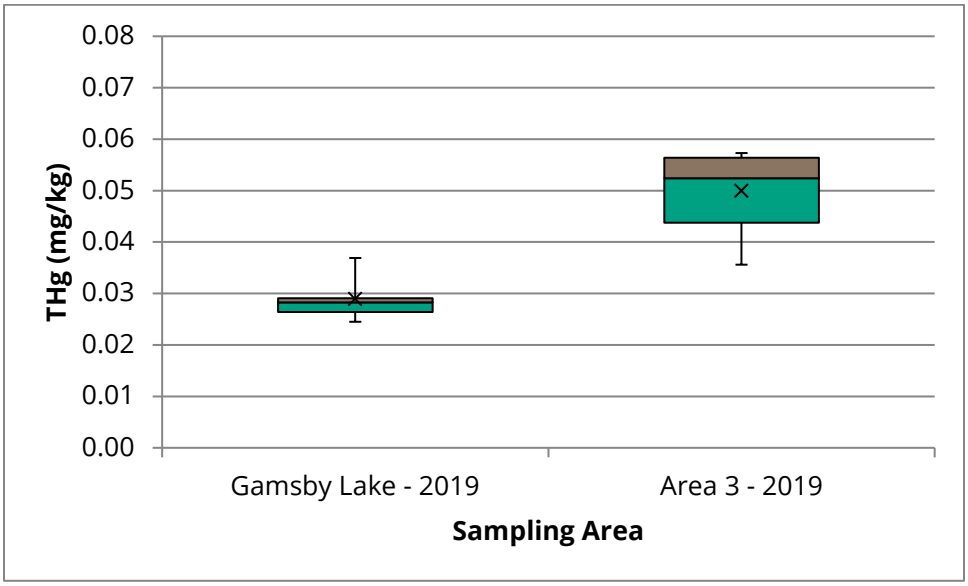
Whiskers represent the minimum and maximum values while the box consists of first, median, and third quartile values. The mean value is also displayed with an 'X'.

Figure 2-16: Boxplot of Total Mercury (THg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Sampling Areas in 2023



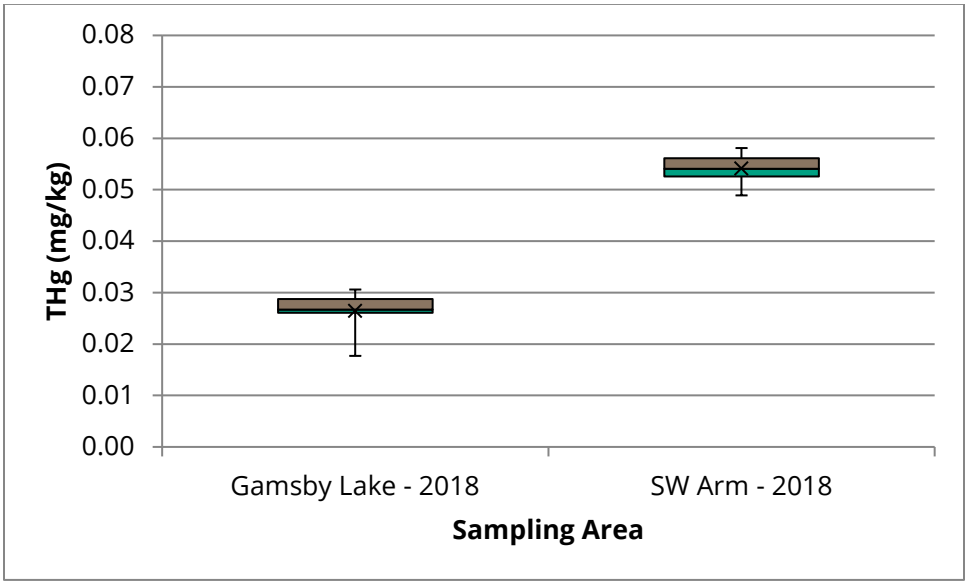
Whiskers represent the minimum and maximum values while the box consists of first, median, and third quartile values. The mean value is also displayed with an 'X'.

Figure 2-17: Boxplot of Total Mercury (THg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Sampling Areas in 2021



Whiskers represent the minimum and maximum values while the box consists of first, median, and third quartile values. The mean value is also displayed with an 'X'.

Figure 2-18: Boxplot of Total Mercury (THg) Concentration (mg/kg ww) of Age 1 Yellow Perch tissue from Sampling Areas in 2019



Whiskers represent the minimum and maximum values while the box consists of first, median, and third quartile values. The mean value is also displayed with an 'X'.

Figure 2-19: Boxplot of Total Mercury (THg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Sampling Areas in 2018

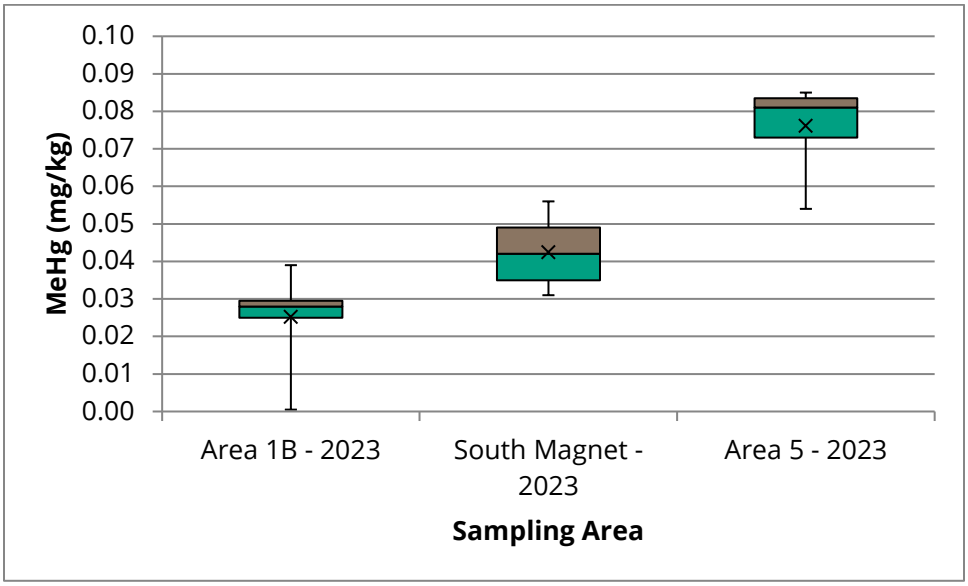
Table 2-19: Summary of Control-Impact Statistical Comparisons of Methylmercury Concentrations (mg/kg ww) of Age 1 Yellow Perch Tissue Composites from Reference and Exposure Areas

Year	[1]Pairwise Comparison		Statistical Analysis	P-Value	[3] Magnitude (%)	[2]> CES	Statistical Power
2018	Gamsby Lake (Reference)	Southwest Arm (Exposure)	Two-tailed independent t-test	5.85E-10	137.4	Yes	1.00
2019	Gamsby Lake (Reference)	Area 3 (Exposure)	Two-tailed independent t-test	1.71E-05	87.60	Yes	1.00
2021	Area 1B (Reference)	Area 3 (Exposure)	One-way ANOVA Tukey's HSD	1.66E-08	101.3	Yes	1.00
	Area 1B (Reference)	Area 5 (Exposure)		2.20E-04	49.99	Yes	0.999
	Area 3 (Exposure)	Area 5 (Exposure)		1.65E-04	-25.48	Yes	0.999
2023	Area 1B (Reference)	Area 5 (Exposure)	One-way ANOVA Tukey's HSD	1.80E-07	202.0	Yes	1.00
	Area 1B (Reference)	South Magnet (Reference)		2.12E-02	-40.58	Yes	0.851
	Area 5 (Exposure)	South Magnet (Reference)		4.79E-05	79.45	Yes	1.00

Notes: [1]The sampling area with the significantly higher ($p \leq 0.05$) total mercury concentration is shaded.

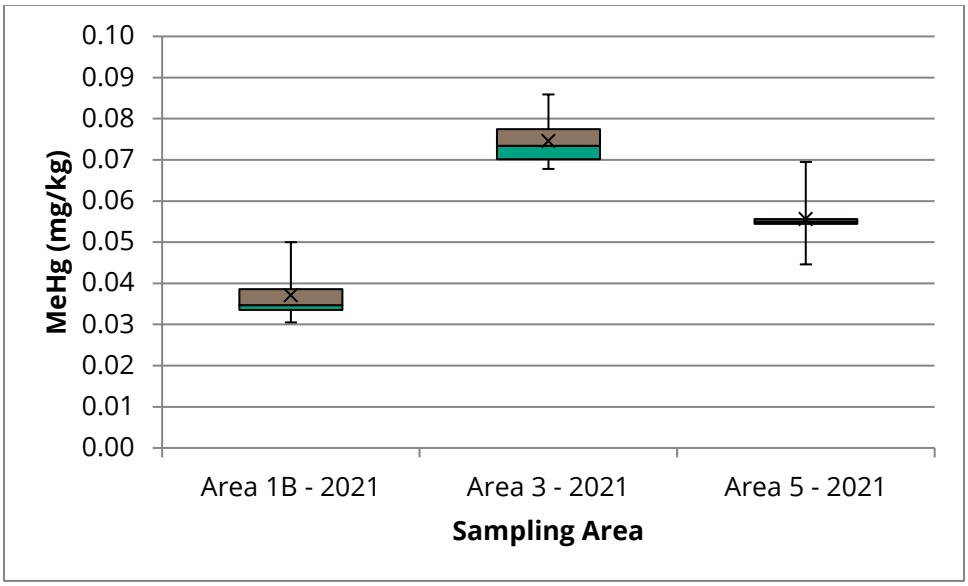
[2]Greater than CES of ± 25% of the reference mean.

[3]Magnitude calculated as [(Exposure mean – Reference mean)/Reference mean] × 100



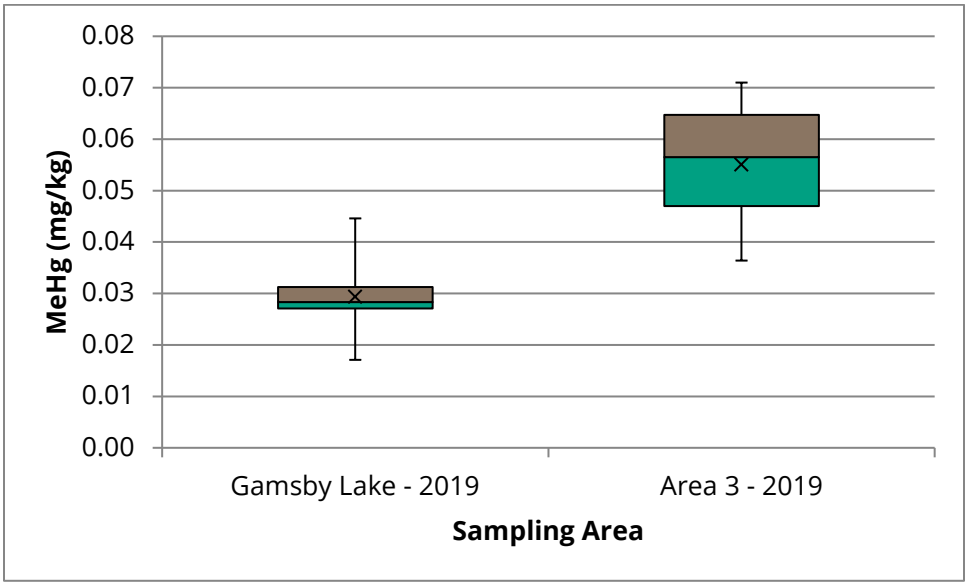
Whiskers represent the minimum and maximum values while the box consists of first, median, and third quartile values. The mean value is also displayed with an 'X'.

Figure 2-20: Boxplot of Methylmercury (MeHg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Sampling Areas in 2023



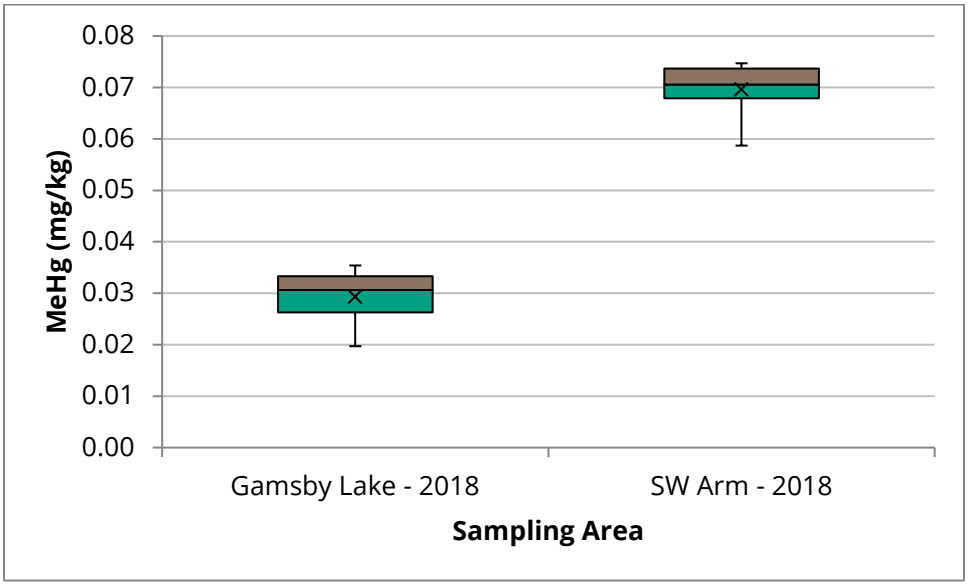
Whiskers represent the minimum and maximum values while the box consists of first, median, and third quartile values. The mean value is also displayed with an 'X'.

Figure 2-21: Boxplot of Methylmercury (MeHg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Sampling Areas in 2021



Whiskers represent the minimum and maximum values while the box consists of first, median, and third quartile values. The mean value is also displayed with an 'X'.

Figure 2-22: Boxplot of Methylmercury (MeHg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Sampling Areas in 2019



Whiskers represent the minimum and maximum values while the box consists of first, median, and third quartile values. The mean value is also displayed with an 'X'.

Figure 2-23: Boxplot of Methylmercury (MeHg) Concentration (mg/kg ww) of Age 1 Yellow Perch Tissue from Sampling Areas in 2018

Quality Assurance/Quality Control

The RPD between 2023 duplicate composite samples of age 1 Yellow Perch tissue was 8.26% and 12.9% for mercury and methylmercury concentrations, respectively (Table 2-20). Both fall below the RPD guideline of 20% (Environment Canada 2012).

Table 2-20: Summary of Composite Samples and Duplicates used to Calculate Relative Percent Difference

Sample ID	Mercury				Methylmercury			
	Sample	Duplicate	Relative Percent Difference	Mean Relative Percent Difference	Sample	Duplicate	Relative Percent Difference	Mean Relative Percent Difference
SMLK-YLPR-07	0.0528	0.0543	2.80	8.26	0.048	[1]N/A	-	12.9
SMLK-YLPR-09	0.0331	0.0337	1.80		0.038	0.042	10.0	
SMLK-YLPR-09	0.0331	0.0251	27.5		0.038	0.036	5.41	
A1B-YLPR-08	0.0174	0.0189	8.26		0.026	0.023	12.2	
A5-YLPR-10	0.0553	0.0530	4.25		0.054	0.065	18.5	
A5-YLPR-10	0.0553	0.0581	4.9		0.054	0.065	18.5	

[1] Methylmercury not analyzed for SMLK-YLPR-07 duplicate.

2.5.6 Conclusions

Fish tissue from exposure areas had higher concentrations of total mercury and methylmercury relative to reference areas prior to the inundation of new wetland habitat. After the Goldfield Creek realignment, total mercury and methylmercury concentrations in 2023 in exposure area fish were higher than in reference area fish, which was consistent with patterns observed in previous years. The observed increase in mercury and methylmercury concentrations in fish tissue from inundated areas was anticipated (Stantec 2017). It is also expected that these increases will be temporary and

eventually return to concentrations similar to those observed in baseline fish tissue studies. Results from the reference areas also demonstrate natural temporal variability of mercury concentrations in fish tissues. Mercury in young-of-the-year Yellow Perch has been previously found to vary across years and waterbodies with water-level fluctuations strongly influencing mercury concentrations in tissue (Sorensen et al. 2005). Monitoring should continue in 2024 and 2025 as planned to further establish temporal patterns in both the reference and exposure sampling areas.

2.5.7 Adaptive Management

Changes to the Plan related to monitoring fish tissue are not recommended at this time. GGM will continue to implement the fish tissue monitoring program as planned with sampling for age-1 Yellow Perch tissue in 2024 and 2025. After the first three years of post-construction monitoring (2023, 2024, and 2025), the need for continued fish tissue monitoring as outlined in the Plan will be reassessed. Additional fish tissue monitoring may be required if triggered by the findings of the surface water adaptive management plan, and if:

- Ongoing fish tissue monitoring plans do not adequately monitor changes where the surface water Trigger Threshold 2 is exceeded.
- A biologically significant change (statistically significant difference, i.e., increase in fish tissue mercury or methylmercury concentration with a CES ≥ 25%) has the potential to adversely affect fish health or the usability of fish by human or wildlife consumers (i.e., exceeds guidelines), and
- The biologically significant change is likely caused by Mine activities.

Additional fish tissue studies may also be required to determine the magnitude and extent of changes, and if fish tissue monitoring activities demonstrate an effect on fish tissue in two consecutive fish tissue studies that are conducted as part of routine monitoring. The scope of additional fish tissue monitoring, if required, will be based on the area where water quality exceedances may occur and will include reference area sampling. If contaminant levels in fish tissue are below guideline Canadian Council of Ministers of the Environment (2000) guideline levels and/or MECP (Nilima et al. 2017) guidelines and water quality levels are no longer in exceedance of regulatory requirements, then no further monitoring would be required.

Confirmed effects on fish tissue may trigger the need for one or more of the following responses:

- Investigation of cause (i.e., determining the cause of the observed effect)
- Additional mitigation (i.e., improve treatment, revise operational procedures)
- Remedial actions

Response actions will be dictated by the nature of the observed effect, if any, and developed in consultation with relevant governing agencies.

2.6 Fish Tissue Monitoring - Kenogamisis Lake

Fish tissue monitoring is required within 24months from when the Mine first began discharging effluent via the temporary ETP, which occurred on September 15, 2021. Therefore, fish tissue monitoring activities were required by the Plan for Kenogamisis Lake during the 2023 monitoring period. The fish tissue monitoring cycle is scheduled to occur every two years for the first six years of operation, after which time the need for additional monitoring will be evaluated.

Walleye tissue sampling occurred in late September and October of 2023, in keeping with the requirements of the monitoring Plan. At the time of report production, Walleye fish tissue data were not received by the laboratory. A separate memo will be appended to this report following the receipt of the laboratory data. Appendix F has been included as a placeholder for this memo, which will address Condition 5.5.1 of the federal Decision Statement.

3 Closing

This 2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report was prepared to address the monitoring requirements of the Fish and Fish Habitat Follow-Up Monitoring Plan (the Plan) (GGM 2021a); which was designed to address seven specific federal Conditions of Approval related to monitoring potential effects of the Mine on fish and fish habitat (Conditions 3.14, 3.15, 3.16, 3.17, 3.2, 5.4, and 5.5.1). This report presents the results of related monitoring activities undertaken during the period of October 1, 2022, through September 30, 2023 (i.e., the 2023 monitoring period) to satisfy the requirements of the Plan.

4 References

Canadian Council of Ministers of the Environment (CCME). 2000. Canadian tissue residue guidelines for the protection of wildlife consumers of aquatic biota: Methylmercury. In: Canadian environmental quality guidelines, 1999, Canadian Council of Ministers of the Environment, Winnipeg.

Environment Canada (EC). 2012. Metal Mining Technical Guidance for Environmental Effects Monitoring. National Environmental Effects Monitoring Office, Environment Canada Ottawa, ON.

Greenstone Gold Mines (GGM). 2020a. Hardrock Project. Indigenous Peoples Health Risk Assessment Follow-Up Plan. HP-MG003-EV-130-0007_0. November 2, 2020.

Greenstone Gold Mines (GGM). 2020b. Hardrock Project Erosion and Sediment Control Plan. HP-MG007-EV-130-0007_0. September 11, 2020.

Greenstone Gold Mines (GGM). 2020c. Hardrock Project: 2018/2019 Pre-Construction Fish Community and Fish Tissue Assessment. HP-MG003-EV-136-0006_0. August 11, 2020

Greenstone Gold Mines (GGM). 2021a. Hardrock Project Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan. HP-MG003-EV-130-0008_0. February 16, 2021.

Greenstone Gold Mines (GGM). 2021b. Greenstone Mine 2021 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report. December 20, 2021. HP-MG003-EV-136-0014_0.

Greenstone Gold Mines (GGM). 2022. Greenstone Mine 2022 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report. December 22, 2022. File 160900981. HP-MG003-EV-136-0033_0.

Government of Canada. 2023. Metal and Diamond Mining Effluent Regulations.

Nilima et. al. 2017. Are Fish Consumption Advisories for the Great Lakes Adequately Protective against Chemical Mixtures? Nilima Gandhi, Ken G. Drouillard, George B. Arhonditsis, Sarah B. Gewurtz, and Satyendra P. Bhavsar. Research. volume 125 | number 4 | April 2017 • Environmental Health Perspectives

Sorensen, J. A., L.W. Kallemyn and M. Sydor. 2005. Relationship between Mercury Accumulation in Young-of-the-Year Yellow Perch and Water-Level Fluctuations. *Environ. Sci. Technol.* 39 , 9237 – 9243.

Stantec Consulting Ltd. (Stantec). 2017. Hardrock Project Final Environmental Impact Statement/Environmental Assessment Amendment. Document control number: HP-MG003-EV-136-0004-001_0. Prepared for: Greenstone Gold Mines GP Inc. June 2017 and updated in accordance with Provincial EA Approval Condition 27 - 2019.

Stantec Consulting Ltd. (Stantec). 2020. Hardrock Project: 2018/2019 Pre-Construction Fish Community and Fish Tissue Assessment. August 11, 2020. File: 160961355. HP-MG003-EV-136-0006_0. Prepared for Greenstone Gold Mines, 2381 Bristol Circle, Suite B203, Oakville, ON L5H 5S9.

Stantec Consulting Ltd. (Stantec). 2023. Greenstone Gold Mines Diversion Channel Corrective Measures Report: An Assessment of Sediment Deposition Downstream of Failed Offsetting Works in Goldfield Creek. Prepared for Greenstone Gold Mines GP Inc. (GGM). Project #160901057. Doc Control #HP-MG003-PE-136-0037_0.

Wright, D.G., and G.E. Hopky. 1998. Guidelines for the use of explosives in or near Canadian fisheries waters. Can. Tech. Rep. Fish. Aquat. Sci. 2107: iv + 34p.

Appendix A
Erosion Sediment Control Inspection Reports

Due to the size of the files, the PDFs have been uploaded to a SharePoint Site. Please click links below and request access if needed.

Appendix A.1 GGM ESC Reports

Site ESC Inspection Reports

Goldfield Creek ESC Inspection Reports

Appendix A.2 Stantec ESC Reports

Stantec ESC Inspection Reports

Appendix A.3 CSL ESC Reports

CSL ESC Inspection Reports

Appendix B
Surface Water Data

Appendix B.1 Monthly Surface Water Data

SW - Monthly - Field

Date: 10 2022

EQUINOXGOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
Field Blank	2022-10-19 13:43							L.M	T.P	
Trip Blank	[a]							[a]	[a]	[a] Lab did not send a travel blank.
11	2022-10-20 12:05	11.93	160.5	144.0	7.98	4.5	1.10	J.C	W.M	
17	2022-10-04 11:16	10.27	154.2	[b]	7.72	11.7	1.79	L.M	B.M	[b] YSI does not have ORP probe.
1A	2022-10-19 11:47	11.78	228.7	190.3	7.99	3.9	0.74	J.C	L.V	
2	2022-10-13 15:31	10.93	160.1	101.2	8.08	9.0	2.32	M.F	L.M	
20	2022-10-20 13:44	11.14	202.6	235.3	7.48	3.5	0.68	L.M	T.P	
20A	2022-10-19 12:35	11.24	219.5	172.5	7.51	2.7	0.83	J.C	L.V	
21	2022-10-04 14:51	10.41	200.1	[b]	7.82	12.2	0.51	L.M	L.M	[b] YSI does not have ORP probe.
22A	2022-10-19 12:18	11.04	230.9	190.9	7.52	2.9	0.60	J.C	L.V	
23	2022-10-19 13:11	11.99	201.8	186.2	7.93	4.2	1.68	J.C	L.V	
24[D]	2022-10-05 11:40	10.18	186.5	[b]	7.87	11.7	1.90	J.C	M.F	[b] YSI does not have ORP probe.
25	2022-10-19 11:03	9.98	405.3	198.5	7.35	2.4	0.24	J.C	L.V	
26	2022-10-24 14:48	11.80	356.5	104.3	7.86	7.3	0.97	B.M	L.M	
28	2022-10-13 15:03	10.39	168.0	109.3	7.80	8.1	2.24	L.M	M.F	
38	2022-10-04 12:29	9.84	170.8	[b]	7.67	11.6	3.32	B.M	L.M	[b] YSI does not have ORP probe.
39	2022-10-19 13:08	10.64	441.6	[b]	7.91	6.0	0.75	B.M	T.P	[b] YSI does not have ORP probe.
4	2022-10-20 13:51	12.39	253.7	131.3	8.05	3.9	2.86	J.C	W.M	
40	2022-10-04 09:48	10.43	233.1	[b]	7.86	11.4	2.23	B.M	L.M	[b] YSI does not have ORP probe.
46	2022-10-05 12:11	10.46	181.3	[b]	7.88	11.6	1.65	J.C	M.F	[b] YSI does not have ORP probe.
47[D]	2022-10-20 13:05	11.85	176.4	126.4	8.08	5.3	1.52	J.C	W.M	
49	2022-10-05 13:33	10.24	177.6	[b]	7.81	11.8	1.67	J.C	M.F	[b] YSI does not have ORP probe.
52	2022-10-26 13:55	11.15	188.2	172.2	7.92	7.5	0.87	L.M	B.M	
53	2022-10-05 12:58	10.45	181.3	[b]	7.82	11.6	1.66	J.C	M.F	[b] YSI does not have ORP probe.
55	2022-10-20 09:19	4.66	413.5	150.3	7.28	3.3	0.00	J.C	W.M	
8	2022-10-19 10:21	11.43	178.5	248.8	7.97	5.7	1.43	J.C	L.V	

Legend

[D] Duplicate

Not Required

Notes

SW - Monthly - Field

Date: 11 2022

EQUINOXGOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
Field Blank	2022-11-08 11:30							B.M	J.C	
Trip Blank	2022-11-07 08:00							J.C	B.M	
11	2022-11-08 13:22	12.16	148.9	116.3	8.01	4.4	1.18	J.C	B.M	
17[D]	2022-11-02 11:43	11.56	161.7	56.1	7.89	6.3	1.58	B.M	J.C	
1A	2022-11-07 12:08	11.90	195.3	82.3	8.06	4.1	1.17	J.C	B.M	
2	2022-11-08 12:47	12.31	199.9	125.3	7.99	3.3	2.05	B.M	J.C	
20	2022-11-08 14:12	12.60	168.3	171.5	7.39	2.2	0.75	W.M	T.P	
20A	2022-11-07 12:54	10.66	176.8	79.1	7.38	2.6	1.09	J.C	B.M	
21	2022-11-08 13:32	11.99	182.4	242.7	7.74	3.2	0.46	W.M	T.P	
22A	2022-11-07 12:40	10.03	210.9	89.3	7.37	2.5	1.19	B.M	J.C	
23	2022-11-07 13:13	11.62	190.0	70.1	8.02	4.6	1.78	B.M	J.C	
24	2022-11-08 10:16	11.99	195.7	148.0	8.13	4.1	1.61	B.M	J.C	
25	2022-11-08 14:12	10.35	320.5	123.3	7.48	1.9	0.58	J.C	B.M	
26	2022-11-08 15:41	12.16	311.1	174.9	7.92	3.6	0.92	W.M	T.P	
28	2022-11-08 12:30	12.68	185.0	135.5	7.68	2.1	1.38	B.M	J.C	
38	2022-11-02 12:49	11.35	177.8	64.3	7.96	6.6	2.93	B.M	M.F	
39	2022-11-08 14:51	11.10	402.4	196.7	7.87	4.9	0.84	T.P	W.M	
4	2022-11-08 13:00	12.34	232.4	115.3	8.02	3.5	2.32	B.M	J.C	
40	2022-11-02 09:52	11.50	259.3	51.2	7.99	6.2	2.28	B.M	M.F	
46	2022-11-08 10:34	12.00	200.4	137.3	8.14	4.3	1.36	J.C	B.M	
47	2022-11-08 13:55	12.10	166.3	99.5	8.03	4.7	1.25	B.M	J.C	
49[D]	2022-11-07 13:39	11.81	183.0	76.2	8.04	4.9	1.04	J.C	B.M	
52	2022-11-09 12:56	12.58	167.6	211.8	7.64	3.6	0.81	B.M	J.C	
53	2022-11-08 10:50	12.17	199.5	129.5	8.09	4.0	1.29	J.C	B.M	
55	2022-11-10 11:07	4.45	285.9	11.0	6.95	3.1	0.59	T.P	W.M	
8	2022-11-08 13:47	12.08	165.8	115..4	8.03	4.8	1.17	W.M	T.P	

Legend

[D] Duplicate

Not Required

Notes

SW - Monthly - Field

Date: 12 2022

EQUINOX GOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
Field Blank	[a]							a	a	[a] Not completed
Trip Blank	2022-12-15 08:00							J.C	M.F	
11	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
17	2022-12-15 13:27	11.59	176.4	184.4	7.46	2.0	0.86	J.C	M.F	
1A	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
2	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
20	2022-12-14 14:21	7.77	311.0	171.5	7.17	0.4	1.15	B.M	L.M	
20A	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
21	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
22A	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
23	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
24	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
25	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
26	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
28	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
38	2022-12-13 11:39	12.41	190.7	64.3	7.56	1.7	1.67	L.M	B.M	
39	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
4	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
40	2022-12-13 14:25	13.05	241.0	51.2	7.61	2.1	1.17	B.M	L.M	
46	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
47	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
49	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
52	2022-12-13 12:43	12.84	190.0	269.3	6.51	0.6	0.90	J.C	M.F	
53	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
55	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b] Unsafe ice conditions
8	2022-12-13 15:07	13.64	206.5	115.4	7.86	1.2	0.80	L.M	B.M	

Legend

[D] Duplicate

Not Required

Notes

SW - Monthly - Field

Date: 01 2023

EQUINOXGOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
Field Blank	2023-01-05 11:41							J.C	W.M	
Trip Blank	2023-01-17 08:00							J.C	W.M	
11	2023-01-03 12:36	13.96	187.8	171.5	7.78	0.0	0.76	J.C	M.F	
17[D]	2023-01-09 11:33	10.13	165.0	170.9	7.22	2.8	0.59	M.F	L.M	
1A	2023-01-05 14:14	12.37	25.5	56.4	8.58	0.0	1.26	J.C	W.M	
2	2023-01-03 10:10	11.56	247.1	197.0	7.30	0.5	1.46	J.C	M.F	
20	2023-01-09 15:07	7.31	312.0	117.5	7.13	0.0	-0.19	M.F	L.M	
20A	2023-01-05 13:02	7.44	122.9	102.5	7.58	0.0	4.56	J.C	W.M	
21	2023-01-10 12:21	9.05	220.3	49.4	7.24	1.9	1.16	J.C	W.M	
22A	2023-01-05 12:34	8.79	133.2	108.1	7.58	0.0	3.38	J.C	W.M	
23[D]	2023-01-05 11:41	12.14	169.4	157.0	7.74	0.0	1.28	J.C	W.M	
24	2023-01-04 12:44	12.90	14.7	146.5	8.01	0.1	1.27	J.C	W.M	
25	2023-01-04 13:42	1.36	10.7	75.5	6.74	0.0	1.18	J.C	W.M	
26	2023-01-10 14:16	5.57	355.2	68.7	7.20	2.9	-1.08	J.C	W.M	
28	2023-01-03 09:47	9.96	241.2	217.8	7.19	1.8	1.80	J.C	M.F	
38	[a]	[a]	[a]	[a]	[a]	[a]	[a]	[a]	[a]	[a] Unsafe ice conditions
39	2023-01-09 14:22	6.60	422.8	269.8	6.59	3.0	0.67	J.C	W.M	
4	2023-01-03 10:59	11.89	263.9	169.2	7.48	1.3	1.15	J.C	M.F	
40	2023-01-03 10:36	11.72	242.2	168.9	7.43	1.1	1.21	J.C	M.F	
46	2023-01-04 11:40	12.15	182.4	141.1	7.80	0.7	1.13	J.C	W.M	
47	2023-01-03 13:27	13.58	208.3	153.0	7.73	0.8	0.72	J.C	M.F	
49[D]	2023-01-04 10:43	13.22	220.8	164.5	7.70	0.3	0.93	J.C	W.M	
52	2023-01-11 12:22	12.90	180.3	139.4	7.62	0.5	0.94	J.C	W.M	
53	2023-01-04 11:15	12.89	199.1	143.8	7.89	0.2	1.07	J.C	W.M	
54	2023-01-17 11:37	11:30	200.4	139.4	7.43	0.0	0.73	J.C	W.M	
55	2023-01-11 14:47	2.93	435.9	-63.3	6.41	0.8	1.02	J.C	W.M	
8	2023-01-03 13:05	13.59	205.5	160.4	7.75	0.7	0.72	J.C	M.F	

Legend

[D] Duplicate

Not Required

Notes

Site 54 added to the sampling program as per the Multimedia Monitoring and Management Plan.

SW - Monthly - Field

Date: 02 2023

EQUINOX GOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
Field Blank	2023-02-14 09:46							J.C	W.M	
Trip Blank	2023-02-15 16:20							M.F	T.P	
11	2023-02-07 15:02	11.61	181.5	70.9	7.69	0.9	0.19	M.F	T.P	
17[D]	2023-02-13 12:55	9.00	188.8	143.7	7.31	1.9	0.86	M.F	L.M	
1A	2023-02-13 15:56	12.47	201.9	131.4	7.53	0.0	0.87	M.F	L.M	
2	2023-02-07 12:02	7.72	248.8	73.0	7.22	0.2	52.51	M.F	T.P	
20	2023-02-08 16:24	a	a	a	a	a	a	M.F	T.P	[a] Unsafe - A lot of heavy machinery in the area due to Pond T1 construction
20A	2023-02-08 16:17	2.09	353.1	-65.5	7.01	1.1	1.40	M.F	T.P	
21	2023-02-07 09:43	5.22	248.1	126.8	7.81	2.9	0.45	M.F	T.P	
22A	2023-02-08 16:19	3.92	322.2	-0.9	7.01	0.8	4.94	M.F	T.P	
23	2023-02-08 16:22	12.18	183.6	65.7	7.57	0.1	0.48	M.F	T.P	
24	2023-02-06 13:26	12.70	184.1	93.9	7.63	0.4	0.40	J.C	W.M	
25	2023-02-06 14:24	2.46	232.9	37.2	6.94	-0.0	0.72	J.C	W.M	
26	2023-02-14 09:33	6.95	346.5	30.5	7.46	4.3	0.02	J.C	W.M	
28[D]	2023-02-07 11:37	9.19	245.6	64.1	7.14	2.6	0.69	M.F	T.P	
38	2023-02-01 9:37	a	a	a	a	a	a	a	a	[a] Unsafe - Ice conditions
39	2023-02-13 13:58	9.93	212.0	144.2	7.43	1.2	0.99	J.C	W.M	
4	2023-02-07 13:27	6.53	253.5	83.8	7.06	3.2	0.67	M.F	T.P	
40	2023-02-01 14:28	9.18	326.2	98.5	7.28	3.3	1.09	B.M	L.M	

SW - Monthly - Field

Date: 02 2023

EQUINOX GOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
46	2023-02-06 12:29	12.86	183.5	87.0	7.62	0.6	0.39	J.C	W.M	
47	2023-02-08 16:13	11.24	1856	143.7	7.53	2.1	0.19	M.F	T.P	
49	2023-02-06 11:13	12.08	185.5	84.4	7.43	1.1	0.32	J.C	W.M	
52	2023-02-16 11:34	12.21	196.7	100.9	7.61	0.2	0.48	J.C	W.M	
53	2023-02-06 12:02	12.43	194.3	84.1	7.56	0.1	0.31	J.C	W.M	
54	2023-02-14 10:52	10.91	186.9	235.3	7.52	0.2	0.12	J.C	W.M	
55[D]	2023-02-06 13:56	1.71	232.4	-39.7	6.94	0.1	0.32	J.C	W.M	
8	2023-02-07 09:35	12.87	213.5	120.8	8.10	0.9	0.41	M.F	T.P	

Legend

[D] Duplicate
Not Required

Notes

SW - Monthly - Field

Date: 03 2023

EQUINOX GOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
Field Blank	2023-03-13 08:00							W.M	M.F	
Trip Blank	2023-03-07 09:00							J.C	L.M	
11	2023-03-07 12:31	10.39	198.5	142.5	7.43	1.7	0.50	J.C	L.M	
17	2023-03-13 12:30	8.78	268.0	245.2	7.20	1.6	0.36	M.F	W.M	
1A	2023-03-08 10:17	12.59	188.7	131.9	7.47	0.2	1.00	J.C	T.P	
2	2023-03-09 14:43	8.96	257.7	86.4	7.14	0.1	1.31	J.C	T.P	
20	2023-03-08 12:43	3.17	409.3	-56.9	6.70	0.3	2.36	J.C	T.P	
20A	2023-03-08 13:19	8.24	243.0	49.2	6.90	0.1	0.87	J.C	T.P	
21	2023-03-09 12:14	2.29	242.6	-7.1	6.94	1.9	124.85	L.M	B.M	
22A	2023-03-08 11:08	9.02	246.4	98.1	7.02	0.1	0.87	J.C	T.P	
23	2023-03-08 13:56	12.68	190.0	56.5	7.38	0.0	0.96	J.C	T.P	
24	2023-03-06 12:03	11.34	194.7	212.8	6.88	1.7	0.50	J.C	L.M	
25	2023-03-09 11:40	2.63	235.3	-39.7	6.90	-0.0	0.82	J.C	T.P	
26	2023-03-14 09:18	7.49	529	159.7	7.21	0.9	0.00	M.F	W.M	
28[D]	2023-03-09 13:24	11.57	252.5	89.6	7.05	-0.0	1.50	J.C	T.P	
38	2023-03-07 12:40	[a]	[a]	[a]	[a]	[a]	[a]	B.M	T.P	[a] Unsafe - Ice Conditions
39	2023-03-08 15:45	8.62	218.7	166.6	6.96	2.1	0.48	L.M	B.M	
4	2023-03-07 14:04	8.44	261.9	120.4	7.35	1.3	0.50	J.C	L.M	

SW - Monthly - Field

Date: 03 2023

EQUINOX GOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
40[D]	2023-03-07 14:39	6.97	240.7	138.6	7.08	1.6	1.08	T.P	T.P	
46[D]	2023-03-06 12:50	11.83	203.4	205.8	7.16	0.3	0.50	J.C	L.M	
47	2023-03-07 11:53	10.53	193.0	155.5	7.33	1.5	0.50	J.C	L.M	
49	2023-03-06 13:47	11.48	199.8	201.0	7.22	1.1	0.50	J.C	L.M	
52	2023-03-14 14:10	11.61	265.1	80.7	7.64	0.5	0.04	M.F	W.M	
53	2023-03-06 14:30	9.59	213.0	197.7	7.22	0.7	0.50	J.C	L.M	
54	2023-03-13 15:15	11.21	275.3	226.8	7.35	0.2	0.21	W.M	M.F	
55	2023-03-09 10:54	2.69	234.3	-85.1	6.95	1.0	1.22	J.C	T.P	
8	2023-03-07 13:25	11.14	203.2	61.0	7.48	0.9	0.50	J.C	L.M	

Legend

[D] Duplicate
Not Required

Notes

SW - Monthly - Field

Date: 04 2023

EQUINOX GOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
Field Blank	2023-04-13 12:40							B.M	T.P	
Trip Blank	2023-04-13 07:33							M.F	W.M	
11	2023-04-11 08:00	a	a	a	a	a	a	W.M	M.F	[a] Unsafe ice conditions
17	2023-04-05 14:52	7.77	220.6	126.5	7.12	2.9	0.80	M.F	T.P	
1A	2023-04-03 12:44	12.77	213.0	277.3	7.41	0.1	0.47	L.M	W.M	
2	2023-04-11 08:00	a	a	a	a	a	a	W.M	M.F	[a] Unsafe ice conditions
20	2023-04-11 08:00	a	a	a	a	a	a	W.M	M.F	[a] Unsafe ice conditions
20A[D]	2023-04-04 11:34	6.25	305.0	120.0	6.71	0.4	0.37	W.M	L.M	
21	2023-04-11 08:00	a	a	a	a	a	a	W.M	M.F	[a] Unsafe ice conditions
22A	2023-04-04 12:07	7.45	292.1	96.2	6.69	0.0	0.35	W.M	L.M	
23	2023-04-04 13:01	12.72	212.1	122.0	7.38	0.0	0.48	W.M	L.M	
24	2023-04-04 13:39	12.27	213.2	126.3	7.24	0.4	0.52	W.M	L.M	
25	2023-04-04 15:15	2.16	293.7	-66.9	6.63	0.0	0.91	L.M	W.M	
26	2023-04-11 08:00	a	a	a	a	a	a	W.M	M.F	[a] Unsafe ice conditions
28	2023-04-11 08:00	a	a	a	a	a	a	W.M	M.F	[a] Unsafe ice conditions
38	2023-04-03 11:00	a	a	a	a	a	a	J.C	T.P	[a] Unsafe ice conditions
39	2023-04-12 14:10	9.75	168.1	193.3	7.35	0.9	1.11	M.F	W.M	
4	2023-04-11 08:00	a	a	a	a	a	a	W.M	M.F	[a] Unsafe ice conditions

SW - Monthly - Field

Date: 04 2023

EQUINOX GOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
40[D]	2023-04-13 12:40	3.83	255.8	198.8	6.78	3.2	0.00	B.M	T.P	
46	2023-04-03 15:08	12.05	217.6	242.8	7.26	0.5	0.46	W.M	L.M	
47	2023-04-11 08:00	a	a	a	a	a	a	W.M	M.F	[a] Unsafe ice conditions
49	2023-04-03 14:35	11.52	219.0	258.1	7.27	0.5	0.32	W.M	L.M	
52	2023-04-12 10:57	11.32	177.5	183.5	7.54	1.7	0.73	M.F	W.M	
53	2023-04-11 08:00	a	a	a	a	a	a	W.M	M.F	[a] Unsafe ice conditions
54	2023-04-03 13:49	9.67	212.0	229.3	7.38	0.2	0.00	J.C	T.P	
55	2023-04-04 14:38	1.64	279.3	-92.0	6.66	0.0	1.03	L.M	W.M	
8	2023-04-13 02:44	9.41	202.1	175.6	7.02	2.2	0.00	W.M	M.F	

Legend

[D] Duplicate
Not Required

Notes

SW - Monthly - Field

Date: 05 2023

EQUINOXGOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
Field Blank	2023-05-08 12:08							J.C	L.M	
Trip Blank	2023-05-01 10:09							J.C	L.M	
11[D]	2023-05-25 10:47	10.46	129	127.1	7.53	11.1	0.99	J.C	M.F	
17	2023-05-04 11:59	7.88	207.4	188.3	7.11	4.0	0.72	J.C	M.F	
1A	2023-05-18 12:05	10.66	105.6	141.9	6.98	7.6	1.27	B.M	T.P	
2	2023-05-25 12:53	9.24	95	126.7	7.24	13.5	0.79	J.C	M.F	
20	2023-05-04 14:14	9.17	263.5	166.8	7.44	5.6	8.72	J.C	M.F	
20A	2023-05-18 13:36	7.07	133.3	139.3	6.99	11.1	0.65	B.M	T.P	
21	2023-05-29 14:12	8.86	125	227.6	7.64	20.4	0.40	J.C	M.F	
22A[D]	2023-05-18 12:51	7.24	136.9	141.1	6.99	10.2	0.58	B.M	T.P	
23	2023-05-18 14:07	10.56	104.3	143.2	7.02	8.2	0.99	B.M	T.P	
24	2023-05-18 14:43	10.72	102.1	151.7	6.93	8.2	1.00	B.M	T.P	
25	2023-05-09 10:15	8.26	230.5	102.7	7.26	3.6	14.50	J.C	M.F	
26	2023-05-31 12:38	a	a	a	a	a	a	J.C	L.M	[a] Sample not taken, access issues (which have since been resolved).
28	2023-05-25 12:17	9.43	102.6	178.5	7.21	11.1	0.53	T.P	J.C	
38	2023-05-01 10:09	10.79	204.7	203.5	7.23	1.7	1.86	J.C	L.M	
39	2023-05-31 11:38	8.32	183	160.4	7.94	20.6	8.91	J.C	L.M	
4	2023-05-25 13:35	9.45	110.4	183.8	7.33	13.2	0.77	J.C	T.P	
40[D]	2023-05-25 13:13	9.24	97.2	176	7.26	13.2	0.89	T.P	M.F	
46	2023-05-30 13:57	9.42	129.3	206.4	7.69	17.5	0.93	J.C	M.F	
47	2023-05-25 11:28	10.32	117.6	156.5	7.54	12.5	1.25	M.F	T.P	
49	2023-05-30 14:17	9.44	125.9	204.5	7.73	18.1	0.91	L.M	M.F	
52	2023-05-09 14:41	10.02	155.2	145.2	7.11	4.1	1.95	J.C	M.F	
53	2023-05-30 16:32	9.26	100	132.8	7.76	19.4	1.19	B.M	L.M	
54	2023-05-09 12:50	10.21	160.5	146.5	7.02	2.8	2.81	J.C	M.F	
55	2023-05-29 15:01	5.44	219.8	224.9	7.62	20.2	4.61	J.C	M.F	
8	2023-05-01 11:48	9.02	216.3	215.9	6.91	1.4	0.70	J.C	L.M	

Legend

[D] Duplicate

Not Required

Notes

SW - Monthly - Field

Date: 06 2023

EQUINOX GOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
Field Blank	2023-06-26 16:15							M.F	L.M	
Trip Blank	2023-06-26 16:16							M.F	L.M	
11	2023-06-19 13:50	8.99	135.8	152.1	7.75	20.2	1.10	J.C	M.F	
17	2023-06-19 12:29	8.69	136.1	167.4	7.57	21.5	1.42	J.C	M.F	
1A	2023-06-14 10:54	9.86	134.6	103.9	7.71	17.2	1.31	M.F	T.P	
2	2023-06-15 14:52	9.77	106.9	110.2	7.46	16.6	2.38	M.F	T.P	
20	2023-06-23 12:33	4.35	342	162.5	7.25	23.2	1.75	B.M	S.P	
20A[D]	2023-06-23 11:50	6.86	176	144.6	7.35	22.2	1.16	B.M	S.P	
21	2023-06-26 13:37	7.59	152.8	130.5	7.59	18.9	0.73	J.C	T.P	
22A	2023-06-23 12:11	6.72	200.2	153.6	7.32	23.1	1.15	B.M	S.P	
23	2023-06-23 11:29	7.98	160.8	147	7.66	22.1	1.19	B.M	S.P	
24	2023-06-14 11:49	9.91	133.5	124.4	7.84	17.9	2.28	M.F	T.P	
25[D]	2023-06-23 13:22	2.69	285	152.3	7.09	23.3	1.44	B.M	S.P	
26	2023-06-28 10:48	8.58	330.1	197.7	7.97	20.1	1.30	M.F	L.M	
28	2023-06-26 11:25	7.15	179.1	174	7.59	18.1	0.51	M.F	L.M	
38	2023-06-19 11:32	7.26	133.5	157	7.37	18.5	2.52	J.C	M.F	
39	2023-06-28 12:10	7.62	233.5	139	7.52	18.2	1.50	M.F	L.M	
4	2023-06-15 15:02	9.85	123.6	120.2	7.49	16.1	4.69	T.P	M.F	
40	2023-06-26 12:48	7.51	139.7	145.2	7.59	19.3	2.31	M.F	L.M	

SW - Monthly - Field

Date: 06 2023

EQUINOX GOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
46	2023-06-14 13:15	9.92	137	117.9	7.8	18.0	2.05	M.F	T.P	
47	2023-06-15 15:06	9.80	121.3	64.1	7.55	16.6	1.68	M.F	T.P	
49	2023-06-14 01:35	9.95	134.7	126.1	7.76	18.3	1.86	M.F	T.P	
52	2023-06-22 11:12	7.41	169.9	107.5	7.73	24.7	2.16	J.C	M.F	
53	2023-06-14 02:43	9.88	137.4	125.7	7.79	17.5	2.01	M.F	T.P	
54	2023-06-27 11:48	6.47	182	107	7.57	18.4	0.23	B.M	S.P	
55	2023-06-23 08:44	1.18	282.4	101.6	6.95	22.2	1.62	B.M	S.P	
8	2023-06-15 15:03	9.77	122.4	98.1	7.62	16.7	1.72	M.F	T.P	

Legend

[D] Duplicate
Not Required

Notes

SW - Monthly - Field

Date: 07 2023

EQUINOX GOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
Field Blank	2023-07-11 12:08							L.M	B.M	
Trip Blank	2023-07-11 11:03							B.M	S.P	
11	2023-07-03 11:52	9.11	125	142.7	7.88	21.8	0.52	J.C	M.M	
17	2023-07-11 11:03	7.95	135.5	136	7.38	19.3	1.69	L.M	B.M	
1A	2023-07-04 10:16	8.18	171.3	189.9	7.93	22.8	0.18	R.D	W.M	
2	2023-07-03 10:15	9.02	121	145.7	7.87	21.9	0.92	J.C	M.M	
20	2023-07-04 11:17	6.59	266.7	210.2	7.21	23.3	0.28	R.D	W.M	
20A	2023-07-04 11:33	8.33	220.5	209.1	7.22	23.0	0.00	R.D	W.M	
21	2023-07-10 12:20	8.77	155	167	7.93	19.8	0.81	W.M	S.P	
22A	2023-07-04 10:56	6.30	241.8	182.6	7	21.9	0.00	R.D	W.M	
23[D]	2023-07-04 11:51	8.41	167.6	186.1	7.89	21.1	0.24	R.D	W.M	
24	2023-07-04 12:36	8.61	169.7	173.2	7.99	21.4	0.16	R.D	W.M	
25	2023-07-04 13:58	3.76	319.7	204.8	7.15	26.1	0.00	R.D	W.M	
26	2023-07-10 03:14	8.87	319.6	100.6	8.15	21.0	1.01	W.M	S.P	
28	2023-07-03 09:46	7.77	170	165.6	7.52	23.2	0.83	J.C	M.M	
38[D]	2023-07-11 12:08	6.91	139.6	145.6	7.19	20.1	1.61	B.M	L.M	
39	2023-07-10 02:14	8.04	236.4	161.4	7.67	20.6	1.59	W.M	S.P	
4	2023-07-03 10:53	9.02	136.1	141.2	7.85	22.2	2.65	J.C	M.M	
40	2023-07-03 10:34	8.91	132.5	145.6	7.82	23.5	2.22	J.C	M.M	

SW - Monthly - Field

Date: 07 2023

EQUINOX GOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
46[D]	2023-07-04 13:28	8.97	169.6	184.2	8.07	22.3	0.07	R.D	W.M	
47	2023-07-03 11:19	9.19	135.7	145.3	7.94	22.1	0.36	J.C	M.M	
49	2023-07-04 14:19	8.70	166	188.2	7.99	21.9	0.06	R.D	W.M	
52	2023-07-12 09:13	8.14	136.1	131.7	7.7	17.1	0.35	J.C	S.P	
53	2023-07-04 14:37	8.73	173.7	162.1	8.09	24.5	0.02	R.D	W.M	
54	2023-07-10 01:32	7.46	189.3	146.3	7.49	21.4	3.53	W.M	S.P	
55	2023-07-10 10:11	1.56	325.3	200.9	6.82	17.1	1.16	W.M	S.P	
8	2023-07-03 11:34	8.95	134.1	138.7	7.85	23.2	0.38	J.C	M.M	

Legend

[D] Duplicate
Not Required

Notes

SW - Monthly - Field

Date: 08 2023

EQUINOX GOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
Field Blank	2023-08-09 11:48							J.C	W.M	
Trip Blank	2023-08-01 08:00							J.C	T.P	
11	2023-08-01 13:46	9.31	127.4	112.4	7.79	21.4	0.52	J.C	T.P	
17	2023-08-09 13:03	8.12	117.2	32.1	7.94	21.8	3.15	J.C	W.M	
1A	2023-08-08 13:31	7.79	162	178.3	7.77	21.3	0.00	J.C	T.P	
2[D]	2023-08-01 10:32	8.72	130.5	112.2	7.6	20.8	1.40	J.C	T.P	
20	2023-08-08 12:35	7.30	241.4	110	7.53	20.8	-0.12	L.M	W.M	
20A	2023-08-02 11:28	9.36	175.1	183	7.4	20.9	0.23	M.F	L.M	
21	2023-08-14 12:15	8.78	111.3	-55.3	7.68	19.6	0.61	W.M	S.P	
22A	2023-08-02 12:00	8.57	217.9	188.2	7.21	20.8	0.14	M.F	L.M	
23	2023-08-02 12:39	8.85	152.1	179.1	7.81	21.1	0.79	M.F	L.M	
24[D]	2023-08-02 13:29	9.19	156.7	187	7.92	21.1	0.81	M.F	L.M	
25	2023-08-08 14:35	4.97	279.1	157	7.15	21.3	-0.38	J.C	T.P	
26	2023-08-10 10:40	8.71	286.2	179.5	8.25	21.5	0.55	M.F	T.P	
28	2023-08-01 09:54	8.51	183.1	98.9	7.48	18.4	0.99	J.C	T.P	
38	2023-08-09 11:47	7.47	123.4	23.9	7.85	21.9	0.03	J.C	W.M	
39	2023-08-10 11:50	8.15	243.1	148	7.71	21.2	-0.14	M.F	T.P	
4	2023-08-01 12:40	9.16	148	167.8	7.73	21.4	2.57	J.C	T.P	

SW - Monthly - Field

Date: 08 2023

EQUINOX GOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
40	2023-08-01 11:41	8.39	139.1	157	7.49	20.6	2.74	J.C	T.P	
46	2023-08-08 12:43	8.50	167	164.8	7.92	21.8	0.11	J.C	T.P	
47	2023-08-08 10:35	8.53	143.4	180.3	7.85	22.0	0.14	J.C	T.P	
49	2023-08-08 11:16	8.34	153.9	171	7.82	22.7	0.04	J.C	T.P	
52	2023-08-16 10:28	8.87	113	31.1	7.91	18.2	0.37	J.C	W.M	
53[D]	2023-08-08 12:09	8.41	168.9	172.4	7.89	21.2	0.14	J.C	T.P	
54	2023-08-14 10:59	7.11	131.5	210.7	7.29	19.4	1.46	W.M	R.D	
55	2023-08-15 09:40	1.51	259.5	212.8	6.74	15.6	1.33	R.D	W.M	
8	2023-08-01 13:20	9.39	139.7	170.1	7.89	22.9	0.49	J.C	T.P	

Legend

[D] Duplicate
Not Required

Notes

SW - Monthly - Field

Date: 09 2023

EQUINOX GOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
Field Blank	2023-09-12 12:06							J.C	R.D	
Trip Blank	2023-09-07 10:59							R.D	W.M	
11	2023-09-12 14:07	9.35	100.9	96	7.89	15.9	1.55	J.C	T.P	
17	2023-09-06 13:58	8.06	126.7	70.9	7.92	19.9	1.82	M.F	R.D	
1A[D]	2023-09-11 12:57	8.90	129.8	137.8	7.84	16.2	0.95	R.D	W.M	
2	2023-09-12 11:47	9.35	111.2	88.8	7.84	15.1	3.61	J.C	R.D	
20	2023-09-18 13:06	7.78	278.4	44.3	7.52	14.2	0.08	M.F	W.M	
20A	2023-09-11 10:26	7.74	147.4	192.4	7.13	14.6	0.70	R.D	W.M	
21	2023-09-18 12:35	8.49	171.6	51.4	7.77	15.0	0.56	M.F	W.M	
22A	2023-09-11 10:07	7.74	159.4	189.3	7.04	14.3	0.86	R.D	W.M	
23	2023-09-11 10:55	9.05	123.5	181.4	7.76	15.9	1.71	R.D	W.M	
24	2023-09-11 11:26	9.27	126.8	164.8	7.85	16.1	1.76	R.D	W.M	
25	2023-09-07 10:59	2.41	289.7	96.6	7.24	15.6	0.00	W.M	R.D	
26	2023-09-25 12:53	11.00	298.2	150.6	8.18	17.1	1.81	L.M	T.P	
28	2023-09-12 11:18	9.38	145.5	83.9	7.63	13.2	1.39	J.C	R.D	
38	2023-09-06 11:44	8.11	143.1	72	7.91	19.6	9.37	M.F	R.D	
39	2023-09-18 14:05	8.98	255.1	54.4	7.95	15.8	0.12	M.F	W.M	
4	2023-09-12 13:24	9.42	130.7	95.7	7.96	15.6	6.40	J.C	T.P	

SW - Monthly - Field

Date: 09 2023

EQUINOX GOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Field Visit Details										
ID	Date	Dissolved Oxygen, Field (mg/l)	Conductivity, Field (us/cm)	Oxidation Reduction Potential (millivolts (mV))	pH, Field	Temperature, Field (deg C)	Turbidity, Field (NTU)	Technician 1	Technician 2	Comments
40	2023-09-06 12:46	8.22	160.6	78.8	8.01	20.4	5.34	M.F	R.D	
46	2023-09-11 13:34	9.28	128.9	140	7.92	16.4	1.67	R.D	W.M	
47	2023-09-07 12:24	8.77	147.2	101.6	8.03	17.6	0.00	R.D	W.M	
49	2023-09-11 13:54	9.23	118.4	128.8	7.94	17.1	1.53	R.D	W.M	
52	2023-09-26 12:14	10.16	159.3	103.6	7.9	15.7	1.07	J.C	W.M	
53	2023-09-07 11:57	8.73	167.4	101.1	8.1	17.2	0.00	W.M	R.D	
54	2023-09-06 16:00	7.63	189.6	56.4	7.85	19.4	1.85	M.F	R.D	
55[D]	2023-09-19 11:52	2.99	346.9	117.9	7.15	13.1	0.47	M.F	W.M	
8[D]	2023-09-06 15:03	8.62	151.2	74.6	7.97	18.3	1.85	M.F	R.D	

Legend

[D] Duplicate
Not Required

Notes

Appendix B.2 Surface Water Analytical Results

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location							1A						
Sample Date		19-Oct-22	7-Nov-22	5-Jan-23	13-Feb-23	8-Mar-23	3-Apr-23	18-May-23	30-May-23	14-Jun-23	4-Jul-23	8-Aug-23	11-Sep-23
Sample ID		1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480701	482900	487639	490787	C369594	C399854	C3E5063	C3F8864	C3H7129	C3K0765	C3O2537	C3S2923
Laboratory Sample ID	Units	1815504	1824496	1840475	1851311	VGN747	VMZ385	VWI321	VZJ710	WDD947	WIB170	WQV775	WZJ689
Field Parameters													
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.99	8.06	8.58	7.53	7.47	7.41	6.98	7.67	7.71	7.93	7.77	7.84
Temperature, Field	deg C	3.9	4.1	-0.1	0	0.2	0.1	7.6	17.7	17.2	22.8	21.3	16.2
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-	-	-
General Chemistry													
Acidity as CaCO3	mg/L	16	<5	29	23	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	95	111	98	98	110	110	53	67	76	84	87	100
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00372	0.0229	0.00123	0.00145	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	95	112	98	98	110	110	53	68	77	84	88	110
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	<0.01	0.04	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.0004	<0.0004	<0.0004	<0.00077	<0.00081	<0.002	<0.0013	<0.001
Biochemical Oxygen Demand (BOD)	mg/L	1.8	1.4	0.9	3	<2	-	<2	<2	<2	<2	<2	<2
Chemical Oxygen Demand	mg/L	18	18	26	38	26	26	40	31	35	29	29	24
Chloride	mg/L	0.6	0.5	0.6	0.4	<1.0	<1.0	<1.0	1.1	<1.0	1.4	<1.0	<1.0
Chlorophyll a	µg/L	0.5	-	-	-	-	-	-	-	<2.1	-	-	-
Color, True	TCU	23.4	29.7	25.8	22.3	21	21	71	56	49	37	27	23
Cyanide	mg/L	<0.002	<0.002	0.003	0.005	0.00065	0.00087 CYN	0.00080 CYN	0.00052 CYN	0.00071	0.00057	<0.00050	<0.00050
Cyanide (Free)	mg/L	<0.001	0.003	0.002	0.005	<0.002	0.0027 ICB	0.0034 ICB	0.0029 ICB	0.0022	0.0052	0.0026	<0.002 ICB
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	8.2	11.9	9.1	9.3	9.5	9.2	14	12	12	11	10	9.1
Electrical Conductivity, Lab	µS/cm	219	200	196	200	213	216	105	137	154	168	179	204
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	122	110	104	115	110	120	60	72	87	93	100	110
Mineral Oil and Grease	mg/L	-	-	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Nitrate (as N)	mg/L	<0.02	<0.05	0.04	0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.05	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	2	<1	2	<1	-	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
pH, lab	S.U.	7.34	8.13	6.86	6.93	7.91	7.91	7.68	7.85	7.91	8.04	7.98	8.09
Phaeophytin A	µg/L	<0.5	-	-	-	-	-	-	-	-	-	-	-
Pheophytin a	µg/L	-	-	-	-	-	-	-	-	6.6	-	-	-
Phosphate	mg/L	0.025	0.022	<0.002	0.003	-	-	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.003	0.025	0.002	0.001	0.0031	0.0055	0.0074	0.0034	0.0052	0.0053	0.0042	0.0043
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Radium-226	Bq/L	-	-	-	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Sulfate	mg/L	1.3	1.4	1.3	1	2.0	3.2	4.2	3.7	2.4	2.4	3.7	1.9
Total Dissolved Solids	mg/L	145	410	130	140	135	125	90	90	125	140	120	120
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	0.37	0.28	0.45	0.45	0.41	0.30	0.33	0.34
Total Organic Carbon	mg/L	8.5	11.8	9.2	9.4	9.8	9.7	15	12	12	11	10	9.0
Total Suspended Solids	mg/L	3	<0.67	<0.67	<0.67	<1	<1	3	1	<1	2	<1	<1
Turbidity, Lab	NTU	1.7	1.03	1.2	0.9	0.6	0.7	0.5	0.5	0.6	0.5	0.7	0.8
Metals, Dissolved													
Aluminum	µg/L	6	3	2	2	1.7	2.2	21.7	12.8	9.2	6.2	4.6	3.7
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	1.1	0.9	0.8	0.8	0.7	0.6	1	0.8	0.9	1.1	1.2	1.1
Barium	µg/L	14	13.5	11.9	11.7	11.7	12.1	7.3	8.4	9.3	10.7	11.1	12
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	5	5	4	3	4	5	5	5
Cadmium	µg/L	0.008	0.008	0.008	0.007	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	34.5	32.9	34.4	32.5	33.8	35.2	17.9	21.6	26.2	28.1	30.8	33.3
Cerium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.4	0.3	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	0.3	0.3	0.6	0.8	1.0	0.7	0.9	0.4	0.4	0.4	0.4	0.3
Europium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Gallium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Iron	µg/L	60	80	50	10	36	35	46	50	55	37	38	38
Lanthanum	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Lead	µg/L	<0.05	<0.05	0.06	<0.05	<0.05	0.22	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	1	1	<1	0.9	0.9	0.6	0.6	0.7	0.8	0.9	1
Magnesium	mg/L	7.24	6.52	6.83	6.7	6.86	6.68	3.76	4.41	5.16	5.48	6.03	6.46
Manganese	µg/L	3.9	3.4	3.2	3.5	3.5	4.5	4.2	5.8	3.8	2.1	6.5	6.2
Mercury	µg/L	-	-	<0.1	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.22	0.11	0.1	0.09	0.14	0.12	0.06	0.09	0.09	0.11	0.12	0.13
Nickel	µg/L	<0.5	<0.5	0.5	<0.5	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2
Niobium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	<5	<5	<5	<5	<5	<5
Potassium	mg/L	0.92	0.82	0.83	0.79	0.806	0.788	0.51	0.55	0.66	0.68	0.70	0.79
Rhodium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Rubidium	µg/L	2.1	2	1.8	1.8	1.77	1.75	1.22	1.45	1.61	1.88	1.91	1.96
Scandium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Selenium	µg/L	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	2,020	1,870	2,260	2,620	2,750	2,900	1,870	1,820	2,100	2,040	2,250	2,470
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	0.78	0.74	0.81	0.79	0.83	0.828	0.55	0.57	0.67	0.69	0.71	0.76
Strontium	µg/L	23.8	26.1	23.7	26.5	29.0	28.3	13.7	19.1	21.3	23.6	26.8	28
Sulfur	µg/L	<500	1,000	1,300	700	-	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Tin	µg/L	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.6	0.4	0.5	0.4	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.32	0.25	0.18	0.21	0.27	0.26	0.08	0.13	0.15	0.2	0.23	0.33
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.12	0.11	0.15	0.17	0.21	0.26	0.28	0.27
Yttrium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Zinc	µg/L	<1	<1	2	2	1.3	0.8	0.8	0.5	<0.5	<0.5	<0.5	<0.5
Zirconium	µg/L	<0.2	<0.2	<0.2	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location							1A						
Sample Date		19-Oct-22	7-Nov-22	5-Jan-23	13-Feb-23	8-Mar-23	3-Apr-23	18-May-23	30-May-23	14-Jun-23	4-Jul-23	8-Aug-23	11-Sep-23
Sample ID		1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480701	482900	487639	490787	C369594	C399854	C3E5063	C3F8864	C3H7129	C3K0765	C3O2537	C3S2923
Laboratory Sample ID	Units	1815504	1824496	1840475	1851311	VGN747	VMZ385	VWI321	VZJ710	WDD947	WIB170	WQV775	WZJ689
Metals, Total													
Aluminum	µg/L	12	9	8	9	4.4	6.1	33.1	19.4	13.6	11.5	8	7.3
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	1.1	1	0.7	0.7	0.8	0.7	1	0.8	0.9	1.1	1.2	1.2
Barium	µg/L	14.3	13.8	11.8	12.1	12.1	11.8	7.8	8.6	9.8	10.7	11.5	13
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	5	4	3	3	4	5	6	5
Cadmium	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	35.2	34.7	34.4	34.5	36.3	35.8	16.9	22.8	25.2	27.1	30.1	33.7
Cerium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.2	0.4	0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	0.5	0.5	0.5	0.6	0.4	0.6	0.5	0.5	0.4	0.4	0.4	0.3
Europium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Gallium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Iron	µg/L	150	150	130	140	82	100	79	73	87	76	72	84
Lanthanum	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Lead	µg/L	<0.05	<0.05	0.21	0.08	0.06	0.16	0.08	<0.05	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	2	1	1	0.9	1.0	0.6	0.6	0.7	0.8	1	1
Magnesium	mg/L	7.15	6.62	6.8	7.1	6.96	7.09	3.64	4.76	4.90	5.39	6.41	6.59
Manganese	µg/L	10.2	10.2	5.4	6.7	6.1	7.7	8	10.2	13.2	18.2	16.1	15.7
Mercury	µg/L	<0.1	<0.1	<0.1	<0.1	0.00127	0.00072	0.00391	0.00137	0.00104	0.00148	0.00064	0.00072
Molybdenum	µg/L	0.19	0.15	0.12	0.1	0.13	0.12	0.07	0.07	0.09	0.11	0.13	0.14
Nickel	µg/L	<0.5	<0.5	<0.5	<0.5	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2
Niobium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	<5	5	7	<5	7	5	10	<5
Potassium	mg/L	0.96	0.86	0.84	0.83	0.788	0.789	0.50	0.56	0.64	0.68	0.71	0.81
Rhodium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Rubidium	µg/L	2.2	2.1	1.8	1.9	1.71	1.70	1.29	1.52	1.61	1.9	1.97	2.02
Scandium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Selenium	µg/L	<0.05	0.17	<0.05	<0.05	0.06	0.06	<0.05	0.06	0.05	0.06	0.06	0.05
Silicon	µg/L	2,080	2,080	2,500	2,890	2,940	3,060	1,780	1,900	2,090	2,070	2,230	2,570
Silver	µg/L	0.06	0.07	0.06	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	0.78	0.78	0.82	0.86	0.857	0.944	0.52	0.60	0.61	0.68	0.76	0.78
Strontium	µg/L	24.2	26.8	23.6	28	27.7	27.0	14.2	19	21.4	24.5	27.5	28.4
Sulfur	µg/L	<500	1,200	1,500	1,600	-	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Tin	µg/L	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1	0.7	0.8	0.7	<0.5	<0.5	1.2	0.7	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.33	0.33	0.25	0.28	0.28	0.29	0.09	0.13	0.14	0.17	0.25	0.33
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.15	0.15	0.21	0.19	0.23	0.28	0.3	0.29
Yttrium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Zinc	µg/L	<1	<1	<1	1	<0.5	1.5	0.9	0.6	<0.5	<0.5	<0.5	<0.5
Zirconium	µg/L	<0.2	<0.2	<0.2	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-Up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location					4				
Sample Date		20-Oct-22	8-Nov-22	3-Jan-23	7-Feb-23	7-Mar-23	15-Jun-23	3-Jul-23	1-Aug-23
Sample ID		4	4	4	4	4	4	4	4
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV
Laboratory Work Order		480798	482783	487429	490327	C367124	C3H9198	C3J8815	C3N6326
Laboratory Sample ID	Units	1815915	1824038	1839740	1849698	VGA336	WDP486	WHR327	WPN823
Field Parameters									
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-
pH, Field	S.U.	8.05	8.02	7.48	7.06	7.35	7.49	7.85	7.73
Temperature, Field	deg C	3.9	3.5	1.3	3.2	1.3	16.1	22.2	21.4
Turbidity, Field	NTU	-	-	-	-	-	-	-	-
General Chemistry									
Acidity as CaCO3	mg/L	15	9	10	8	11	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	76	48	107	107	110	55	60	70
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00347	0.00892	0.00447	0.00389	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	76	48	107	107	110	55	60	70
Ammonia	mg/L	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	0.07	<0.01	<0.050	0.056	0.053	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.0004	0.00050	0.0017	<0.0012
Biochemical Oxygen Demand (BOD)	mg/L	-	-	-	-	-	-	-	-
Chloride	mg/L	12.4	14.5	14.9	13	14	5.1	4.9	5.4
Chlorophyll a	µg/L	1.7	-	-	-	-	5.6	-	-
Color, True	TCU	44.5	40.8	48.7	54.9	48	110	81	55
Cyanide	mg/L	0.004	0.005	<0.002	0.005	0.00051	0.00101	0.00070	0.00051
Cyanide (Free)	mg/L	0.004	0.002	<0.001	0.002	<0.002	0.0029	0.0031	<0.002
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	13.8	13.3	15.3	16.5	17	17	16	14
Electrical Conductivity, Lab	µS/cm	251	250	257	250	286	143	153	169
Fluoride	mg/L	<0.05	0.06	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	106	104	118	114	130	67	75	85
Nitrate (as N)	mg/L	<0.02	<0.02	0.05	0.09	0.15	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	0.15	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	-	-	-	-
pH, lab	S.U.	7.31	7.72	7.42	7.36	7.77	7.71	7.86	7.80
Phaeophytin A	µg/L	<0.5	-	-	-	-	-	-	-
Pheophytin a	µg/L	-	-	-	-	-	>-3.0	-	-
Phosphorus, Total	mg/L	0.015	0.016	<0.001	<0.001	0.0063	0.019	0.018	0.028
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-
Radium-226	Bq/L	-	-	-	-	-	-	-	-
Sulfate	mg/L	13.6	16.4	12.5	7.2	9.7	6.8	6.2	7.7
Total Dissolved Solids	mg/L	150	150	200	205	145	100	120	105
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	0.70	0.48	0.51	0.44
Total Organic Carbon	mg/L	13.6	14.4	15	16.2	17	18	17	15
Total Suspended Solids	mg/L	6	3	<0.67	<0.67	<1	5	3	4
Turbidity, Lab	NTU	6.6	3.6	0.9	1	0.8	1.3	2.0	1.5
Metals, Dissolved									
Aluminum	µg/L	5	3	4	3	3.7	11.3	4.8	2.5
Antimony	µg/L	0.8	0.7	0.7	0.6	0.5	0.2	0.3	0.5
Arsenic	µg/L	78.9	58.7	39.4	22.5	19.5	48.4	52.6	81.6
Barium	µg/L	8.4	8.6	9	8.1	8.9	5.8	5.8	7
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	6	5	6	7
Cadmium	µg/L	0.006	<0.005	0.01	0.02	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	31.5	33.1	36.1	29.9	40.3	20.0	22.5	25.5
Cesium	µg/L	0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.4	0.4	1	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.1	0.1	0.1	0.1	<0.05	0.09	<0.05	<0.05
Copper	µg/L	4.3	3.6	3	1.6	1.6	2.5	2.8	3.4
Iron	µg/L	120	110	80	40	101	167	82	45
Lead	µg/L	0.07	0.08	<0.05	0.09	<0.05	0.08	<0.05	<0.05
Lithium	µg/L	<1	<1	<1	<1	0.8	<0.5	0.6	0.6
Magnesium	mg/L	6.91	7	7.63	7.77	8.18	4.22	4.55	5.23
Manganese	µg/L	3.3	2.3	8.6	14.6	6.9	14.7	0.6	0.7
Mercury	µg/L	-	-	-	-	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.14	0.19	0.12	0.48	0.09	0.08	0.09	0.11
Nickel	µg/L	1.4	1.5	1.4	1	0.6	0.9	0.9	1.1
Phosphorus	µg/L	<50	<50	<50	<50	5	8	<5	7
Potassium	mg/L	0.87	0.87	0.74	0.51	0.592	0.53	0.57	0.65
Rubidium	µg/L	1.5	1.5	1.3	1	1.17	1.15	1.41	1.53
Selenium	µg/L	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	1,710	1,740	2,170	2,720	3,630	1,520	1,780	2,380
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	8.75	8.88	9.53	8.98	9.29	4.67	4.84	5.28
Strontium	µg/L	42.1	46.1	43.2	35.5	52.6	29.5	30.2	36.9
Sulfur	µg/L	4,700	6,300	4,800	2,300	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	0.01	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-
Tin	µg/L	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.6	0.9	0.5	0.6	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	0.2	0.1	0.1	0.1	0.1	<0.1	<0.1	0.1
Uranium	µg/L	0.07	0.06	0.05	0.04	0.05	0.02	0.03	0.04
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.11	0.21	0.18	0.28
Zinc	µg/L	<1	<1	1	<1	0.8	0.6	<0.5	<0.5
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-Up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location					4				
Sample Date		20-Oct-22	8-Nov-22	3-Jan-23	7-Feb-23	7-Mar-23	15-Jun-23	3-Jul-23	1-Aug-23
Sample ID		4	4	4	4	4	4	4	4
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV
Laboratory Work Order		480798	482783	487429	490327	C367124	C3H9198	C3J8815	C3N6326
Laboratory Sample ID	Units	1815915	1824038	1839740	1849698	VGA336	WDP486	WHR327	WPN823
Metals, Total									
Aluminum	µg/L	80	55	9	7	3.9	49.7	27.1	37.2
Antimony	µg/L	0.7	0.7	0.6	0.5	0.5	0.3	0.4	0.5
Arsenic	µg/L	79	56.5	37.1	20.1	18.8	58.3	61.9	89.1
Barium	µg/L	8.7	9.1	8.9	7.8	9.0	6.5	6.7	7.8
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	6	5	6	7
Cadmium	µg/L	<0.005	<0.005	0.006	<0.005	<0.005	0.005	<0.005	<0.005
Calcium	mg/L	31.1	32.7	36.4	30	41.4	19.3	21.1	23.3
Cesium	µg/L	0.02	0.01	<0.01	<0.01	<0.02	0.02	<0.02	0.02
Chromium	µg/L	0.6	0.5	0.4	<0.1	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.2	0.2	0.1	0.1	<0.05	0.18	0.1	0.13
Copper	µg/L	5	4.2	3.8	1.8	1.6	3	3.2	3.8
Iron	µg/L	400	290	180	160	96	368	228	209
Lead	µg/L	0.25	0.17	0.07	0.13	<0.05	0.25	0.17	0.19
Lithium	µg/L	<1	1	1	<1	0.9	0.5	0.5	0.7
Magnesium	mg/L	7.1	6.93	7.48	7.94	8.03	4.06	4.50	5.12
Manganese	µg/L	9.4	7.8	9.7	15.8	6.8	21.9	17.4	21.4
Mercury	µg/L	<0.1	<0.1	<0.1	0.001	0.00166	0.00159	0.00206	0.00124
Molybdenum	µg/L	0.11	0.13	0.21	0.16	0.10	0.07	0.09	0.11
Nickel	µg/L	1.4	1.1	1.1	0.7	0.7	1	1	1.3
Phosphorus	µg/L	<50	<50	<50	<50	7	17	14	17
Potassium	mg/L	0.86	0.92	0.75	0.49	0.572	0.53	0.56	0.63
Rubidium	µg/L	1.6	1.6	1.4	1	1.19	1.22	1.46	1.66
Selenium	µg/L	0.13	0.11	<0.05	<0.05	0.07	0.07	0.07	0.07
Silicon	µg/L	1,910	1,840	2,370	2,740	3,640	1,600	1,790	2,240
Silver	µg/L	0.06	0.06	0.05	0.04	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	8.97	8.64	9.64	9.25	9.23	4.38	4.54	5.06
Strontium	µg/L	40.4	44.5	44.1	34	51.1	30.4	32.6	37.5
Sulfur	µg/L	4,100	5,400	3,200	1,900	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	3.5	2.1	0.9	0.7	<0.5	2.6	1.2	1.7
Tungsten	µg/L	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.2
Uranium	µg/L	0.07	0.08	0.06	0.04	0.05	0.03	0.03	0.04
Vanadium	µg/L	0.5	<0.5	<0.5	<0.5	0.11	0.37	0.34	0.43
Zinc	µg/L	1	1	1	<1	0.8	1.4	0.9	0.8
Zirconium	µg/L	<0.2	<0.2	0.2	<0.2	<0.1	0.1	0.1	0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		4								
Sample Date		20-Oct-22	8-Nov-22	3-Jan-23	7-Feb-23	7-Mar-23	15-Jun-23	3-Jul-23	1-Aug-23	12-Sep-23
Sample ID		4	4	4	4	4	4	4	4	4
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV
Laboratory Work Order		480798	482783	487429	490327	C367124	C3H9198	C3J8815	C3N6326	C3S3687
Laboratory Sample ID	Units	1815915	1824038	1839740	1849698	VGA336	WDP486	WHR327	WPN823	WZN942
Field Parameters										
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	8.05	8.02	7.48	7.06	7.35	7.49	7.85	7.73	7.96
Temperature, Field	deg C	3.9	3.5	1.3	3.2	1.3	16.1	22.2	21.4	15.6
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-
General Chemistry										
Acidity as CaCO3	mg/L	15	9	10	8	11	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	76	48	107	107	110	55	60	70	78
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00347	0.00892	0.00447	0.00389	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	76	48	107	107	110	55	60	70	79
Ammonia	mg/L	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	0.07	<0.01	<0.050	0.056	0.053	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.0004	0.00050	0.0017	<0.0012	<0.0013
Biochemical Oxygen Demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-
Chloride	mg/L	12.4	14.5	14.9	13	14	5.1	4.9	5.4	7.4
Chlorophyll a	µg/L	1.7	-	-	-	-	5.6	-	-	-
Color, True	TCU	44.5	40.8	48.7	54.9	48	110	81	55	43
Cyanide	mg/L	0.004	0.005	<0.002	0.005	0.00051	0.00101	0.00070	0.00051	0.00071
Cyanide (Free)	mg/L	0.004	0.002	<0.001	0.002	<0.002	0.0029	0.0031	<0.002	0.0051
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	13.8	13.3	15.3	16.5	17	17	16	14	13
Electrical Conductivity, Lab	µS/cm	251	250	257	250	286	143	153	169	202
Fluoride	mg/L	<0.05	0.06	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	106	104	118	114	130	67	75	85	96
Nitrate (as N)	mg/L	<0.02	<0.02	0.05	0.09	0.15	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	0.15	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	-	-	-	-	-
pH, lab	S.U.	7.31	7.72	7.42	7.36	7.77	7.71	7.86	7.80	8.10
Phaeophytin A	µg/L	<0.5	-	-	-	-	-	-	-	-
Pheophytin a	µg/L	-	-	-	-	-	>-3.0	-	-	-
Phosphorus, Total	mg/L	0.015	0.016	<0.001	<0.001	0.0063	0.019	0.018	0.028	0.029
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-
Radium-226	Bq/L	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	13.6	16.4	12.5	7.2	9.7	6.8	6.2	7.7	11
Total Dissolved Solids	mg/L	150	150	200	205	145	100	120	105	120
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	0.70	0.48	0.51	0.44	0.41
Total Organic Carbon	mg/L	13.6	14.4	15	16.2	17	18	17	15	14
Total Suspended Solids	mg/L	6	3	<0.67	<0.67	<1	5	3	4	8
Turbidity, Lab	NTU	6.6	3.6	0.9	1	0.8	1.3	2.0	1.5	3.8
Metals, Dissolved										
Aluminum	µg/L	5	3	4	3	3.7	11.3	4.8	2.5	7.2
Antimony	µg/L	0.8	0.7	0.7	0.6	0.5	0.2	0.3	0.5	0.8
Arsenic	µg/L	78.9	58.7	39.4	22.5	19.5	48.4	52.6	81.6	81.6
Barium	µg/L	8.4	8.6	9	8.1	8.9	5.8	5.8	7	7.7
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	6	5	6	7	8
Cadmium	µg/L	0.006	<0.005	0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	31.5	33.1	36.1	29.9	40.3	20.0	22.5	25.5	28.8
Cesium	µg/L	0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.4	0.4	1	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.1	0.1	0.1	0.1	<0.05	0.09	<0.05	<0.05	0.09
Copper	µg/L	4.3	3.6	3	1.6	1.6	2.5	2.8	3.4	4.1
Iron	µg/L	120	110	80	40	101	167	82	45	67
Lead	µg/L	0.07	0.08	<0.05	0.09	<0.05	0.08	<0.05	<0.05	0.08
Lithium	µg/L	<1	<1	<1	<1	0.8	<0.5	0.6	0.6	0.8
Magnesium	mg/L	6.91	7	7.63	7.77	8.18	4.22	4.55	5.23	5.81
Manganese	µg/L	3.3	2.3	8.6	14.6	6.9	14.7	0.6	0.7	3.9
Mercury	µg/L	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.14	0.19	0.12	0.48	0.09	0.08	0.09	0.11	0.12
Nickel	µg/L	1.4	1.5	1.4	1	0.6	0.9	0.9	1.1	1.2
Phosphorus	µg/L	<50	<50	<50	<50	5	8	<5	7	<5
Potassium	mg/L	0.87	0.87	0.74	0.51	0.592	0.53	0.57	0.65	0.75
Rubidium	µg/L	1.5	1.5	1.3	1	1.17	1.15	1.41	1.53	1.59
Selenium	µg/L	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	1,710	1,740	2,170	2,720	3,630	1,520	1,780	2,380	1,990
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	8.75	8.88	9.53	8.98	9.29	4.67	4.84	5.28	6.91
Strontium	µg/L	42.1	46.1	43.2	35.5	52.6	29.5	30.2	36.9	45
Sulfur	µg/L	4,700	6,300	4,800	2,300	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	0.01	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.6	0.9	0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	0.2	0.1	0.1	0.1	0.1	<0.1	<0.1	0.1	0.2
Uranium	µg/L	0.07	0.06	0.05	0.04	0.05	0.02	0.03	0.04	0.05
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.11	0.21	0.18	0.28	0.3
Zinc	µg/L	<1	<1	1	<1	0.8	0.6	<0.5	<0.5	0.6
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		4								
Sample Date		20-Oct-22	8-Nov-22	3-Jan-23	7-Feb-23	7-Mar-23	15-Jun-23	3-Jul-23	1-Aug-23	12-Sep-23
Sample ID		4	4	4	4	4	4	4	4	4
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV
Laboratory Work Order		480798	482783	487429	490327	C367124	C3H9198	C3J8815	C3N6326	C3S3687
Laboratory Sample ID	Units	1815915	1824038	1839740	1849698	VGA336	WDP486	WHR327	WPN823	WZN942
Metals, Total										
Aluminum	µg/L	80	55	9	7	3.9	49.7	27.1	37.2	63.6
Antimony	µg/L	0.7	0.7	0.6	0.5	0.5	0.3	0.4	0.5	0.8
Arsenic	µg/L	79	56.5	37.1	20.1	18.8	58.3	61.9	89.1	90.5
Barium	µg/L	8.7	9.1	8.9	7.8	9.0	6.5	6.7	7.8	8.4
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	6	5	6	7	8
Cadmium	µg/L	<0.005	<0.005	0.006	<0.005	<0.005	0.005	<0.005	<0.005	<0.005
Calcium	mg/L	31.1	32.7	36.4	30	41.4	19.3	21.1	23.3	28.9
Cesium	µg/L	0.02	0.01	<0.01	<0.01	<0.02	0.02	<0.02	0.02	0.03
Chromium	µg/L	0.6	0.5	0.4	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.2	0.2	0.1	0.1	<0.05	0.18	0.1	0.13	0.23
Copper	µg/L	5	4.2	3.8	1.8	1.6	3	3.2	3.8	4.9
Iron	µg/L	400	290	180	160	96	368	228	209	335
Lead	µg/L	0.25	0.17	0.07	0.13	<0.05	0.25	0.17	0.19	0.33
Lithium	µg/L	<1	1	1	<1	0.9	0.5	0.5	0.7	0.8
Magnesium	mg/L	7.1	6.93	7.48	7.94	8.03	4.06	4.50	5.12	5.90
Manganese	µg/L	9.4	7.8	9.7	15.8	6.8	21.9	17.4	21.4	14.8
Mercury	µg/L	<0.1	<0.1	<0.1	0.001	0.00166	0.00159	0.00206	0.00124	0.002330
Molybdenum	µg/L	0.11	0.13	0.21	0.16	0.10	0.07	0.09	0.11	0.25
Nickel	µg/L	1.4	1.1	1.1	0.7	0.7	1	1	1.3	1.4
Phosphorus	µg/L	<50	<50	<50	<50	7	17	14	17	15
Potassium	mg/L	0.86	0.92	0.75	0.49	0.572	0.53	0.56	0.63	0.77
Rubidium	µg/L	1.6	1.6	1.4	1	1.19	1.22	1.46	1.66	1.73
Selenium	µg/L	0.13	0.11	<0.05	<0.05	0.07	0.07	0.07	0.07	0.08
Silicon	µg/L	1,910	1,840	2,370	2,740	3,640	1,600	1,790	2,240	2,110
Silver	µg/L	0.06	0.06	0.05	0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	8.97	8.64	9.64	9.25	9.23	4.38	4.54	5.06	6.92
Strontium	µg/L	40.4	44.5	44.1	34	51.1	30.4	32.6	37.5	44.9
Sulfur	µg/L	4,100	5,400	3,200	1,900	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	3.5	2.1	0.9	0.7	<0.5	2.6	1.2	1.7	3.7
Tungsten	µg/L	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3
Uranium	µg/L	0.07	0.08	0.06	0.04	0.05	0.03	0.03	0.04	0.05
Vanadium	µg/L	0.5	<0.5	<0.5	<0.5	0.11	0.37	0.34	0.43	0.51
Zinc	µg/L	1	1	1	<1	0.8	1.4	0.9	0.8	1.6
Zirconium	µg/L	<0.2	<0.2	0.2	<0.2	<0.1	0.1	0.1	0.1	0.2

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-Up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location													
Sample Date		19-Oct-22	8-Nov-22	13-Dec-22	3-Jan-23	6-Feb-23	7-Mar-23	13-Apr-23	1-May-23	15-Jun-23	3-Jul-23	1-Aug-23	6-Sep-23
Sample ID		8	8	8	8	8	8	SW8	8	8	8	8	8
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480701	482783	486047	487429	490194	C367124	C3A5833	C3C4719	C3H9198	C3J8815	C3N6326	C3R6726
Laboratory Sample ID	Units	1815500	1824042	1835329	1839742	1849342	VGA337	VOE687	VSC161	WDP485	WHR329	WPN824	WYE141
Field Parameters													
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.97	8.03	7.86	7.75	8.1	7.48	7.02	6.91	7.62	7.85	7.89	7.97
Temperature, Field	deg C	5.7	4.8	1.2	0.7	0.9	0.9	2.2	1.4	16.7	23.2	22.9	18.3
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-	-	-
General Chemistry													
Acidity as CaCO3	mg/L	13	9	<5	9	5	5.4	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	65	61	99	100	101	110	110	93	64	68	75	75
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00339	0.00777	0.00795	0.00437	0.00777	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	65	62	99	100	101	110	110	94	65	69	75	76
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	<0.01	0.03	0.06	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0004	<0.0004	<0.0004	<0.00064	<0.0017	<0.0018	<0.0016
Biochemical Oxygen Demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Chloride	mg/L	2.8	3.9	4	5.6	4.8	2.1	5.4	2.4	1.3	<1.0	1.2	3.1
Chlorophyll a	µg/L	1.5	-	-	-	-	-	-	-	4.1	-	-	-
Color, True	TCU	35	35.2	32.5	33.2	43.2	26	23	36	64	54	41	33
Cyanide	mg/L	<0.002	0.005	0.003	0.003	<0.002	<0.00050	0.00059	<0.00050	0.00070	<0.00050	<0.00050	<0.00050
Cyanide (Free)	mg/L	0.002	0.002	<0.001	<0.001	0.002	<0.002	<0.002 ICB	<0.002	0.0025	0.0035	0.0023	<0.002
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	12.4	11.4	11.4	12.2	11.5	11	11	11	14	13	12	12
Electrical Conductivity, Lab	µS/cm	176	181	200	206	220	230	231	201	141	149	159	176
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	85.7	88.4	97.1	103	96.2	120	120	110	75	80	87	80
Nitrate (as N)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.10	0.11	0.18	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	-	<0.10	0.11	0.18	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.01	0.23	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
pH, lab	S.U.	7.3	7.66	7.67	7.41	7.66	7.90	7.90	7.86	7.79	7.90	7.80	7.90
Phaeophytin A	µg/L	<0.5	-	-	-	-	-	-	-	-	-	-	-
Pheophytin a	µg/L	-	-	-	-	-	-	-	-	>-20	-	-	-
Phosphorus, Total	mg/L	0.061	0.009	0.041	0.002	<0.001	0.0027	0.0038	0.0047	0.0078	0.0074	0.0085	0.011
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Radium-226	Bq/L	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	2.7	4.3	5.6	6.8	7.5	5.6	6.9	5.7	5.6	4.6	5.8	5.8
Total Dissolved Solids	mg/L	170	140	115	145	165	130	110	130	85	115	95	135
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	<1	0.39	0.41	0.35	0.42	0.41	0.39	0.38
Total Organic Carbon	mg/L	12	18.4	11	11.7	11.6	12	11	11	14	13	12	12
Total Suspended Solids	mg/L	3.7	2	<1.3	<0.67	<0.67	<1	1	<1	1	<1	1	4
Turbidity, Lab	NTU	3.1	1.9	2.6	0.5	0.4	0.4	0.5	0.6	0.6	0.6	1.1	1.2
Metals, Dissolved													
Aluminum	µg/L	4	2	1	1	2	1.8	2.1	7.7	9.2	5.6	2.3	2.1
Antimony	µg/L	0.2	0.2	0.2	0.2	0.2	<0.1	<0.1	0.1	<0.1	<0.1	0.1	0.1
Arsenic	µg/L	21.5	18.2	15.8	17.6	14.7	4.1	4.1	3.7	5.9	7.8	13.7	19.4
Barium	µg/L	9.7	10.4	10	11.1	11.7	12.1	11.6	11.1	8.6	8.5	9.1	9.3
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	<2	5	5	5	4	5	5	5
Cadmium	µg/L	0.007	<0.005	0.006	0.01	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	25	26.9	29.7	31.6	30.4	35.7	35.1	32.2	22.2	23.9	25.6	23.6
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.2	0.3	0.6	0.3	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	1.5	1.5	1.5	1.9	2	0.8	0.7	1.4	0.7	0.9	1.1	1.1
Iron	µg/L	40	60	<10	40	<10	27	34	57	56	41	20	21
Lead	µg/L	<0.05	<0.05	<0.05	0.19	0.1	<0.05	<0.05	0.24	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	<1	<1	1	1	1.0	0.9	0.9	0.6	0.7	0.7	0.7
Magnesium	mg/L	5.25	5.46	6.17	6.57	6.37	7.45	7.19	6.60	4.62	4.82	5.62	5.12
Manganese	µg/L	1.7	1.4	0.9	0.8	1.4	1.9	9.4	15.3	2.1	0.5	0.9	1.9
Mercury	µg/L	-	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.11	0.1	<0.05	0.36	0.12	0.14	0.12	0.12	0.09	0.09	0.11	0.09
Nickel	µg/L	0.6	0.7	0.9	1	0.8	0.3	0.4	0.3	0.3	0.3	0.4	0.4
Phosphorus	µg/L	<50	<50	<50	<50	<50	<5	<5	<5	<5	<5	<5	<5
Potassium	mg/L	0.71	0.75	0.85	0.87	0.94	0.913	0.863	0.78	0.61	0.61	0.67	0.65
Rubidium	µg/L	1.6	1.7	1.8	1.9	1.9	1.90	1.71	1.65	1.47	1.63	1.72	1.72
Selenium	µg/L	<0.05	0.1	<0.05	0.07	<0.05	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	1,640	1,730	1,730	2,050	1,760	2,980	2,990	2,850	1,890	1,880	2,120	2,150
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	2.35	2.91	4.04	5.45	5.04	2.91	4.61	3.75	1.77	2.04	2.71	3.68
Strontium	µg/L	22.3	26.4	25.8	29.4	27.7	32.2	31.6	27.8	19.9	20.5	23.6	25.5
Sulfur	µg/L	900	2,200	3,200	3,400	2,200	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.5	0.4	0.3	0.4	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.11	0.11	0.11	0.13	0.15	0.26	0.22	0.17	0.1	0.1	0.11	0.1
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.15	0.13	0.12	0.23	0.18	0.29	0.31
Zinc	µg/L	<1	<1	<1	2	5	<0.5	0.6	1.5	<0.5	<0.5	<0.5	0.6
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-Up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location							8						
Sample Date		19-Oct-22	8-Nov-22	13-Dec-22	3-Jan-23	6-Feb-23	7-Mar-23	13-Apr-23	1-May-23	15-Jun-23	3-Jul-23	1-Aug-23	6-Sep-23
Sample ID		8	8	8	8	8	8	SW8	8	8	8	8	8
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480701	482783	486047	487429	490194	C367124	C3A5833	C3C4719	C3H9198	C3J8815	C3N6326	C3R6726
Laboratory Sample ID	Units	1815500	1824042	1835329	1839742	1849342	VGA337	VOE687	VSC161	WDP485	WHR329	WPN824	WYE141
Metals, Total													
Aluminum	µg/L	34	21	7	4	3	2.8	6.1	13.9	20.1	7.8	7.4	11.9
Antimony	µg/L	0.2	0.2	0.2	0.2	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
Arsenic	µg/L	20.1	17.5	14.4	15.7	13.3	4.3	4.6	3.6	6.4	8.5	14.4	21.1
Barium	µg/L	10.3	10.8	10.1	10.7	11.1	11.9	12.0	11.2	8.9	9.1	9.3	9.9
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	<2	5	5	4	4	5	5	5
Cadmium	µg/L	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	25.4	27.3	28.9	30	30.6	36	34.4	30.0	21.7	22.6	24.7	25.4
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.4	0.4	0.8	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	2.1	1.8	1.7	2.1	1.5	0.6	0.7	0.5	0.8	0.9	1.1	1.4
Iron	µg/L	160	140	90	90	70	44	67	99	97	61	47	76
Lead	µg/L	0.12	0.07	<0.05	0.56	<0.05	<0.05	0.06	<0.05	0.06	<0.05	<0.05	0.1
Lithium	µg/L	<1	1	1	1	1	1.0	1.0	0.8	0.6	0.6	0.8	0.7
Magnesium	mg/L	5.22	5.46	6.23	6.43	6.59	7.26	7.06	6.27	4.40	4.77	5.48	5.34
Manganese	µg/L	9.8	8.3	2.9	2	1.6	4.0	15.6	20	9.7	6.2	14	23
Mercury	µg/L	<0.1	<0.1	<0.1	<0.1	0.0006	0.00133	0.00077	0.00166	0.00104	0.00158	0.00081	0.00092
Molybdenum	µg/L	0.13	0.11	<0.05	0.18	0.12	0.13	0.13	0.11	0.09	0.09	0.1	0.1
Nickel	µg/L	0.5	<0.5	0.6	0.9	<0.5	0.3	0.3	0.3	0.3	0.3	0.4	0.5
Phosphorus	µg/L	70	<50	<50	<50	<50	<5	<5	<5	9	6	9	<5
Potassium	mg/L	0.74	0.78	0.84	0.85	0.94	0.886	0.855	0.77	0.59	0.61	0.63	0.69
Rubidium	µg/L	1.7	1.8	1.8	1.9	1.9	1.90	1.85	1.73	1.55	1.62	1.76	1.76
Selenium	µg/L	<0.05	0.17	<0.05	<0.05	<0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.07
Silicon	µg/L	1,730	1,840	1,870	2,120	1,830	3,020	2,910	2,700	1,940	1,850	1,930	2,280
Silver	µg/L	0.05	0.06	0.04	0.04	0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	2.35	2.92	4.1	4.97	5.11	2.94	4.7	3.93	1.67	1.97	2.50	4.25
Strontium	µg/L	22.2	26.9	25.7	28.7	27.3	32.0	31.9	28.4	20.1	22.4	24.3	25.3
Sulfur	µg/L	900	1,800	3,400	2,200	1,900	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	2.2	1.1	0.7	0.5	0.4	<0.5	0.6	0.6	0.9	<0.5	<0.5	0.7
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.13	0.15	0.15	0.16	0.19	0.25	0.22	0.17	0.09	0.1	0.1	0.11
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.15	0.16	0.15	0.28	0.25	0.32	0.37
Zinc	µg/L	2	<1	<1	1	1	<0.5	0.8	0.8	0.6	1.1	<0.5	1.2
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location						11					
Sample Date		20-Oct-22	8-Nov-22	3-Jan-23	7-Feb-23	7-Mar-23	25-May-23	19-Jun-23	3-Jul-23	1-Aug-23	12-Sep-23
Sample ID		11	11	11	11	11	11	11	11	11	11
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480798	482783	487429	490327	C367124	C3F3423	C3I2472	C3J8815	C3N6326	C3S3687
Laboratory Sample ID	Units	1815913	1824039	1839741	1849699	VGA338	VYF415	WEH080	WHR330	WPN825	WZN943
Field Parameters											
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.98	8.01	7.78	7.69	7.43	7.53	7.75	7.88	7.79	7.89
Temperature, Field	deg C	4.5	4.4	0	0.9	1.7	11.1	20.2	21.8	21.4	15.9
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-
General Chemistry											
Acidity as CaCO3	mg/L	9	9	7	10	6.2	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	68	27	90	102	100	51	60	62	68	72
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00693	0.00777	0.00576	0.00576	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	68	27	91	102	110	51	60	62	69	73
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	0.56	<0.01	<0.050	0.055	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	0.003	<0.002	<0.0004	<0.0004	<0.0011	<0.0017	<0.0013	<0.0011
Biochemical Oxygen Demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-	-
Chloride	mg/L	2.8	3	3.4	4	3.8	2.2	2.6	1.3	1.5	1.4
Chlorophyll a	µg/L	-	-	-	-	-	-	-	-	-	-
Color, True	TCU	36.2	33.5	36.4	31.6	27	73	68	59	44	34
Cyanide	mg/L	0.004	0.004	<0.002	0.004	<0.00050	<0.00050	0.00052	<0.00050	<0.00050	0.00055 CYN
Cyanide (Free)	mg/L	0.007	0.002	<0.001	<0.001	<0.002	0.0047	0.0049	0.0021	0.0026	0.0046 ICB
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	11.9	11.3	12.2	12.7	12	14	14	13	12	11
Electrical Conductivity, Lab	µS/cm	158	162	181	207	223	122	137	140	145	156
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	81.9	78.1	93.2	100	110	58	68	73	79	82
Nitrate (as N)	mg/L	<0.02	<0.02	<0.02	0.03	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	-	-	-	-	-	-
pH, lab	S.U.	7.61	7.66	7.53	7.53	7.83	7.70	7.87	7.90	7.82	8.07
Phosphorus, Total	mg/L	0.004	0.005	<0.001	<0.001	0.0052	0.0073	0.010	0.0075	0.0081	0.012
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-
Radium-226	Bq/L	-	-	-	-	-	-	-	-	-	-
Silica (as SiO2)	mg/L	-	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	2.5	3	3.9	4.8	6.5	6.2	5.2	5.2	5.2	4.9
Total Dissolved Solids	mg/L	70	110	135	130	115	85	80	105	90	75
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	0.44	0.57	0.41	0.39	0.39	0.31
Total Organic Carbon	mg/L	11.8	13	12.1	12.5	12	14	14	13	13	12
Total Suspended Solids	mg/L	2	<1	<0.67	1	1	1	2	2	2	2
Turbidity, Lab	NTU	2.5	1.9	0.6	0.4	0.4	0.8	0.5	0.7	0.9	0.8
Metals, Dissolved											
Aluminum	µg/L	4	2	4	2	1.3	17.2	8.3	4.4	2.1	2.3
Antimony	µg/L	0.1	0.1	0.2	0.2	0.1	<0.1	<0.1	<0.1	0.1	0.1
Arsenic	µg/L	15.1	13.8	15.1	11.5	8.2	5	7.3	8.4	11.1	16.6
Barium	µg/L	8.8	9.3	10.5	10.6	11.4	6.2	8.1	7.7	8.3	8.6
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	5	3	4	4	5	5
Cadmium	µg/L	0.009	<0.005	0.007	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	23.4	24.3	28.2	26.2	34	17.2	20.4	21.6	23.6	24.7
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.4	0.3	0.3	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	1.5	1.2	2.9	1.1	1.0	0.6	1.2	0.8	1.1	1.2
Iron	µg/L	100	60	20	<10	23	58	66	47	23	22
Lead	µg/L	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	<1	<1	<1	0.9	<0.5	0.6	0.7	0.6	0.7
Magnesium	mg/L	4.82	4.98	5.77	7.08	7.18	3.70	4.07	4.66	4.79	4.96
Manganese	µg/L	2.4	2	0.4	0.5	0.8	6.8	2.6	0.6	0.5	1.2
Mercury	µg/L	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.1	0.12	0.12	0.22	0.12	0.07	0.09	0.09	0.1	0.1
Nickel	µg/L	0.7	0.6	1	0.8	0.4	0.3	0.3	0.3	0.4	0.4
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	<5	<5	5	<5
Potassium	mg/L	0.67	0.68	0.75	0.77	0.9	0.52	0.55	0.59	0.62	0.64
Rubidium	µg/L	1.6	1.6	1.8	1.8	1.87	1.2	1.4	1.61	1.56	1.62
Selenium	µg/L	0.14	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	1,570	1,640	1,840	2,230	2,810	1,710	1,740	1,840	2,100	2,340
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	2.1	2.19	2.83	3.79	3.61	2.53	2.32	2.47	2.54	2.74
Strontium	µg/L	19.9	22.9	25.6	25.2	33.8	17.7	19	20.3	21.7	23.6
Sulfur	µg/L	600	1,600	2,100	1,500	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.5	0.4	0.6	0.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.09	0.09	0.12	0.12	0.20	0.07	0.08	0.08	0.09	0.1
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.17	0.15	0.21	0.19	0.31	0.34
Zinc	µg/L	<1	<1	3	1	0.5	0.8	0.6	<0.5	<0.5	<0.5
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		11									
Sample Date		20-Oct-22	8-Nov-22	3-Jan-23	7-Feb-23	7-Mar-23	25-May-23	19-Jun-23	3-Jul-23	1-Aug-23	12-Sep-23
Sample ID		11	11	11	11	11	11	11	11	11	11
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480798	482783	487429	490327	C367124	C3F3423	C3I2472	C3J8815	C3N6326	C3S3687
Laboratory Sample ID	Units	1815913	1824039	1839741	1849699	VGA338	VYF415	WEH080	WHR330	WPN825	WZN943
Metals, Total											
Aluminum	µg/L	17	17	6	4	1.5	37.3	12.7	8.6	8.2	12.2
Antimony	µg/L	0.1	0.2	0.2	0.2	0.1	<0.1	<0.1	<0.1	0.1	0.1
Arsenic	µg/L	14.5	13.8	13.8	9.9	7.8	5.5	7.8	9.1	11.5	17.3
Barium	µg/L	9.3	10	10	10	11.1	6.9	8	8.3	8.9	8.9
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	5	3	4	4	5	5
Cadmium	µg/L	<0.005	<0.005	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	23.1	25	27.7	27	34.5	17.9	20.5	20.8	23.0	24.7
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.6	0.3	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	2	1.5	2.1	1.3	1.0	0.7	0.8	1	1	1.2
Iron	µg/L	130	140	90	80	22	98	89	77	48	78
Lead	µg/L	0.06	0.06	0.5	0.56	<0.05	0.05	<0.05	<0.05	<0.05	0.08
Lithium	µg/L	<1	<1	1	<1	0.9	<0.5	0.6	0.5	0.6	0.7
Magnesium	mg/L	5.07	5.09	5.7	7.01	6.94	3.94	4.22	4.39	4.65	5.02
Manganese	µg/L	9.2	10.2	2.2	2.5	0.8	11.7	7.2	9.9	13.6	23.5
Mercury	µg/L	<0.1	<0.1	<0.1	0.0007	0.00105	0.00230	0.00127	0.00147	0.00086	0.00108
Molybdenum	µg/L	0.1	0.12	0.12	0.13	0.12	0.07	0.08	0.09	0.09	0.09
Nickel	µg/L	<0.5	<0.5	0.6	<0.5	0.4	0.3	0.3	0.3	0.4	0.4
Phosphorus	µg/L	<50	<50	<50	<50	5	6	9	7	9	6
Potassium	mg/L	0.67	0.75	0.76	0.76	0.861	0.55	0.56	0.58	0.57	0.65
Rubidium	µg/L	1.6	1.8	1.7	1.7	1.82	1.25	1.47	1.54	1.58	1.62
Selenium	µg/L	0.18	0.06	<0.05	<0.05	0.07	<0.05	0.06	0.06	0.07	0.07
Silicon	µg/L	1,700	1,800	1,960	2,280	2,810	1,820	1,790	1,870	1,950	2,380
Silver	µg/L	0.06	0.06	0.05	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	2.19	2.25	2.83	3.92	3.51	2.72	2.33	2.38	2.46	2.73
Strontium	µg/L	19.9	23.1	25.3	24.2	32.9	18.2	19.3	21.5	22.1	23.5
Sulfur	µg/L	<500	1,700	1,400	1,400	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1	1.1	0.6	0.6	<0.5	1.6	<0.5	<0.5	<0.5	0.7
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.1	0.12	0.13	0.14	0.21	0.07	0.08	0.08	0.08	0.1
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.17	0.22	0.24	0.27	0.34	0.4
Zinc	µg/L	<1	<1	1	2	0.5	1	0.5	<0.5	<0.5	0.7
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-Up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location							17						
Sample Date		4-Oct-22	2-Nov-22	15-Dec-22	9-Jan-23	13-Feb-23	13-Mar-23	5-Apr-23	4-May-23	19-Jun-23	11-Jul-23	10-Aug-23	6-Sep-23
Sample ID		17	17	17	17	17	17	SW17	Sw17	17	17	17	17
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		479018	482202	486300	487939	490787	C373279	C399775	C3C9103	C3I2472	C3K9086	C3O7600	C3R6726
Laboratory Sample ID	Units	1808304	1821943	1836070	1841533	1851312	VHI193	VMY891	VSZ027	WEH079	WJT596	WRX711	WYE140
Field Parameters													
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.72	7.89	7.46	7.22	7.31	7.20	7.12	7.11	7.59	7.38	7.94	7.92
Temperature, Field	deg C	11.7	6.3	2	2.8	1.9	1.6	2.9	4	21.5	19.3	21.8	19.9
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-	-	-
General Chemistry													
Acidity as CaCO3	mg/L	13	9	15	17	22	<5.0	<5.0	6.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	57	62	84	81	79	95	95	96	56	62	66	69
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00282	0.00603	0.00135	0.00123	0.00083	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	58	62	84	82	79	95	96	97	56	62	66	69
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	0.05	<0.01	0.17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0004	<0.0004	<0.0004	<0.00084	<0.00045	<0.0019	<0.0016
Biochemical Oxygen Demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Chloride	mg/L	3.5	4.1	3.1	3.1	3.3	3.7	4.0	5.4	2.7	2.0	3.0	2.1
Chlorophyll a	µg/L	0.7	-	-	-	-	-	-	-	7.2	-	-	-
Color, True	TCU	37.2	40.4	31.8	34.3	30.6	29	26	35	73	57	45	38
Cyanide	mg/L	0.006	<0.002	0.003	0.003	0.003	<0.00050	<0.00050	0.00054 CYN	0.00054	<0.00050	<0.00050	<0.00050
Cyanide (Free)	mg/L	<0.001	<0.001	<0.001	<0.001	0.002	0.0028	<0.002 ICB	0.0024 ICB	0.0044	0.0057	0.0033	0.0021
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	11.6	12.3	11.8	11.1	11.6	12	11	12	14	13	13	12
Electrical Conductivity, Lab	µS/cm	154	151	168	182	188	207	207	227	135	142	146	155
Fluoride	mg/L	<0.05	<0.06	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	81.8	73.3	88	86	97.9	100	120	110	66	72	78	72
Nitrate (as N)	mg/L	<0.02	<0.05	<0.02	0.03	0.07	<0.10	<0.10	0.12	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	-	<0.10	<0.10	0.12	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.05	0.13	<0.01	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
pH, lab	S.U.	7.22	7.55	6.9	6.86	6.69	7.55	7.72	7.73	7.80	7.84	7.66	7.83
Phaeophytin A	µg/L	<0.5	-	-	-	-	-	-	-	-	-	-	-
Pheophytin a	µg/L	-	-	-	-	-	-	-	-	8.6	-	-	-
Phosphorus, Total	mg/L	<0.001	<0.001	<0.001	0.003	0.001	0.0047	0.0060	0.0060	0.010	0.0076	0.015	0.0078
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Radium-226	Bq/L	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	2.4	2.6	2.9	2.8	4	7.2	8.1	9.4	4.5	4.6	4.5	4.1
Total Dissolved Solids	mg/L	175	130	120	75	115	135	145	125	95	85	95	165
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	<1	0.45	0.38	0.38	0.43	0.48	0.39	0.44
Total Organic Carbon	mg/L	11.3	12.1	11.6	11.3	11.7	12	11	12	15	13	13	12
Total Suspended Solids	mg/L	1.3	<0.67	<0.67	<0.67	<0.67	<1	<1	1	14	3	3	3
Turbidity, Lab	NTU	2.3	2.5	0.9	1.2	0.9	0.7	0.7	0.5	0.7	1.0	1.6	1.3
Metals, Dissolved													
Aluminum	µg/L	6	7	2	2	2	1.7	1.9	4.3	8.4	8.7	7.2	6.7
Antimony	µg/L	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	<0.1	0.2	0.1	0.2
Arsenic	µg/L	10.9	7.2	12	11.5	10.9	8.2	7.1	6.1	7.3	10.6	14.5	13
Barium	µg/L	8.4	8.1	9.4	9.6	10.2	10.7	11.2	10.5	8.1	12.4	7.7	9.1
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	<2	5	6	6	4	8	5	7
Cadmium	µg/L	0.01	0.02	<0.005	0.01	0.007	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Calcium	mg/L	24.3	21.4	26.4	26.1	27.9	30.7	35.1	33.3	19.9	21.5	23.2	21.2
Cerium	µg/L	-	-	-	<1	-	-	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.2	0.3	0.2	0.4	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	1
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	1.4	1.5	1.4	1.3	1.3	1.0	1.1	1.1	0.8	22.3	1	6.6
Europium	µg/L	-	-	-	<1	-	-	-	-	-	-	-	-
Gallium	µg/L	-	-	-	<1	-	-	-	-	-	-	-	-
Iron	µg/L	170	40	20	60	30	34	39	41	77	73	54	46
Lanthanum	µg/L	-	-	-	<1	-	-	-	-	-	-	-	-
Lead	µg/L	0.37	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.2	<0.05	0.55	<0.05	0.08
Lithium	µg/L	<1	<1	<1	<1	<1	0.9	0.9	0.9	0.6	0.7	0.7	0.7
Magnesium	mg/L	5.17	4.61	5.45	5.43	5.85	6.29	7.1	6.98	3.93	4.50	4.76	4.70
Manganese	µg/L	2.4	3.4	5.5	6.3	5	5.1	8.1	11.9	5.2	3.9	4	4
Mercury	µg/L	-	-	-	<0.1	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.11	0.12	0.09	0.09	0.09	0.10	0.12	0.1	0.09	0.1	0.1	0.1
Nickel	µg/L	0.7	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.3	0.5	0.4	0.7
Niobium	µg/L	-	-	-	<1	-	-	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	<50	<5	<5	<5	<5	7	<5	<5
Potassium	mg/L	0.7	0.61	0.69	0.7	0.76	0.768	0.876	0.78	0.56	0.61	0.59	0.55
Rhodium	µg/L	-	-	-	<1	-	-	-	-	-	-	-	-
Rubidium	µg/L	1.5	1.3	1.5	1.6	1.6	1.75	1.62	1.59	1.4	1.58	1.51	1.51
Scandium	µg/L	-	-	-	<1	-	-	-	-	-	-	-	-
Selenium	µg/L	<0.05	<0.05	0.18	0.14	<0.05	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	2,200	1,890	1,830	1,840	2,340	2,640	3,180	3,000	1,610	1,940	2,230	2,270
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	2.55	2.34	2.62	2.88	3.33	3.78	4.09	6.18	3.04	2.75	2.86	2.79
Strontium	µg/L	21.7	22	21.9	24	28.1	31.7	29.6	31.9	19.1	22.3	22.1	23.4
Sulfur	µg/L	800	600	1,400	1,500	1,900	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1
Titanium	µg/L	0.8	0.6	0.3	0.4	0.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.12	0.12	0.08	0.09	0.11	0.15	0.16	0.14	0.08	0.08	0.09	0.09
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.15	0.16	0.12	0.24	0.31	0.35	0.29
Yttrium	µg/L	-	-	-	<1	-	-	-	-	-	-	-	-
Zinc	µg/L	2	2	<1	<1	<1	0.6	<0.5	<0.5	<0.5	7.3	1.3	3.9
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-Up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location													
Sample Date		4-Oct-22	2-Nov-22	15-Dec-22	9-Jan-23	13-Feb-23	13-Mar-23	5-Apr-23	4-May-23	19-Jun-23	11-Jul-23	10-Aug-23	6-Sep-23
Sample ID		17	17	17	17	17	17	SW17	Sw17	17	17	17	17
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		479018	482202	486300	487939	490787	C373279	C399775	C3C9103	C3I2472	C3K9086	C3O7600	C3R6726
Laboratory Sample ID	Units	1808304	1821943	1836070	1841533	1851312	VHI193	VMY891	VSZ027	WEH079	WJT596	WRX711	WYE140
Metals, Total													
Aluminum	µg/L	25	20	-	8	8	5.1	6.1	9.7	32.2	22.7	82.5	18.4
Antimony	µg/L	0.1	0.1	-	0.1	0.1	0.2	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	9.7	7.6	-	10.1	10.8	9.0	7.9	7.1	7.8	11.3	15.9	14.5
Barium	µg/L	8.6	8.6	-	8.8	10.7	10.8	10.3	10.4	8.4	9.3	9.3	8.1
Beryllium	µg/L	<0.02	<0.02	-	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	-	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	-	<2	<2	5	5	5	4	5	5	5
Cadmium	µg/L	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005
Calcium	mg/L	24.7	21.3	-	25	30.5	31	31.5	32.4	19.9	22.3	22.5	23.4
Cerium	µg/L	-	-	-	<1	-	-	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	-	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.7	0.3	0.4	0.3	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.1	<0.1	-	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05
Copper	µg/L	1.1	1.1	-	2.6	1.6	1.2	1.1	0.9	1	1.1	1.4	1
Europium	µg/L	-	-	-	<1	-	-	-	-	-	-	-	-
Gallium	µg/L	-	-	-	<1	-	-	-	-	-	-	-	-
Iron	µg/L	350	190	-	100	120	76	94	85	142	106	252	109
Lanthanum	µg/L	-	-	-	<1	-	-	-	-	-	-	-	-
Lead	µg/L	0.12	0.08	-	<0.05	0.08	0.16	<0.05	0.06	0.11	0.09	0.29	0.1
Lithium	µg/L	<1	<1	-	<1	1	0.8	0.9	0.9	0.6	0.7	0.7	0.6
Magnesium	mg/L	5.24	4.71	-	4.84	6.4	6.44	6.72	7.01	4.03	4.37	4.75	4.70
Manganese	µg/L	21.1	14.1	-	10.2	12.9	13.4	16.1	20.1	14.5	19.8	36.5	24.3
Mercury	µg/L	<0.1	<0.1	-	<0.1	0.001	0.00106	0.00081	0.00224	0.00136	0.00184	0.00111	0.00092
Molybdenum	µg/L	0.1	0.11	-	0.1	0.1	0.11	0.11	0.1	0.08	0.08	0.07	0.08
Nickel	µg/L	<0.5	<0.5	-	<0.5	<0.5	0.5	0.4	0.4	0.4	0.4	0.6	0.4
Niobium	µg/L	-	-	-	<1	-	-	-	-	-	-	-	-
Phosphorus	µg/L	60	<50	-	<50	<50	6	7	<5	5	9	12	<5
Potassium	mg/L	0.7	0.6	-	0.66	0.82	0.793	0.771	0.77	0.55	0.58	0.59	0.57
Rhodium	µg/L	-	-	-	<1	-	-	-	-	-	-	-	-
Rubidium	µg/L	1.4	1.3	-	1.5	1.8	1.72	1.56	1.65	1.42	1.57	1.6	1.51
Scandium	µg/L	-	-	-	<1	-	-	-	-	-	-	-	-
Selenium	µg/L	0.1	<0.05	-	0.14	<0.05	0.07	0.07	0.06	0.07	0.06	0.06	0.06
Silicon	µg/L	2,930	2,060	-	1,870	2,710	2,790	3,060	2,890	1,690	1,890	2,300	2,440
Silver	µg/L	0.08	0.03	-	0.06	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	2.74	2.28	-	2.52	3.7	3.73	3.81	6.15	3.00	2.48	2.76	2.77
Strontium	µg/L	20.6	22.6	-	25.9	29.9	32.2	29.1	31.9	18.9	20.1	22.6	22.5
Sulfur	µg/L	1,900	900	-	1,800	2,800	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	-	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	-	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1.7	1.2	-	0.8	0.6	<0.5	<0.5	0.5	1.2	1	3.5	0.8
Tungsten	µg/L	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.12	0.11	-	0.12	0.15	0.15	0.16	0.13	0.08	0.07	0.1	0.1
Vanadium	µg/L	<0.5	<0.5	-	<0.5	<0.5	0.19	0.19	0.16	0.31	0.36	0.57	0.37
Yttrium	µg/L	-	-	-	<1	-	-	-	-	-	-	-	-
Zinc	µg/L	1	<1	-	<1	<1	1.0	0.6	<0.5	0.7	0.6	1.4	1.8
Zirconium	µg/L	<0.2	<0.2	-	<0.2	0.2	<0.1	<0.1	<0.1	0.1	<0.1	0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		20										
Sample Date		20-Oct-22	8-Nov-22	14-Dec-22	9-Jan-23	8-Mar-23	4-May-23	23-Jun-23	4-Jul-23	8-Aug-23	18-Sep-23	23-Oct-23
Sample ID		20	20	20	20	20	Sw20	20	20	20	20	20
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480798	482783	486154	487939	C369594	C3C9103	C3J0006	C3K0765	C3O2537	C3T1094	C3X4958
Laboratory Sample ID	Units	1815916	1824045	1835606	1841534	VGN749	VSZ028	WFV593	WIB172	WQV778	XBA938	XKL320
Field Parameters												
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.48	7.39	7.17	7.13	6.70	7.44	7.25	7.21	7.53	7.52	7.52
Temperature, Field	deg C	3.4	2.2	0.4	0	0.3	5.6	23.2	23.3	20.8	14.2	7.2
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-	-
General Chemistry												
Acceptable Percent Difference	none	-	-	-	-	-	-	-	-	-	-	-
Acidity as CaCO3	mg/L	8	11	10	32	48	6.6	6.6	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	84	53	168	184	250	140	160	130	160	160	160
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1.0	<1.0	1.4	<1.0	1.2	1.0	1.1
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00468	0.00603	0.00458	0.00152	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	84	53	168	184	250	140	160	130	160	160	160
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	0.04	0.2	1.0	0.41	0.085	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	0.0004	0.0015	0.00074	<0.0004	<0.0007	<0.00042	<0.0004
Anion Sum	meq/L	-	-	-	-	-	-	-	-	-	-	-
Biochemical Oxygen Demand (BOD)	mg/L	1.5	2.3	1.3	<1	9	<2	<2	<2	<2	<2	<2
Cation Sum	meq/L	-	-	-	-	-	-	-	-	-	-	-
Chemical Oxygen Demand	mg/L	45	42	34	26	70	41	51	44	49	45	33
Chloride	mg/L	1.2	1.3	1.2	1.8	4.5	3.7	4.9	1.5	<1.0	1.1	<1.0
Chlorophyll a	µg/L	-	-	-	-	-	-	-	-	-	-	-
Color, True	TCU	100	77.6	58.7	40.5	150	34	41	55	35	32	24
Cyanide	mg/L	0.004	0.003	<0.002	<0.002	0.00087	0.00083 CYN	0.00085	0.00106	<0.00050	0.00057	<0.00050
Cyanide (Free)	mg/L	<0.001	0.003	<0.001	<0.001	<0.002	0.0021 ICB	<0.002	0.0054	0.0035	<0.002 ICB	<0.002
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	20.1	17	12.9	10.7	24	13	15	16	17	14	13
Electrical Conductivity, Lab	µS/cm	193	186	301	343	460	298	334	253	302	308	319
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	109	92.9	161	178	230	160	190	140	170	180	170
Ion Balance	%	-	-	-	-	-	-	-	-	-	-	-
Mineral Oil and Grease	mg/L	-	-	-	-	<0.50	<0.50	0.50	<0.50	<0.50	<0.50	<0.50
Nitrate (as N)	mg/L	0.1	0.06	0.11	0.19	<0.10	0.28	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	<0.10	0.31	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.010	0.028	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	<1	1	<1	1	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	0.013	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
pH, lab	S.U.	7.44	7.55	7.43	6.95	7.48	7.82	7.96	7.90	7.90	7.83	7.88
Phaeophytin A	µg/L	-	-	-	-	-	-	-	-	-	-	-
Phosphate	mg/L	0.026	0.016	0.528	0.023	-	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.004	0.001	0.006	0.003	0.063	0.043	0.023	0.011	0.014	0.0082	0.011
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Radium-226	Bq/L	-	-	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	0.9	1.4	1.9	3.3	<1.0	11	6.1	2.5	5.3	4.5	5.6
Total Dissolved Solids	mg/L	210	150	220	205	245	165	200	160	205	195	180
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	1.6	0.84	0.71	0.52	0.57	0.53	0.47
Total Organic Carbon	mg/L	19.4	13.8	12.7	10.7	28	14	16	16	17	16	13
Total Suspended Solids	mg/L	<0.67	<1	2	<0.67	7	13	2	2	<1	1	4
Turbidity, Lab	NTU	1.7	1.4	1.1	1.8	4.2	4.4	1.4	1.3	0.6	0.5	0.7
Metals, Dissolved												
Aluminum	µg/L	12	9	7	6	24.3	20.9	8.9	4.6	4.6	1.9	2.1
Antimony	µg/L	<0.1	0.1	<0.1	<0.1	0.1	2.3	1	0.1	0.4	0.2	0.4
Arsenic	µg/L	9.8	14.9	7.4	7.6	102	9.9	21.8	13.3	20.8	9.2	6.2
Barium	µg/L	8.3	7.3	9.7	10.3	57.7	13.5	18.6	13.7	165	14.5	16
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	3	5	7	6	9	7	5
Cadmium	µg/L	0.007	<0.005	0.01	0.01	<0.01	<0.01	0.02	<0.01	0.03	<0.01	<0.01
Calcium	mg/L	31.1	27.5	49.7	53.8	66.9	47.9	58.1	44.0	51.9	53.7	49.9
Cerium	µg/L	-	-	-	<1	-	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	0.17	0.11	<0.02	0.03	0.02	0.03
Chromium	µg/L	0.4	0.4	0.8	0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	<0.1	0.1	1.79	0.42	0.27	0.07	0.13	<0.05	0.06
Copper	µg/L	0.6	0.3	0.3	0.4	0.3	1.1	0.7	0.3	1.7	0.5	1.8
Europium	µg/L	-	-	-	<1	-	-	-	-	-	-	-
Gallium	µg/L	-	-	-	<1	-	-	-	-	-	-	-
Iron	µg/L	220	150	220	340	5,030	73	177	159	77	56	38
Lanthanum	µg/L	-	-	-	<1	-	-	-	-	-	-	-
Lead	µg/L	<0.05	<0.05	0.05	<0.05	0.07	0.16	0.06	<0.05	0.12	<0.05	0.05
Lithium	µg/L	<1	<1	1	<1	1.0	0.7	0.9	0.8	0.9	0.9	0.9
Magnesium	mg/L	6.35	6.8	10.2	10.5	14.5	8.63	9.85	7.94	10.7	9.98	10.1
Manganese	µg/L	25.4	13.6	120	112	7,320	137	396	71.8	65.3	34.4	12.2
Mercury	µg/L	-	-	-	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.13	0.07	<0.05	0.19	0.28	0.81	0.68	0.17	0.26	0.16	0.25
Nickel	µg/L	0.6	0.6	1	0.8	0.9	2.7	1.3	0.4	1.3	0.6	1
Niobium	µg/L	-	-	-	<1	-	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	37	12	7	6	11	<5	<5
Phosphorus	mg/L	-	-	-	-	-	-	-	-	-	-	-
Potassium	mg/L	1.59	2.4	1.62	1.49	2.81	3.52	2.66	1.00	0.82	1.43	1.96
Rhodium	µg/L	-	-	-	<1	-	-	-	-	-	-	-
Rubidium	µg/L	3.4	6.4	3.3	2.9	6.18	4.62	4.18	2.52	1.69	2.99	3.19
Scandium	µg/L	-	-	-	1	-	-	-	-	-	-	-
Selenium	µg/L	<0.05	0.06	<0.05	0.13	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	2,490	4,010	4,710	4,520	6,780	2,380	1,280	2,480	433	772	844
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	0.91	1.03	1.52	1.67	2.05	2.52	2.06	1.13	1.66	1.72	1.94
Strontium	µg/L	27.3	34.5	43.1	48.9	75.7	55	67.5	43.8	67.4	62.6	59.3
Sulfur	µg/L	<500	1,200	2,200	1,600	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	0.011	0.009	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.9	1	0.9	0.9	1.4	0.9	<0.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.07	0.03	0.13	0.23	0.42	0.82	0.58	0.12	0.3	0.25	0.39
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.51	0.27	0.22	0.15	0.15	0.1	0.1
Yttrium	µg/L	-	-	-	<1	-	-	-	-	-	-	-
Zinc	µg/L	3	5	9	6	39.6	15	7.2	0.6	21.2	4.3	14.9
Zirconium	µg/L	<0.2	<0.2	<0.2	0.4	0.3	0.2	0.2	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		20										
Sample Date		20-Oct-22	8-Nov-22	14-Dec-22	9-Jan-23	8-Mar-23	4-May-23	23-Jun-23	4-Jul-23	8-Aug-23	18-Sep-23	23-Oct-23
Sample ID		20	20	20	20	20	Sw20	20	20	20	20	20
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480798	482783	486154	487939	C369594	C3C9103	C3J0006	C3K0765	C3O2537	C3T1094	C3X4958
Laboratory Sample ID	Units	1815916	1824045	1835606	1841534	VGN749	VSZ028	WFV593	WIB172	WQV778	XBA938	XKL320
Metals, Total												
Aluminum	µg/L	26	16	12	10	56.5	298	25.9	7.3	7.8	3.8	10.2
Antimony	µg/L	<0.1	0.1	<0.1	<0.1	0.2	2.2	0.9	0.1	0.3	0.2	0.4
Arsenic	µg/L	9.2	13.4	7.2	7.9	106	11.5	24.3	15.3	17.3	9.9	7
Barium	µg/L	8.2	7.5	9.1	9.7	58.2	16.1	19	14.7	11.8	14.4	14.9
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	3	6	7	5	6	4	4
Cadmium	µg/L	0.009	<0.005	<0.005	<0.005	0.017	0.01	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	31.4	28.1	48.3	56.6	71.1	46.3	58.2	43.1	51.1	50.8	50.4
Cerium	µg/L	-	-	-	<1	-	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	0.03	0.2	0.11	<0.02	0.04	0.02	0.03
Chromium	µg/L	0.3	0.4	0.5	0.4	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	<0.1	0.2	1.83	0.62	0.3	0.09	0.11	<0.05	0.07
Copper	µg/L	0.6	0.4	0.3	1.3	0.5	1.6	0.8	0.3	0.7	0.3	0.6
Europium	µg/L	-	-	-	<1	-	-	-	-	-	-	-
Gallium	µg/L	-	-	-	<1	-	-	-	-	-	-	-
Iron	µg/L	270	200	370	620	5,150	455	331	287	129	119	94
Lanthanum	µg/L	-	-	-	<1	-	-	-	-	-	-	-
Lead	µg/L	<0.05	<0.05	<0.05	<0.05	0.22	0.66	0.12	<0.05	0.21	<0.05	0.13
Lithium	µg/L	<1	<1	1	<1	1.1	0.9	0.9	0.8	0.9	1	0.9
Magnesium	mg/L	6.45	6.84	9.84	9.51	14.8	8.62	10.7	7.84	11.0	9.57	9.99
Manganese	µg/L	26	14.8	119	100	7,010	169	431	94.6	65.8	38.8	15.8
Mercury	µg/L	<0.1	<0.1	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.18	0.07	<0.05	0.23	0.30	0.73	0.68	0.17	0.26	0.15	0.24
Nickel	µg/L	<0.5	<0.5	0.6	0.6	0.9	3.1	1.4	0.4	1	0.6	1
Niobium	µg/L	-	-	-	<1	-	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	56	34	17	13	13	7	9
Potassium	mg/L	1.56	2.44	1.59	1.41	2.97	3.48	2.75	0.98	0.77	1.51	1.93
Rhodium	µg/L	-	-	-	<1	-	-	-	-	-	-	-
Rubidium	µg/L	3.3	6.3	3.2	2.8	6.09	4.97	4.14	2.53	1.68	2.93	3.23
Scandium	µg/L	-	-	-	2	-	-	-	-	-	-	-
Selenium	µg/L	<0.05	0.06	<0.05	0.19	0.17	0.15	0.12	0.08	0.09	0.08	0.07
Silicon	µg/L	2,560	4,060	4,700	4,290	7,250	2,690	1,330	2,440	388	749	813
Silver	µg/L	0.07	0.05	0.04	0.07	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	0.96	1.02	1.48	1.51	2.13	2.48	2.33	1.12	1.57	1.64	1.89
Strontium	µg/L	26	32.5	41.8	55.2	75.1	55.2	65.4	45.3	64.3	60.3	57.7
Sulfur	µg/L	<500	900	2,500	1,800	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	0.007	0.013	0.009	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1.7	1.4	1.2	1.4	2.3	8	0.9	<0.5	<0.5	<0.5	0.6
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.08	0.04	0.18	0.3	0.44	0.81	0.59	0.12	0.29	0.25	0.37
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.64	0.76	0.29	0.18	0.17	0.1	0.12
Yttrium	µg/L	-	-	-	<1	-	-	-	-	-	-	-
Zinc	µg/L	3	4	7	5	91.5	13.8	9.1	0.8	23.6	4.1	15.1
Zirconium	µg/L	<0.2	<0.2	<0.2	0.2	0.4	0.6	0.2	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		20A										
Sample Date		19-Oct-22	7-Nov-22	5-Jan-23	8-Feb-23	8-Mar-23	4-Apr-23	18-May-23	23-Jun-23	4-Jul-23	2-Aug-23	11-Sep-23
Sample ID		20A	20A	20A	20A	20A	20A	20A	20A	20A	20A	20A
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480701	482900	487639	490500	C369594	C3A1264	C3E5063	C3J0006	C3K0765	C3N6270	C3S2923
Laboratory Sample ID	Units	1815502	1824498	1840474	1850232	VGN750	VNG414	VWI323	WFV596	WIB173	WPN396	WZJ686
Field Parameters												
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.51	7.38	7.58	7.01	6.90	6.71	6.99	7.35	7.23	7.40	7.13
Temperature, Field	deg C	2.7	2.6	0	1.1	0.1	0.4	11.1	22.2	23.1	20.9	14.6
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-	-
General Chemistry												
Acceptable Percent Difference	none	-	-	-	-	-	-	-	-	-	-	-
Acidity as CaCO3	mg/L	15	<5	47	12	16	22	5.6	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	88	96	133	152	140	150	67	86	110	110	120
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00282	0.0155	0.00047	0.00282	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	88	97	133	152	140	160	68	87	110	110	120
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	0.01	0.04	0.03	<0.050	0.10	<0.050	<0.050	0.051	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.0004	<0.0004	<0.0004	<0.00051	0.00043	<0.00053	<0.0004
Anion Sum	meq/L	-	-	-	-	-	-	-	-	-	-	-
Biochemical Oxygen Demand (BOD)	mg/L	1.6	1.2	<0.5	2.3	<2	<2	<2	<2	<2	<2	3
Cation Sum	meq/L	-	-	-	-	-	-	-	-	-	-	-
Chemical Oxygen Demand	mg/L	42	49	30	34	30	29	45	35	41	36	33
Chloride	mg/L	0.9	1.1	0.8	0.5	<1.0	<1.0	<1.0	1.3	1.0	<1.0	1.3
Chlorophyll a	µg/L	-	-	-	-	-	-	-	-	-	-	-
Color, True	TCU	73.6	86.9	43.8	46.4	34	37	90	48	61	37	42
Cyanide	mg/L	<0.002	0.002	0.002	0.005	0.00056	<0.00050	0.00105 CYN	<0.00050	0.00094	<0.00050	<0.00050
Cyanide (Free)	mg/L	0.001	0.003	0.001	<0.001	<0.002	<0.002 ICB	0.0047 ICB	0.0027	0.0047	<0.002	<0.002 ICB
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	15.6	19.8	12	12.7	12	11	18	12	15	12	12
Electrical Conductivity, Lab	µS/cm	209	187	254	277	271	297	132	175	221	201	233
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	112	99.2	141	146	150	160	75	90	130	120	130
Ion Balance	%	-	-	-	-	-	-	-	-	-	-	-
Mineral Oil and Grease	mg/L	-	-	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Nitrate (as N)	mg/L	0.05	<0.05	0.1	0.03	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.05	<0.01	0.03	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	<1	<1	<1	1	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
pH, lab	S.U.	7.22	7.96	6.44	7.22	7.66	7.59	7.64	7.87	7.87	7.92	7.94
Phaeophytin A	µg/L	-	-	-	-	-	-	-	-	-	-	-
Phosphate	mg/L	0.027	0.019	<0.002	0.031	-	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.005	0.013	0.002	<0.001	0.0046	0.0036	0.0061	0.017	0.0076	0.0082	0.0070
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	1.1	1.1	1.9	1.5	2.5	3.3	4.2	2.8	2.6	2.3	2.1
Total Dissolved Solids	mg/L	125	280	160	170	185	195	105	100	155	125	130
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	0.36	0.46	0.42	0.39	0.47	0.31	0.37
Total Organic Carbon	mg/L	15.4	20.5	12	12.4	12	12	17	13	15	13	12
Total Suspended Solids	mg/L	2.3	<1.3	1	<0.67	<1	2	1	<1	1	1	1
Turbidity, Lab	NTU	2.3	3.13	0.9	0.9	0.6	0.7	0.4	0.6	0.5	0.5	0.5
Metals, Dissolved												
Aluminum	µg/L	9	8	4	5	3.3	4.6	14.3	6.3	5	6.3	2.4
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	6.4	12.5	4.7	8	3.9	4.6	3.5	3.4	7.9	6.2	4.9
Barium	µg/L	9.2	8.8	14.1	16.6	14.5	15.2	7.2	10.1	12.4	10.6	12.5
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	4	3	4	5	5	19	4
Cadmium	µg/L	0.008	<0.005	0.005	0.006	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	32.7	28.2	45.5	46.3	44.4	48	22.4	27.1	39.3	36.6	39.1
Cerium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.4	0.3	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.1	<0.1	0.2	0.6	0.17	1.46	0.05	0.05	0.08	0.06	<0.05
Copper	µg/L	0.4	0.4	0.6	1.1	0.4	0.3	0.5	0.6	0.3	4.3	0.2
Europium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Gallium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Iron	µg/L	150	150	150	280	230	380	66	56	124	76	60
Lanthanum	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Lead	µg/L	<0.05	<0.05	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
Lithium	µg/L	<1	<1	1	1	0.8	0.9	<0.5	0.8	0.8	0.9	0.8
Magnesium	mg/L	6.53	6.55	8.93	8.01	8.62	9.9	4.51	5.31	6.96	7.10	7.36
Manganese	µg/L	20.7	19.4	75.9	242	78.2	155	10.7	26.8	39	10.6	12.5
Mercury	µg/L	-	-	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.16	0.07	0.1	0.12	0.10	0.13	0.08	0.11	0.12	0.12	0.07
Nickel	µg/L	<0.5	0.7	0.6	0.7	0.2	0.7	0.2	0.2	0.3	0.3	0.3
Niobium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	<5	<5	<5	35	<5
Phosphorus	mg/L	-	-	-	-	-	-	-	-	-	-	-
Potassium	mg/L	1.31	2.21	0.97	0.94	0.871	1.13	0.71	0.70	0.85	0.67	0.73
Rhodium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Rubidium	µg/L	2.6	5.9	1.8	2	1.66	1.97	1.45	1.79	2.14	1.22	1.76
Scandium	µg/L	-	-	<1	1	-	-	-	-	-	-	-
Selenium	µg/L	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	2,480	3,580	3,270	3,690	3,960	4,910	2,080	1,870	2,860	2,180	2,880
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	0.97	0.99	1.15	1.05	1.13	1.46	0.65	0.80	0.99	2.93	1.20
Strontium	µg/L	25.4	32.6	31.1	35.4	37.4	40.0	18.3	24	34	32.5	34.1
Sulfur	µg/L	<500	1,000	1,400	800	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.8	0.8	0.7	0.7	0.5	0.6	0.6	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	<0.1
Uranium	µg/L	0.06	0.04	0.07	0.09	0.09	0.09	0.02	0.14	0.07	0.11	0.09
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.10	0.16	0.15	0.2	0.15	0.17	0.13
Yttrium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Zinc	µg/L	2	4	3	3	1.3	0.6	1.2	3.4	0.5	1.2	<0.5
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1
Metals, Total												
Aluminum	µg/L	24	18	7	7	4.8	6.3	18.3	10.5	6.3	4.5	9.4
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	5.7	11.8	4.4	5.4	4.0	4.9	3.5	4	8.6	6.2	5.4
Barium	µg/L	9.1	8.9	14	16.2	14.9	15.1	7.9	10.6	12.8	10.6	13.3
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	4	3	3	4	4	5	4
Cadmium	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	32.4	29.5	45.6	42.8	45.2	49.6	22.9	29.1	37.1	35.3	38.8
Cerium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.2	0.4	0.4	0.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.1	<0.1	0.2	0.2	0.17	1.55	0.06	0.06	0.1	0.06	0.09
Copper	µg/L	0.4	0.4	0.6	0.7	0.4	0.4	0.4	0.4	0.3	0.2	0.2
Europium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Gallium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		20A										
Sample Date		**19-Oct-22**	**7-Nov-22**	**5-Jan-23**	**8-Feb-23**	**8-Mar-23**	**4-Apr-23**	**18-May-23**	**23-Jun-23**	**4-Jul-23**	**2-Aug-23**	**11-Sep-23**
Sample ID		**20A**	**20A**	**20A**	**20A**	**20A**	**20A**	**20A**	**20A**	**20A**	**20A**	**20A**
Sampling Company		**GGM**	**GGM**	**GGM**	**GGM**	**GGM**	**GGM**	**GGM**	**GGM**	**GGM**	**GGM**	**GGM**
Laboratory		**TESTMARK**	**TESTMARK**	**TESTMARK**	**TESTMARK**	**BV**	**BV**	**BV**	**BV**	**BV**	**BV**	**BV**
Laboratory Work Order		**480701**	**482900**	**487639**	**490500**	**C369594**	**C3A1264**	**C3E5063**	**C3J0006**	**C3K0765**	**C3N6270**	**C3S2923**
Laboratory Sample ID	**Units**	**1815502**	**1824498**	**1840474**	**1850232**	**VGN750**	**VNG414**	**VWI323**	**WFV596**	**WIB173**	**WPN396**	**WZJ686**
Iron	µg/L	220	230	270	350	275	444	81	99	189	97	147
Lanthanum	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Lead	µg/L	0.06	<0.05	0.46	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	<1	1	1	0.9	0.9	<0.5	0.8	0.7	0.8	0.8
Magnesium	mg/L	6.7	6.63	9.1	8.53	8.67	10.1	4.49	5.72	7.02	6.72	7.35
Manganese	µg/L	21.2	23.5	75.3	131	81.6	162	14.4	40.2	49	17.3	48.4
Mercury	µg/L	<0.1	<0.1	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.13	0.08	0.15	0.13	0.12	0.14	0.1	0.11	0.11	0.13	0.09
Nickel	µg/L	<0.5	<0.5	<0.5	<0.5	0.2	0.8	0.2	0.2	0.3	0.3	0.3
Niobium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	6	<5	7	9	7	9	<5
Potassium	mg/L	1.25	2.24	0.98	0.89	0.861	1.1	0.72	0.75	0.86	0.50	0.75
Rhodium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Rubidium	µg/L	2.4	5.9	1.8	1.8	1.63	2.03	1.44	1.83	2.14	1.37	1.78
Scandium	µg/L	-	-	1	1	-	-	-	-	-	-	-
Selenium	µg/L	<0.05	<0.05	<0.05	<0.05	0.06	0.05	0.06	0.06	0.07	0.06	<0.05
Silicon	µg/L	2,480	4,050	3,500	3,800	3,950	4,680	2,180	1,890	2,850	2,030	2,930
Silver	µg/L	0.05	0.06	0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	0.97	1.02	1.18	1.07	1.16	1.54	0.63	0.87	1.01	1.10	1.21
Strontium	µg/L	23.9	31.8	31.4	36	36.7	40.7	18.4	24.8	35.8	30.6	34.4
Sulfur	µg/L	<500	900	1,500	800	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1.6	1.3	0.9	0.8	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.06	0.05	0.1	0.11	0.10	0.10	0.02	0.13	0.07	0.11	0.09
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.10	0.19	0.15	0.21	0.16	0.17	0.18
Yttrium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Zinc	µg/L	2	4	1	1	1.5	0.9	1.3	<0.5	0.6	0.6	0.7
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location						21					
Sample Date		4-Oct-22	8-Nov-22	10-Jan-23	6-Feb-23	9-Mar-23	29-May-23	26-Jun-23	10-Jul-23	14-Aug-23	18-Sep-23
Sample ID		21	21	21	21	21	21	21	21	21	21
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV
Laboratory Work Order		479018	482783	488145	490194	C369577	C3F5169	C3J1238	C3K7615	C3P0321	C3T1094
Laboratory Sample ID	Units	1808305	1824044	1842169	1849341	VGN673	VYP226	WGC257	WJL686	WSM217	XBA937
Field Parameters											
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.81	7.74	7.24	7.81	6.94	7.64	7.59	7.93	7.68	7.77
Temperature, Field	deg C	12.2	3.2	1.9	2.9	1.9	20.4	18.9	19.8	19.6	15.0
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-
General Chemistry											
Acidity as CaCO3	mg/L	15	9	9	8	16	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	87	78	127	134	140	62	71	80	93	100
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00408	0.00956	0.00468	0.00502	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	88	78	127	134	140	62	72	81	94	100
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	<0.01	0.23	0.085	<0.050	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	-	<0.00087	<0.0007	<0.0016	<0.0009	<0.00079
Anion Sum	meq/L	-	-	-	-	-	-	-	-	-	-
Biochemical Oxygen Demand (BOD)	mg/L	<0.5	1.3	2.7	0.6	3	<2	<2	<2	<2	<2
Cation Sum	meq/L	-	-	-	-	-	-	-	-	-	-
Chemical Oxygen Demand	mg/L	30	22	34	34	26	38	45	40	43	37
Chloride	mg/L	0.3	0.7	0.6	0.5	<1.0	<1.0	1.1	<1.0	<1.0	<1.0
Chlorophyll a	µg/L	-	-	-	-	-	-	-	-	-	-
Color, True	TCU	41.2	42.6	36.1	40.3	27	71	54	49	37	31
Cyanide	mg/L	0.006	0.003	0.004	0.004	<0.00050	0.00090	0.00069	<0.00050	<0.00050	0.00126 CYN
Cyanide (Free)	mg/L	<0.001	0.003	<0.001	0.001	0.0031	0.0063 ICB	0.0027	<0.002	0.003	0.0021 ICB
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	13.5	13.7	12.3	12.7	10	14	15	14	14	12
Electrical Conductivity, Lab	µS/cm	199	201	222	245	266	125	154	161	180	196
Fluoride	mg/L	<0.05	0.06	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	118	106	128	122	140	69	83	91	100	130
Ion Balance	%	-	-	-	-	-	-	-	-	-	-
Mineral Oil and Grease	mg/L	-	-	-	-	<0.50	<0.50	0.50	0.80	<0.50	<0.50
Nitrate (as N)	mg/L	<0.02	<0.02	0.04	0.02	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	<1	<1	<1	<1	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
pH, lab	S.U.	7.38	7.75	7.44	7.47	7.89	7.81	7.94	8.06	7.82	7.95
Phaeophytin A	µg/L	-	-	-	-	-	-	-	-	-	-
Phosphate	mg/L	0.021	0.011	0.017	0.028	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.002	<0.001	0.002	<0.001	0.0018	0.0045	0.0072	0.0088	0.0062	0.0064
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-
Radium-226	Bq/L	-	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	<0.3	0.5	3.5	0.6	1.8	3.9	3.2	2.7	2.0	2.0
Total Dissolved Solids	mg/L	230	160	170	185	185	105	90	135	120	130
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	0.39	0.40	0.47	0.41	0.44	0.35
Total Organic Carbon	mg/L	13.5	9.9	10.8	12.7	10	14	14	13	15	14
Total Suspended Solids	mg/L	<0.67	<1	<0.67	1	2	1	2	3	1	1
Turbidity, Lab	NTU	0.5	0.7	0.8	0.4	0.4	0.4	0.5	1.0	1.0	0.5
Metals, Dissolved											
Aluminum	µg/L	4	3	9	2	1.7	7.2	5	6.8	5.1	3.6
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	3.1	3.1	2.7	2.7	2.4	2.5	3.3	3.8	4.2	6.8
Barium	µg/L	8.5	7.6	6.6	8.6	7.2	4	6.1	7	7.7	9.8
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	2	4	4	4	4	11
Cadmium	µg/L	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	34.4	34.7	36.4	38.3	42.6	20.6	24.7	27.2	30.1	37.4
Cerium	µg/L	-	-	<1	-	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.3	0.9	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.1	<0.1	0.1	<0.1	0.06	<0.05	<0.05	<0.05	<0.05	0.06
Copper	µg/L	<0.2	<0.2	1.2	<0.2	0.2	0.3	0.2	0.2	0.3	0.7
Europium	µg/L	-	-	<1	-	-	-	-	-	-	-
Gallium	µg/L	-	-	<1	-	-	-	-	-	-	-
Iron	µg/L	40	80	110	70	195	57	37	42	34	55
Lanthanum	µg/L	-	-	<1	-	-	-	-	-	-	-
Lead	µg/L	<0.05	<0.05	0.22	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	<1	<1	<1	0.7	<0.5	<0.5	0.7	0.7	0.8
Magnesium	mg/L	7.09	6.71	6.88	7.45	8.31	4.19	5.19	5.53	6.03	7.93
Manganese	µg/L	1	1.6	44.6	52.4	101	3.7	1.5	5.7	1.3	6.4
Mercury	µg/L	-	-	<0.1	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.07	<0.05	0.06	0.07	0.06	<0.05	0.05	0.05	<0.05	0.07
Nickel	µg/L	<0.5	<0.5	0.6	<0.5	0.1	0.1	<0.1	<0.1	<0.1	0.2
Niobium	µg/L	-	-	<1	-	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	<5	6	<5	<5
Potassium	mg/L	0.29	0.29	0.29	0.36	0.33	0.40	0.45	0.47	0.41	0.59
Rhodium	µg/L	-	-	<1	-	-	-	-	-	-	-
Rubidium	µg/L	0.7	0.7	0.6	0.7	0.70	0.77	0.9	1	0.96	0.86
Scandium	µg/L	-	-	1	-	-	-	-	-	-	-
Selenium	µg/L	0.09	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	3,260	2,770	2,740	2,730	3,780	1,660	1,950	2,150	2,530	3,130
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	0.99	1.06	1.13	1.21	1.29	0.64	0.79	0.88	0.96	2.54
Strontium	µg/L	27.8	26.3	31.4	28	35.8	17.2	23.2	26.3	29.5	57.4
Sulfur	µg/L	<500	1,200	<500	<500	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	0.007	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1.1	0.7	1.1	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.02	0.01	0.03	0.02	0.05	<0.01	0.01	0.01	0.02	0.04
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.06	0.08	0.16	0.19	0.18	0.14
Yttrium	µg/L	-	-	<1	-	-	-	-	-	-	-
Zinc	µg/L	<1	<1	4	2	2.5	0.8	<0.5	0.5	0.5	1.1
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location						21					
Sample Date		4-Oct-22	8-Nov-22	10-Jan-23	6-Feb-23	9-Mar-23	29-May-23	26-Jun-23	10-Jul-23	14-Aug-23	18-Sep-23
Sample ID		21	21	21	21	21	21	21	21	21	21
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV
Laboratory Work Order		479018	482783	488145	490194	C369577	C3F5169	C3J1238	C3K7615	C3P0321	C3T1094
Laboratory Sample ID	Units	1808305	1824044	1842169	1849341	VGN673	VYP226	WGC257	WJL686	WSM217	XBA937
Metals, Total											
Aluminum	µg/L	7	8	8	4	4.1	8.7	6.8	8.2	7.6	4.9
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	3.1	2.8	2.2	2.5	2.6	2.5	3.5	3.9	4.6	3.7
Barium	µg/L	8.8	8.1	6.3	8.4	7.5	4.1	6.4	7.1	7.8	9.5
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	2	3	3	4	4	4
Cadmium	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	35.7	34.4	37.3	39	42.5	20.3	25.1	27.1	31.9	34.2
Cerium	µg/L	-	-	<1	-	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.6	0.3	0.3	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.2	<0.1	<0.1	<0.1	0.06	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	0.3	0.5	1.4	0.3	0.2	0.2	0.2	0.2	0.3	0.2
Europium	µg/L	-	-	<1	-	-	-	-	-	-	-
Gallium	µg/L	-	-	<1	-	-	-	-	-	-	-
Iron	µg/L	230	100	120	160	238	76	57	60	69	98
Lanthanum	µg/L	-	-	<1	-	-	-	-	-	-	-
Lead	µg/L	<0.05	<0.05	0.31	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	1	<1	1	0.8	<0.5	<0.5	0.6	0.7	0.7
Magnesium	mg/L	7.24	6.47	7.5	7.67	8.54	4.36	5.33	5.16	6.07	6.17
Manganese	µg/L	4.1	3.9	42.8	53.6	108	5	11.3	11.6	13.7	9.7
Mercury	µg/L	<0.1	<0.1	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.06	0.05	0.05	0.05	0.05	<0.05	<0.05	0.06	<0.05	0.05
Nickel	µg/L	<0.5	<0.5	<0.5	<0.5	0.1	0.1	<0.1	<0.1	0.1	0.1
Niobium	µg/L	-	-	<1	-	-	-	-	-	-	-
Phosphorus	µg/L	60	<50	<50	<50	<5	5	5	8	<5	<5
Potassium	mg/L	0.31	0.4	0.3	0.36	0.327	0.42	0.46	0.46	0.50	0.42
Rhodium	µg/L	-	-	<1	-	-	-	-	-	-	-
Rubidium	µg/L	0.6	0.7	0.6	0.7	0.73	0.8	0.94	0.97	1	0.89
Scandium	µg/L	-	-	1	-	-	-	-	-	-	-
Selenium	µg/L	0.2	0.07	0.07	<0.05	<0.05	<0.05	0.05	0.05	0.05	0.05
Silicon	µg/L	4,230	2,770	2,980	2,840	3,910	1,710	1,960	2,170	2,690	3,170
Silver	µg/L	0.07	0.06	0.04	0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	1.16	1.05	1.17	1.24	1.28	0.66	0.82	0.80	1.01	1.06
Strontium	µg/L	27.4	26.2	27.8	28.6	37.3	18.3	23.8	25.2	30	32.9
Sulfur	µg/L	1,300	1,000	<500	<500	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-
Tin	µg/L	0.1	0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1.6	0.9	1	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.02	0.02	0.03	0.03	0.05	<0.01	0.01	0.01	0.02	0.02
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.07	0.1	0.17	0.19	0.21	0.17
Yttrium	µg/L	-	-	<1	-	-	-	-	-	-	-
Zinc	µg/L	1	1	3	2	2.6	0.9	0.6	0.7	2.5	0.7
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		22A										
Sample Date		19-Oct-22	7-Nov-22	5-Jan-23	8-Feb-23	8-Mar-23	4-Apr-23	18-May-23	23-Jun-23	4-Jul-23	2-Aug-23	11-Sep-23
Sample ID		22A	22A	22A	22A	22A	22A	22A	22A	22A	22A	22A
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480701	482900	487639	490500	C369594	C3A1264	C3E5063	C3J0006	C3K0765	C3N6270	C3S2923
Laboratory Sample ID	Units	1815503	1824497	1840473	1850233	VGN748	VNG416	VWI322	WFV597	WIB171	WPN397	WZJ685
Field Parameters												
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.52	7.37	7.58	7.01	7.02	6.69	6.99	7.32	7.00	7.21	7.04
Temperature, Field	deg C	2.9	2.5	0	0.8	0.1	0.0	10.2	23.1	21.9	20.8	14.3
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-	-
General Chemistry												
Acidity as CaCO3	mg/L	16	<5	41	19	14	24	<5.0	<5.0	9.0	<5.0	5.4
Alkalinity, Bicarbonate (as CaCO3)	mg/L	97	113	128	150	140	150	70	99	120	130	130
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	1.1
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00317	0.0145	0.00065	0.00174	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	97	114	128	150	140	150	70	99	120	130	130
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	<0.01	0.07	<0.050	0.086	<0.050	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.0004	<0.0004	<0.0004	<0.00051	<0.0004	<0.0004	<0.0004
Biochemical Oxygen Demand (BOD)	mg/L	0.9	2	1.2	5.6	<2	<2	NND	<2	<2	<2	<2
Chemical Oxygen Demand	mg/L	30	30	30	34	30	31	46	44	46	38	41
Chloride	mg/L	0.6	0.6	0.6	0.6	<1.0	<1.0	<1.0	1.5	1.6	1.1	<1.0
Color, True	TCU	51.5	51.4	42.2	41.6	35	37	89	52	68	42	44
Cyanide	mg/L	<0.002	<0.002	<0.002	0.005	0.00055	<0.00050	0.00097 CYN	0.00075	0.00100	<0.00050	<0.00050
Cyanide (Free)	mg/L	0.002	0.003	<0.001	<0.001	<0.002	<0.002 ICB	0.0039 ICB	0.0034	0.0057	0.0037	<0.002 ICB
Dissolved Organic Carbon (DOC)	mg/L	13.2	16.6	11.8	12.2	11	11	18	13	16	13	13
Electrical Conductivity, Lab	µS/cm	222	221	250	277	270	288	136	198	235	248	249
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	120	119	139	147	150	160	77	110	130	140	140
Mineral Oil and Grease	mg/L	-	-	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Nitrate (as N)	mg/L	<0.02	<0.05	0.04	0.07	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.05	<0.01	0.03	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	<1	<1	2	1	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
pH, lab	S.U.	7.27	7.93	6.58	7.01	7.64	7.59	7.66	7.88	7.78	7.91	7.95
Phosphate	mg/L	0.028	0.019	0.056	0.031	-	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.007	0.006	<0.001	<0.001	0.0042	0.0043	0.0045	0.0066	0.0067	0.0056	0.0063
Sulfate	mg/L	1.7	1.4	1.8	1.7	2.8	3.0	4.5	2.8	2.4	2.3	2.7
Total Dissolved Solids	mg/L	220	240	135	175	155	180	95	135	145	150	165
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	0.44	0.46	0.44	0.42	0.46	0.34	0.43
Total Organic Carbon	mg/L	13.7	16.8	11.7	12.4	12	12	17	14	16	14	13
Total Suspended Solids	mg/L	4	<0.67	1	1.3	<1	1	<1	<1	<1	1	<1
Turbidity, Lab	NTU	2.2	2.11	0.9	1	0.6	0.6	0.4	0.6	0.4	0.4	0.5
Metals, Dissolved												
Aluminum	µg/L	7	4	4	4	3.4	4.4	13.1	5.3	5.2	3.8	3.3
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	3.2	3.2	4.5	5.2	3.7	4.5	2.9	6	8.1	6.9	5
Barium	µg/L	10.3	11.6	14.4	15.9	14.6	15.3	7.5	11.2	12.8	12.3	13.1
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	4	3	4	4	5	14	4
Cadmium	µg/L	0.01	0.02	0.007	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	35.4	34.8	43.2	43.9	44.4	46.6	23.0	33.2	40.9	43.5	41.8
Cerium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.4	0.3	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	µg/L	0.1	0.2	0.2	0.3	0.23	0.45	0.05	0.18	0.19	0.21	0.16
Copper	µg/L	0.4	0.4	0.5	0.8	0.5	0.8	0.4	0.3	0.2	1	0.3
Europium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Gallium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Iron	µg/L	80	90	140	220	232	378	55	73	152	68	65
Lanthanum	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Lead	µg/L	0.15	<0.05	0.29	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
Lithium	µg/L	<1	1	1	1	0.8	0.9	<0.5	0.8	0.8	0.9	0.8
Magnesium	mg/L	7.1	7.05	8.58	8.09	8.73	9.65	4.72	6.21	7.28	7.85	7.80
Manganese	µg/L	7.3	13.8	73	117	75.2	110	4.8	53.3	67.4	28.6	17.6
Mercury	µg/L	-	-	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.46	0.11	0.11	0.11	0.13	0.11	0.07	0.16	0.13	0.27	0.13
Nickel	µg/L	<0.5	0.7	0.7	0.6	0.3	0.3	0.2	0.3	0.4	0.6	0.4
Niobium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	<5	<5	<5	16	<5
Potassium	mg/L	0.94	0.94	0.9	0.86	0.883	1.06	0.70	0.91	0.89	0.65	0.82
Rhodium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Rubidium	µg/L	1.8	2.1	1.7	1.8	1.63	1.90	1.38	2.09	2.2	1.5	1.94
Scandium	µg/L	-	-	<1	1	-	-	-	-	-	-	-
Selenium	µg/L	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	2,470	2,660	3,170	3,550	3,930	4,780	2,150	1,940	3,000	2,660	3,250
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	1.01	1.02	1.13	1.02	1.17	1.4	0.67	0.93	1.06	2.57	1.28
Strontium	µg/L	24.9	29.1	30.5	34.1	37.4	39.5	18.8	30	35.3	39.7	36.9
Sulfur	µg/L	<500	1,200	1,200	900	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	0.02	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.8	0.6	0.7	0.6	<0.5	0.6	0.7	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	<0.1
Uranium	µg/L	0.05	0.06	0.06	0.08	0.09	0.08	0.02	0.09	0.05	0.11	0.08
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.11	0.11	0.12	0.18	0.15	0.19	0.13
Yttrium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Zinc	µg/L	<1	<1	1	2	1.0	0.7	0.9	0.6	<0.5	0.6	0.6
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	0.1	<0.1	<0.1	<0.1	0.2	0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		22A										
Sample Date		19-Oct-22	7-Nov-22	5-Jan-23	8-Feb-23	8-Mar-23	4-Apr-23	18-May-23	23-Jun-23	4-Jul-23	2-Aug-23	11-Sep-23
Sample ID		22A	22A	22A	22A	22A	22A	22A	22A	22A	22A	22A
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480701	482900	487639	490500	C369594	C3A1264	C3E5063	C3J0006	C3K0765	C3N6270	C3S2923
Laboratory Sample ID	Units	1815503	1824497	1840473	1850233	VGN748	VNG416	VWI322	WFV597	WIB171	WPN397	WZJ685
Metals, Total												
Aluminum	µg/L	14	16	8	13	5.3	6.5	16.5	9.2	6.5	5.4	4.8
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	3.2	3.1	4.2	5.1	3.9	4.5	2.9	5.8	8.5	7.2	5.2
Barium	µg/L	10.4	11.6	14.4	16.9	14.9	14.3	7.8	11.3	13.2	12.3	13.6
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	4	3	3	4	4	5	5
Cadmium	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	34.8	37.2	43.8	44.1	47.4	48.3	21.8	33.1	40.0	44.4	42.7
Cerium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.2	0.4	0.4	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	µg/L	0.2	0.3	0.2	0.3	0.22	0.44	0.06	0.15	0.22	0.23	0.17
Copper	µg/L	0.4	0.5	0.5	0.8	0.4	0.3	0.4	0.3	0.2	0.3	0.2
Europium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Gallium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Iron	µg/L	160	170	250	350	274	414	60	109	212	93	102
Lanthanum	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Lead	µg/L	<0.05	<0.05	0.34	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	1	1	2	0.8	0.9	<0.5	0.7	0.7	0.8	0.8
Magnesium	mg/L	7.07	7.27	8.65	8.65	8.69	9.39	4.27	6.25	7.24	7.67	7.87
Manganese	µg/L	10.6	17.3	73.6	129	75.4	107	6.6	54.4	76.8	34.3	20.9
Mercury	µg/L	<0.1	<0.1	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.18	0.13	0.14	0.15	0.13	0.11	0.08	0.13	0.13	0.2	0.13
Nickel	µg/L	<0.5	<0.5	<0.5	<0.5	0.3	0.3	0.2	0.3	0.4	0.5	0.4
Niobium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	6	7	7	9	8	8	<5
Potassium	mg/L	0.95	0.99	0.92	0.94	0.866	0.994	0.67	0.87	0.89	0.62	0.83
Rhodium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Rubidium	µg/L	1.8	2.1	1.7	1.9	1.60	1.81	1.39	1.99	2.17	1.58	1.93
Scandium	µg/L	-	-	<1	1	-	-	-	-	-	-	-
Selenium	µg/L	<0.05	<0.05	0.06	<0.05	0.05	0.05	<0.05	0.05	0.06	0.06	<0.05
Silicon	µg/L	2,510	2,930	3,360	3,890	4,140	4,630	2,040	1,930	3,120	2,720	3,410
Silver	µg/L	0.05	0.06	0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	0.99	1.07	1.11	1.1	1.17	1.39	0.75	0.95	1.04	1.13	1.26
Strontium	µg/L	24.5	29.2	30.2	37.6	36.4	37.9	18.5	28.6	36.5	38.3	36.6
Sulfur	µg/L	<500	1,300	1,500	1,100	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1.3	1.1	0.8	1.1	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.06	0.07	0.08	0.11	0.10	0.08	0.02	0.1	0.05	0.1	0.07
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.11	0.12	0.12	0.19	0.16	0.19	0.16
Yttrium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Zinc	µg/L	<1	<1	<1	2	0.6	0.7	1.5	0.6	<0.5	0.5	0.7
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	0.1	0.1	<0.1	<0.1	0.1	0.2	0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		23										
Sample Date		19-Oct-22	7-Nov-22	5-Jan-23	8-Feb-23	8-Mar-23	4-Apr-23	18-May-23	23-Jun-23	4-Jul-23	2-Aug-23	11-Sep-23
Sample ID		23	23	23	23	23	23	23	23	23	23	23
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480701	482900	487639	490500	C369594	C3A1264	C3E5063	C3J0006	C3K0765	C3N6270	C3S2923
Laboratory Sample ID	Units	1815505	1824499	1840472	1850234	VGN751	VNG417	VWI324	WFV595	WIB174	WPN398	WZJ687
Field Parameters												
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.93	8.02	7.74	7.57	7.38	7.38	7.02	7.66	7.89	7.81	7.76
Temperature, Field	deg C	4.2	4.6	0	0.1	0.0	0.0	8.2	22.1	21.1	21.1	15.9
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-	-
General Chemistry												
Acidity as CaCO3	mg/L	16	<5	32	6	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	82	105	96	110	110	110	52	78	82	90	95
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00269	0.0209	0.00112	0.00576	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	82	106	96	110	110	110	52	79	83	90	97
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	<0.01	<0.01	0.053	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.0004	<0.0004	<0.0004	<0.001	<0.0016	<0.0014	<0.00083
Biochemical Oxygen Demand (BOD)	mg/L	1.6	1.9	<0.5	3.6	<2	<2	<2	<2	<2	<2	<2
Chemical Oxygen Demand	mg/L	22	49	26	22	25	23	39	33	28	31	26
Chloride	mg/L	0.9	0.9	0.6	0.6	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0
Chlorophyll a	µg/L	-	-	-	-	-	-	-	-	-	-	-
Color, True	TCU	25.4	30.9	31.7	24.9	21	20	75	46	41	28	25
Cyanide	mg/L	<0.002	<0.002	<0.002	0.004	<0.00050	<0.00050	0.00080 CYN	<0.00050	0.00058	<0.00050	<0.00050
Cyanide (Free)	mg/L	<0.001	0.003	0.001	<0.001	<0.002	<0.002 ICB	0.0045 ICB	0.0029	0.0042	<0.002	<0.002 ICB
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	9.6	12.5	8.9	9.3	9.5	9.3	14	12	11	10	9.2
Electrical Conductivity, Lab	µS/cm	193	195	198	203	213	212	103	159	166	173	194
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	106	108	104	106	110	120	58	83	92	94	100
Mineral Oil and Grease	mg/L	-	-	-	-	<0.50	<0.50	<0.50	0.50	<0.50	<0.50	<0.50
Nitrate (as N)	mg/L	<0.02	<0.05	0.03	0.06	<0.10	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	<0.10	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.05	<0.01	<0.01	<0.010	<0.010	0.017	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	1	<1	<1	<1	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
pH, lab	S.U.	7.2	8.09	6.82	7.53	7.90	7.84	7.69	7.95	8.01	7.96	8.14
Phaeophytin A	µg/L	-	-	-	-	-	-	-	-	-	-	-
Phosphate	mg/L	0.025	0.021	1.65	0.027	-	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.004	0.006	0.003	<0.001	0.0037	0.0037	0.0047	0.0059	0.0070	0.0082	0.0095
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Radium-226	Bq/L	-	-	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	1.5	1.9	1.2	1.2	2.0	2.8	4.3	3.1	2.6	2.9	3.2
Total Dissolved Solids	mg/L	145	340	120	115	145	120	100	95	115	115	130
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	0.30	0.30	0.41	0.41	0.33	0.26	0.32
Total Organic Carbon	mg/L	10	12.7	9.3	9.5	9.9	9.3	15	12	11	11	9.5
Total Suspended Solids	mg/L	4.7	3	<0.67	<0.67	2	<1	2	<1	1	2	2
Turbidity, Lab	NTU	3.8	1.91	0.8	0.9	0.7	0.6	0.5	0.5	0.6	0.5	1.1
Metals, Dissolved												
Aluminum	µg/L	6	4	3	2	1.7	2.0	20.9	7.8	6.1	5.1	4.1
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	2.8	1.8	0.8	0.8	0.7	0.7	0.9	1.3	1.4	1.9	2.1
Barium	µg/L	11.1	12.3	11.5	11.7	11.8	11.7	7.4	10.2	10.3	10.5	10.9
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	5	4	3	5	5	15	5
Cadmium	µg/L	0.006	0.009	0.009	0.009	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	30.1	32	33	32.4	34.2	36.4	17.3	25.0	28.1	28.4	31.3
Cerium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.3	0.2	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	0.4	0.4	0.5	0.6	1.3	0.4	0.6	1.4	0.7	1.3	0.3
Europium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Gallium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Iron	µg/L	50	70	30	40	35	37	44	43	39	42	34
Lanthanum	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Lead	µg/L	<0.05	<0.05	0.13	0.32	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05
Lithium	µg/L	<1	1	1	1	0.9	0.9	0.5	0.8	0.8	0.9	0.9
Magnesium	mg/L	6.17	6.34	6.49	6	6.7	7.22	3.66	5.02	5.35	5.65	6.21
Manganese	µg/L	3.3	3.7	3.4	4.4	5.5	5.8	3.9	1.9	2	2.3	1.8
Mercury	µg/L	-	-	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.15	0.1	0.12	0.95	0.12	0.11	0.06	0.12	0.12	0.15	0.11
Nickel	µg/L	<0.5	<0.5	<0.5	<0.5	0.2	0.2	0.3	0.2	0.2	0.2	0.2
Niobium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	<5	<5	<5	14	<5
Potassium	mg/L	0.86	0.86	0.79	0.73	0.792	0.819	0.51	0.65	0.66	0.65	0.75
Rhodium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Rubidium	µg/L	2	2.1	1.8	1.9	1.82	1.80	1.26	1.73	1.85	1.62	1.93
Scandium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Selenium	µg/L	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	2,000	2,040	2,180	2,380	2,830	3,030	1,830	1,970	2,100	2,190	2,580
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	1.18	1.19	0.79	0.73	0.816	0.883	0.51	0.81	0.72	2.49	1.59
Strontium	µg/L	21.9	26.1	23.3	26.6	29.0	28.1	14	21.7	22.8	25.5	26.6
Sulfur	µg/L	500	1,300	1,000	800	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	0.04	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.6	0.4	0.4	0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	<0.1
Uranium	µg/L	0.22	0.22	0.18	0.22	0.27	0.27	0.08	0.17	0.18	0.2	0.23
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.11	0.11	0.18	0.24	0.26	0.27	0.23
Yttrium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Zinc	µg/L	<1	<1	1	3	1.3	<0.5	0.9	<0.5	<0.5	0.9	<0.5
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		23										
Sample Date		19-Oct-22	7-Nov-22	5-Jan-23	8-Feb-23	8-Mar-23	4-Apr-23	18-May-23	23-Jun-23	4-Jul-23	2-Aug-23	11-Sep-23
Sample ID		23	23	23	23	23	23	23	23	23	23	23
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480701	482900	487639	490500	C369594	C3A1264	C3E5063	C3J0006	C3K0765	C3N6270	C3S2923
Laboratory Sample ID	Units	1815505	1824499	1840472	1850234	VGN751	VNG417	VWI324	WFV595	WIB174	WPN398	WZJ687
Metals, Total												
Aluminum	µg/L	32	21	6	8	3.7	3.6	29.9	13.2	51.9	11.1	13
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	2.7	1.9	0.8	0.7	0.7	0.7	1.1	1.3	1.3	2	2.2
Barium	µg/L	11.8	13.5	11.6	12	12.1	11.5	7.8	10.3	10.9	10.9	12.4
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	4	4	3	5	5	5	5
Cadmium	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	30.3	33.8	34.2	32.2	35.5	35.3	17.4	26.2	26.8	29.8	31.6
Cerium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Cesium	µg/L	0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.5	0.4	0.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	0.5	0.7	0.7	0.6	0.4	0.4	0.5	0.5	0.5	0.4	0.4
Europium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Gallium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Iron	µg/L	190	200	140	130	79	76	71	77	81	98	122
Lanthanum	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Lead	µg/L	0.09	0.05	0.18	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	1	1	1	1.0	1.0	0.6	0.8	0.8	0.8	0.9
Magnesium	mg/L	6.2	6.68	6.75	6.33	6.58	7.08	3.79	5.28	5.33	5.54	6.25
Manganese	µg/L	14.9	16.8	5.6	7.8	8.1	8.7	7.4	11.5	16	23.1	24.1
Mercury	µg/L	<0.1	<0.1	<0.1	0.0007	0.00093	0.00077	0.00388	0.00192	0.00147	0.00126	0.00087
Molybdenum	µg/L	0.15	0.2	0.17	0.12	0.14	0.12	0.07	0.09	0.1	0.11	0.12
Nickel	µg/L	<0.5	<0.5	<0.5	<0.5	0.2	0.2	0.3	0.2	0.2	0.2	0.2
Niobium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	5	<5	6	6	7	8	<5
Potassium	mg/L	0.89	0.92	0.84	0.77	0.765	0.778	0.55	0.68	0.66	0.66	0.77
Rhodium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Rubidium	µg/L	2.1	2.3	1.9	1.9	1.72	1.69	1.29	1.75	1.9	1.81	1.93
Scandium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Selenium	µg/L	<0.05	0.14	<0.05	<0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06
Silicon	µg/L	2,100	2,330	2,470	2,590	2,940	3,030	1,890	2,010	2,060	2,260	2,660
Silver	µg/L	0.05	0.08	0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	1.16	1.3	0.82	0.79	0.829	0.876	0.50	0.88	0.71	0.92	1.43
Strontium	µg/L	21.9	27.4	24	27.7	28.3	27.0	13.9	21.6	24.2	24.8	26.7
Sulfur	µg/L	<500	1,500	1,700	700	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	2.1	1.3	0.7	0.6	<0.5	<0.5	1	0.6	<0.5	<0.5	0.7
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.23	0.29	0.25	0.29	0.29	0.28	0.08	0.16	0.16	0.19	0.25
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.14	0.14	0.19	0.26	0.29	0.31	0.3
Yttrium	µg/L	-	-	<1	<1	-	-	-	-	-	-	-
Zinc	µg/L	1	<1	<1	3	0.6	<0.5	0.9	0.7	0.5	<0.5	0.6
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location						24						
Sample Date		5-Oct-22	8-Nov-22	4-Jan-23	6-Feb-23	6-Mar-23	4-Apr-23	18-May-23	14-Jun-23	4-Jul-23	2-Aug-23	11-Sep-23
Sample ID		24	24	24	24	24	24	24	24	24	24	24
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		479154	482783	487567	490194	C365616	C3A1264	C3E5063	C3H7129	C3K0765	C3N6270	C3S2923
Laboratory Sample ID	Units	1808889	1824043	1840230	1849338	VFS058	VNG418	VWI325	WDD948	WIB175	WPN399	WZJ688
Field Parameters												
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.87	8.13	8.01	7.63	6.88	7.24	6.93	7.78	7.99	7.92	7.85
Temperature, Field	deg C	11.7	4.1	0.1	0.4	1.7	0.4	8.2	17.9	21.4	21.1	16.1
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-	-
General Chemistry												
Acidity as CaCO3	mg/L	7	9	32	5	12	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	88	29	100	116	110	110	51	75	80	86	90
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.011	0.00934	0.00123	0.00709	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	88	29	100	116	110	110	52	75	81	87	91
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	<0.01	0.09	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.0004	<0.0004	<0.0004	<0.001	<0.0021	<0.0017	<0.001
Biochemical Oxygen Demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Chloride	mg/L	0.7	3.8	0.5	0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.2
Chlorophyll a	µg/L	-	-	-	-	-	-	-	-	-	-	-
Color, True	TCU	42.2	27.9	27.8	29.7	20	20	80	51	41	30	26
Cyanide	mg/L	0.007	0.003	0.003	0.005	0.00068	0.00051	0.00088 CYN	0.00070	0.00069	<0.00050	<0.00050
Cyanide (Free)	mg/L	0.002	0.002	<0.001	<0.001	<0.002 BH	<0.002 ICB	0.0034 ICB	0.0029	0.004	0.0035	<0.002 ICB
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	10.2	9.8	9.2	9.3	9.7	9.3	15	13	11	10	9.9
Electrical Conductivity, Lab	µS/cm	188	208	201	206	216	212	101	153	167	179	201
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	100	97.5	104	99.4	120	120	57	85	90	92	100
Nitrate (as N)	mg/L	<0.02	<0.02	0.03	0.03	<0.10	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	<0.10	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	-	-	-	-	-	-	-
pH, lab	S.U.	7.81	7.74	6.86	7.62	7.92	7.85	7.67	7.92	8.06	7.98	8.09
Phaeophytin A	µg/L	-	-	-	-	-	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.011	<0.001	0.002	<0.001	0.0034	0.0035	0.0053	0.0075	0.0037	0.0054	0.0079
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Radium-226	Bq/L	<0.005	<0.005	<0.005	0.005	<0.010	-	-	-	-	-	-
Sulfate	mg/L	1.3	8.1	1.1	1.5	2.9	3.0	4.3	3.8	4.7	7.0	8.8
Total Dissolved Solids	mg/L	145	140	130	160	115	120	65	115	115	120	140
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	0.33	0.34	0.46	0.42	0.32	0.25	0.30
Total Organic Carbon	mg/L	10.3	11.8	9.1	9.3	9.8	9.5	16	13	12	11	10
Total Suspended Solids	mg/L	2.7	<1	<0.67	<0.67	1	1	1	3	1	2	3
Turbidity, Lab	NTU	1.7	2.4	0.9	0.8	0.7	0.6	0.5	0.7	0.5	0.6	1.2
Metals, Dissolved												
Aluminum	µg/L	5	3	5	2	1.8	2.0	23.1	9.4	6	4.1	3.7
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	3.2	3.8	0.8	0.6	0.6	0.6	1.1	1.6	2.2	3.6	4.4
Barium	µg/L	11.3	11.7	11.7	11.7	12.3	11.9	7.5	9.4	10.2	9.8	10.6
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	5	4	3	4	5	13	5
Cadmium	µg/L	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	30.3	30.2	32.6	31.5	35.2	36.2	16.9	25.4	27.1	27.2	29.7
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.7	0.3	0.2	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	0.5	0.5	1	0.9	0.6	0.3	0.6	0.5	0.5	1	0.4
Iron	µg/L	60	70	30	10	34	35	50	50	36	30	35
Lead	µg/L	<0.05	<0.05	0.23	0.17	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	1	<1	<1	0.9	0.9	0.5	0.7	0.8	0.9	0.9
Magnesium	mg/L	6.14	6.3	6.51	6.33	6.97	6.84	3.58	5.08	5.42	5.85	6.32
Manganese	µg/L	3.1	1.9	3.2	3	4.5	4.1	5.3	1.6	1.2	1.4	2.9
Mercury	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.14	0.1	0.56	0.2	0.12	0.12	0.07	0.09	0.11	0.13	0.11
Nickel	µg/L	1.1	<0.5	<0.5	<0.5	0.2	0.2	0.3	0.2	0.2	0.2	0.2
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	<5	<5	<5	8	<5
Potassium	mg/L	0.89	0.91	0.78	0.82	0.838	0.8	0.53	0.66	0.67	0.70	0.77
Rubidium	µg/L	2	2.2	1.8	1.8	1.80	1.75	1.3	1.63	1.82	1.76	1.98
Selenium	µg/L	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	2,220	2,160	2,120	1,850	2,940	3,000	1,820	2,070	1,960	2,020	2,510
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	1	5.11	0.79	0.8	0.865	0.843	0.50	0.94	1.67	4.18	3.68
Strontium	µg/L	23.1	27.3	24.6	21.9	29.2	27.8	13.7	21.1	23	25.4	26.4
Sulfur	µg/L	<500	3,400	600	<500	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	0.02	<0.01	0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.9	0.6	0.7	0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	<0.1
Uranium	µg/L	0.21	0.18	0.28	0.21	0.28	0.27	0.08	0.14	0.16	0.17	0.2
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.12	0.12	0.17	0.25	0.25	0.31	0.3
Zinc	µg/L	<1	<1	3	4	0.8	<0.5	0.8	<0.5	<0.5	<0.5	<0.5
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location						24						
Sample Date		5-Oct-22	8-Nov-22	4-Jan-23	6-Feb-23	6-Mar-23	4-Apr-23	18-May-23	14-Jun-23	4-Jul-23	2-Aug-23	11-Sep-23
Sample ID		24	24	24	24	24	24	24	24	24	24	24
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		479154	482783	487567	490194	C365616	C3A1264	C3E5063	C3H7129	C3K0765	C3N6270	C3S2923
Laboratory Sample ID	Units	1808889	1824043	1840230	1849338	VFS058	VNG418	VWI325	WDD948	WIB175	WPN399	WZJ688
Metals, Total												
Aluminum	µg/L	21	22	9	5	3.2	4.0	33.3	22.4	9.2	11.5	12.6
Antimony	µg/L	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	3.4	3.8	0.6	0.7	0.7	0.7	1.1	1.7	2.1	3.8	5
Barium	µg/L	12.3	11.9	11.8	12	12.0	11.5	7.7	10.3	10.4	10.5	11
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	4	5	3	4	5	5	5
Cadmium	µg/L	<0.005	0.008	0.123	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005
Calcium	mg/L	29.9	29.9	33.7	32.9	35.7	34.3	17.5	24.2	25.9	28.2	29.6
Cesium	µg/L	<0.01	0.01	0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.4	0.3	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	0.6	0.8	1.5	0.4	0.4	0.4	0.6	0.5	0.5	0.5	0.4
Iron	µg/L	300	150	150	120	73	78	76	116	74	79	102
Lead	µg/L	0.1	0.06	0.42	0.19	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05
Lithium	µg/L	<1	1	1	1	0.9	1.0	0.5	0.7	0.7	0.8	0.9
Magnesium	mg/L	6.13	6.11	6.75	6.8	6.72	7.12	3.70	4.81	5.31	6.00	6.36
Manganese	µg/L	17.2	10.6	9.2	5.7	8.4	8.2	8.6	15.8	11.6	17.4	18.9
Mercury	µg/L	<0.1	<0.1	0.2	0.002	0.00110	0.00068	0.00331	0.00103	0.00150	0.00127	0.00092
Molybdenum	µg/L	0.1	0.14	0.32	0.11	0.13	0.12	0.07	0.09	0.11	0.11	0.11
Nickel	µg/L	<0.5	<0.5	<0.5	<0.5	0.3	0.2	0.3	0.2	0.2	0.2	0.2
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	5	7	<5	8	<5
Potassium	mg/L	0.86	1	0.82	0.86	0.804	0.776	0.55	0.64	0.67	0.72	0.79
Rubidium	µg/L	2.1	2.1	1.8	1.9	1.80	1.74	1.33	1.64	1.84	1.88	1.98
Selenium	µg/L	<0.05	0.17	<0.05	<0.05	0.06	0.06	0.06	0.05	0.06	0.06	0.06
Silicon	µg/L	2,430	2,200	2,450	2,000	2,900	2,930	1,950	2,060	2,000	2,120	2,570
Silver	µg/L	0.07	0.06	0.1	0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	1.01	4.91	0.82	0.83	0.817	0.898	0.50	0.88	1.46	2.85	3.87
Strontium	µg/L	23.3	25.9	24.8	22.7	28.5	27.4	13.7	21.4	23.3	24.7	26.3
Sulfur	µg/L	1,100	2,800	1,600	<500	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	0.9	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	0.02	<0.01	0.011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1.7	1.3	0.9	0.7	<0.5	<0.5	1.2	1	<0.5	0.5	0.6
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.21	0.23	0.29	0.28	0.27	0.28	0.07	0.13	0.15	0.16	0.2
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.14	0.14	0.2	0.3	0.26	0.34	0.36
Zinc	µg/L	<1	<1	<1	2	0.6	0.5	1	0.5	<0.5	<0.5	<0.5
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location													
							25						
Sample Date		19-Oct-22	8-Nov-22	4-Jan-23	6-Feb-23	9-Mar-23	15-Mar-23	4-Apr-23	9-May-23	23-Jun-23	4-Jul-23	8-Aug-23	7-Sep-23
Sample ID		25	25	25	25	25	25	25	25	25	25	25	25
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480701	482783	487567	490194	C369577	C376074	C3A1264	C3D3660	C3J0006	C3K0765	C3O2537	C3R9201
Laboratory Sample ID	Units	1815501	1824041	1840231	1849369	VGN675	VHW773	VNG420	VTX937	WFV594	WIB177	WQV776	WYR005
Field Parameters													
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.35	7.48	6.74	6.94	6.90	-	6.63	7.26	7.090	7.15	7.15	7.24
Temperature, Field	deg C	2.4	1.9	0	0	0.0	-	0.0	3.6	23.3	26.1	21.3	15.6
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-	-	-
General Chemistry													
Acidity as CaCO3	mg/L	24	12	67	13	26	-	24	<5.0	6.2	8.2	5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	117	76	162	131	130	-	140	93	140	150	150	160
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1.0	-	<1.0	<1.0	<1.0	1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00219	0.00632	0.00034	0.00229	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	117	76	162	131	130	-	140	94	140	150	150	160
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	0.28	0.05	0.094	-	0.28	0.053	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.0004	-	<0.0004	<0.0004	<0.0004	<0.00043	<0.0004	<0.0004
Biochemical Oxygen Demand (BOD)	mg/L	-	9	-	-	-	-	-	-	-	-	-	-
Chemical Oxygen Demand	mg/L	-	49	-	-	-	-	-	-	-	-	-	-
Chloride	mg/L	33.7	30.8	26.5	6.7	4.0	-	7.0	12	3.6	4.0	5.3	8.9
Chlorophyll a	µg/L	<0.5	-	-	-	-	-	-	-	<2.1	-	-	-
Color, True	TCU	87.5	72.4	93.1	31.1	34	-	38	59	65	71	52	57
Cyanide	mg/L	0.004	0.004	0.005	0.007	<0.00050	-	0.00067	0.00053 CYN	0.00062	0.00107	0.00078	0.00070
Cyanide (Free)	mg/L	0.001	0.002	<0.001	<0.001	0.0036	-	<0.002 ICB	0.0021 ICB	0.0042	0.0042	0.0028	<0.002
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	19.2	18.1	22.2	12.4	12	-	13	13	16	18	18	17
Electrical Conductivity, Lab	µS/cm	384	344	412	253	264	-	287	234	279	305	303	346
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	164	145	184	123	140	-	150	100	150	170	170	190
Nitrate (as N)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.10	-	<0.10	0.16	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	<0.10	-	<0.10	0.16	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.010	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
pH, lab	S.U.	7.11	7.57	6.3	7.13	7.58	-	7.57	7.68	7.78	7.85	7.83	7.73
Phaeophytin A	µg/L	<0.5	-	-	-	-	-	-	-	-	-	-	-
Pheophytin a	µg/L	-	-	-	-	-	-	-	-	<2.1	-	-	-
Phosphate	mg/L	-	0.025	-	-	-	-	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.024	0.02	0.009	<0.001	0.013	-	0.033	0.017	0.031	0.012	0.020	0.020
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Radium-226	Bq/L	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	1.2	2	1	2.7	2.9	-	4.5	6.2	2.6	2.8	2.1	2.1
Total Dissolved Solids	mg/L	300	240	255	190	185	-	165	175	195	185	220	210
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	0.51	-	0.65	0.31	0.67	0.65	0.58	0.55
Total Organic Carbon	mg/L	19.3	11.3	22.7	12.5	13	-	14	13	18	18	19	17
Total Suspended Solids	mg/L	2.7	<1	3	2.3	<1	-	5	18	3	2	2	3
Turbidity, Lab	NTU	1.1	0.8	1.4	1.7	0.5	-	0.5	9.9	0.5	0.8	0.6	0.5
Speciated Metals													
Methyl Mercury	µg/L	0.00067	0.00068	0.00163	0.00042	-	0.00085	<0.00005	0.00017	0.00066	0.00065	<0.00005	0.00029
Metals, Dissolved													
Aluminum	µg/L	7	6	7	2	2.1	-	2.7	24.7	5.2	4.2	1.9	1.9
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.4	0.2	0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	107	121	149	21.3	21.3	-	32.2	10.2	36.5	47.4	54	46.2
Barium	µg/L	9.1	8.9	21.1	9.1	9.1	-	11.3	8.5	12.5	10.3	14.4	13.8
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	3	-	3	3	4	5	4	4
Cadmium	µg/L	0.006	<0.005	0.007	0.006	<0.01	-	<0.01	0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	47.2	46.4	57.8	39.4	41.7	-	45.3	33.5	48.3	53.1	52.2	61.3
Cesium	µg/L	0.03	0.02	0.04	0.01	<0.02	-	0.05	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.4	0.5	0.6	0.1	<0.5	-	<0.5	0.8	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.1	0.1	1.3	0.2	0.16	-	0.23	0.08	0.11	0.09	<0.05	0.06
Copper	µg/L	0.7	1.9	0.6	0.2	0.1	-	0.1	0.7	0.6	0.3	0.2	0.2
Iron	µg/L	80	110	1,300	140	276	-	425	92	129	130	51	118
Lead	µg/L	<0.05	0.08	0.07	<0.05	<0.05	-	<0.05	0.11	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	1	<1	<1	0.7	-	0.8	0.5	0.7	0.8	0.8	1
Magnesium	mg/L	9.63	9.27	11.4	7.62	7.88	-	8.78	5.17	6.94	7.95	8.58	9.10
Manganese	µg/L	15.7	9.8	2,910	150	184	-	340	18	134	130	20.5	41.5
Mercury	µg/L	-	-	-	-	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.07	0.1	0.21	0.13	0.12	-	0.21	0.26	0.24	0.19	0.13	0.11
Nickel	µg/L	<0.5	0.6	1.2	<0.5	0.2	-	0.5	0.5	0.4	0.4	0.3	0.4
Phosphorus	µg/L	<50	<50	<50	<50	10	-	21	<5	11	10	12	6
Potassium	mg/L	2.05	1.75	1.7	1.03	1.02	-	1.53	0.82	1.39	1.45	1.28	1.77
Rubidium	µg/L	5.6	4.7	4.3	2.3	2.34	-	3.14	1.62	3.36	3.98	3.45	4.27
Selenium	µg/L	0.09	0.15	<0.05	<0.05	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	3,910	3,560	4,650	2,030	2,830	-	3,560	2,190	1,670	2,280	2,330	1,740
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	17.2	13.8	13.7	3.7	2.73	-	4.13	7.90	2.40	2.89	3.44	4.51
Strontium	µg/L	45.2	50.1	59	33.8	42.6	-	49.6	34.1	48.8	55.8	60	63.9
Sulfur	µg/L	<500	1,800	600	600	-	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	-	<0.005	<0.005	0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Tin	µg/L	<0.1	0.2	0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.9	0.8	1.1	0.5	<0.5	-	<0.5	1.2	0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.04	0.04	0.04	0.04	0.03	-	0.10	0.2	0.12	0.09	0.06	0.08
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	<0.05	-	<0.05	0.41	0.27	0.19	0.11	0.12
Zinc	µg/L	3	4	24	3	0.9	-	1.0	3	3.3	1.2	0.5	1.2
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	-	<0.1	0.2	0.2	0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		25											
Sample Date		19-Oct-22	8-Nov-22	4-Jan-23	6-Feb-23	9-Mar-23	15-Mar-23	4-Apr-23	9-May-23	23-Jun-23	4-Jul-23	8-Aug-23	7-Sep-23
Sample ID		25	25	25	25	25	25	25	25	25	25	25	25
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480701	482783	487567	490194	C369577	C376074	C3A1264	C3D3660	C3J0006	C3K0765	C3O2537	C3R9201
Laboratory Sample ID	Units	1815501	1824041	1840231	1849369	VGN675	VHW773	VNG420	VTX937	WFV594	WIB177	WQV776	WYR005
Metals, Total													
Aluminum	µg/L	12	9	11	16	4.6	-	14.5	323	14.1	5.9	2.9	12.1
Antimony	µg/L	<0.1	<0.1	0.1	<0.1	<0.1	-	0.4	0.2	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	96	104	140	19.6	21.6	-	33.8	10.8	39.5	48.3	53.5	56.6
Barium	µg/L	9.2	8.3	21	9	9.2	-	11.1	10.9	12.8	10.3	14.9	17.2
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	3	-	3	3	5	5	5	4
Cadmium	µg/L	<0.005	<0.005	0.008	<0.005	<0.005	-	<0.005	0.019	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	46.8	46.6	54.8	39.8	40.8	-	44.7	37.1	48.6	50.3	52.0	62.0
Cesium	µg/L	0.03	0.02	0.04	0.01	<0.02	-	0.05	0.04	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.4	0.4	<0.1	<0.5	-	<0.5	0.9	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.1	0.1	1.3	0.2	0.16	-	0.26	0.32	0.13	0.1	<0.05	0.15
Copper	µg/L	0.7	1.1	0.8	0.5	0.1	-	0.2	1.6	0.7	0.3	0.2	0.4
Iron	µg/L	130	110	1,350	240	293	-	462	485	206	192	100	351
Lead	µg/L	<0.05	<0.05	0.2	0.08	<0.05	-	0.08	0.39	<0.05	<0.05	<0.05	0.07
Lithium	µg/L	<1	<1	<1	1	0.8	-	0.9	0.8	0.8	0.8	1	1.1
Magnesium	mg/L	9.66	9.28	11.1	7.57	7.7	-	8.89	6.03	7.44	7.85	8.67	9.09
Manganese	µg/L	16.7	10.3	2,800	167	199	-	341	25.8	147	154	37.6	244
Mercury	µg/L	0.002	0.002	0.004	0.002	0.00284	0.00377	0.00279	0.00472	0.00304	0.00251	0.00104	0.00177
Molybdenum	µg/L	0.08	0.07	0.2	0.27	0.11	-	0.20	0.26	0.23	0.19	0.13	0.1
Nickel	µg/L	<0.5	<0.5	0.9	<0.5	0.2	-	0.6	1	0.5	0.4	0.4	0.4
Phosphorus	µg/L	<50	<50	<50	<50	15	-	32	19	27	19	18	30
Potassium	mg/L	2.02	1.82	1.71	1.03	0.975	-	1.49	0.95	1.46	1.39	1.26	1.83
Rubidium	µg/L	5.5	4.6	4.2	2.3	2.37	-	3.07	1.99	3.35	3.91	3.39	4.44
Selenium	µg/L	0.27	0.18	<0.05	<0.05	0.07	-	0.18	0.06	0.08	0.09	0.07	0.07
Silicon	µg/L	4,480	3,790	4,740	2,070	2,850	-	3,580	2,640	1,660	2,310	2,320	1,820
Silver	µg/L	0.05	0.06	0.04	0.05	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	17.1	13.8	13.5	3.88	2.59	-	4.18	8.54	2.65	2.85	3.41	4.37
Strontium	µg/L	44.2	48.1	56.9	34	42.9	-	48.3	32.1	48.6	56.7	59.1	64.4
Sulfur	µg/L	<500	1,400	1,100	<500	-	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	-	<0.005	0.008	0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1.2	1	1.5	1.4	<0.5	-	0.6	13.2	0.9	<0.5	<0.5	0.7
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.04	0.04	0.05	0.05	0.03	-	0.09	0.18	0.1	0.08	0.06	0.07
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	<0.05	-	0.09	0.97	0.33	0.2	0.12	0.16
Zinc	µg/L	3	2	35	4	1.2	-	2.6	4.1	4	1.4	0.7	2.3
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	-	<0.1	0.5	0.2	0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-Up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		26								
Sample Date		24-Oct-22	8-Nov-22	10-Jan-23	14-Feb-23	14-Mar-23	29-Jun-23	10-Jul-23	10-Aug-23	25-Sep-23
Sample ID		26	26	26	26	26	26	26	26	26
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV
Laboratory Work Order		481070	482783	488145	490925	C375955	C3J6640	C3K7615	C3O7461	C3T8385
Laboratory Sample ID	Units	1816984	1824047	1842170	1851731	VHW145	WHF369	WJL688	WRX099	XCQ464
Field Parameters										
Depth, Field	m	-	-	-	-	-	-	-	-	-
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.86	7.92	7.26	7.46	7.21	7.97	8.15	8.25	8.18
Temperature, Field	deg C	7.3	3.6	2.9	4.3	0.9	20.1	21.0	21.5	17.1
Turbidity, Field	NTU	-	-	-	-	-	-	-	0.55	-
General Chemistry										
Acidity as CaCO3	mg/L	13	10	7	9	5.4	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	80	38	109	104	110	84	88	87	89
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1.0	<1.0	1.4	1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00295	0.00795	0.00563	0.00339	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	80	39	109	104	110	85	89	88	90
Ammonia	mg/L	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	0.04	0.07	0.3	0.37	0.079	0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	0.0005	0.0028	0.0029	<0.0036	<0.0023
Anion Sum	meq/L	-	-	-	-	-	-	-	-	-
Biochemical Oxygen Demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-
Cation Sum	meq/L	-	-	-	-	-	-	-	-	-
Chloride	mg/L	50.9	53.9	56.2	55.7	50	41	40	43	42
Chlorophyll a	µg/L	1.1	-	-	-	-	3.4	-	-	-
Color, True	TCU	1.5	5.5	4.4	<1.5	4	6	5	5	5
Cyanide	mg/L	<0.002	<0.002	<0.002	<0.002	0.00096	<0.00050	<0.00050	<0.00050	<0.00050
Cyanide (Free)	mg/L	<0.001	0.002	0.003	<0.001	<0.002 BH	0.0028	0.0021	0.003	<0.002
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	5.8	5.8	5.7	5.6	6.4	6.0	6.3	6.7	6.5
Electrical Conductivity, Lab	µS/cm	334	339	379	386	412	328	332	324	321
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	96.3	102	122	121	130	120	110	110	110
Ion Balance	%	-	-	-	-	-	-	-	-	-
Nitrate (as N)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.01	<0.01	<0.01	0.028	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	-	-	-	-	-
pH, lab	S.U.	7.24	7.67	7.52	7.3	7.77	8.07	8.22	8.10	8.02
Phaeophytin A	µg/L	1.4	-	-	-	-	-	-	-	-
Pheophytin a	µg/L	-	-	-	-	-	6.1	-	-	-
Phosphorus, Total	mg/L	0.003	<0.001	0.002	0.001	0.0061	0.0041	0.0038	0.0063	0.0063
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-
Radium-226	Bq/L	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	2.8	3.2	4	3.1	5.1	3.6	3.4	3.9	3.1
Total Dissolved Solids	mg/L	140	220	230	190	240	175	190	170	185
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	0.75	0.35	0.29	0.36	0.26
Total Organic Carbon	mg/L	6.1	8.7	5.5	5.7	6.6	6.4	6.6	6.8	7.1
Total Suspended Solids	mg/L	1	1	<0.67	1	1	2	3	4	5
Turbidity, Lab	NTU	2.3	1.4	0.5	0.4	0.3	0.7	1.1	1.3	1.6
Metals, Dissolved										
Aluminum	µg/L	5	2	1	1	0.7	8.4	6.9	3.4	2.8
Antimony	µg/L	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1
Arsenic	µg/L	18.5	16.1	13.5	12.7	11.4	16.2	19.8	26.1	20.3
Barium	µg/L	12.7	13.3	14	15	14.9	12.9	12.5	11.5	12.8
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	5	5	5	15	5
Cadmium	µg/L	0.009	<0.005	0.009	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	30.9	32.4	35.4	37	40.1	37.0	33.3	33.0	34.4
Cerium	µg/L	-	-	<1	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.7	0.8	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	0.7	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	2	0.9	0.8	2.5	0.3	0.3	0.2	2.8	0.1
Europium	µg/L	-	-	<1	-	-	-	-	-	-
Gallium	µg/L	-	-	<1	-	-	-	-	-	-
Iron	µg/L	110	90	70	50	5	15	13	21	5
Lanthanum	µg/L	-	-	<1	-	-	-	-	-	-
Lead	µg/L	0.13	<0.05	0.06	0.13	<0.05	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	<1	<1	<1	0.6	<0.5	0.5	0.5	<0.5
Magnesium	mg/L	6.18	6.15	6.47	6.86	6.88	5.70	5.69	6.26	6.09
Manganese	µg/L	1	0.9	0.3	0.6	0.5	0.9	1	1.4	0.6
Mercury	µg/L	-	-	<0.1	-	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.08	0.11	0.38	0.1	0.10	0.08	0.07	0.07	0.05
Nickel	µg/L	<0.5	<0.5	0.6	<0.5	0.1	<0.1	<0.1	<0.1	<0.1
Niobium	µg/L	-	-	<1	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	<5	6	<5
Potassium	mg/L	0.55	0.57	0.62	0.67	0.704	0.59	0.58	0.66	0.59
Rhodium	µg/L	-	-	<1	-	-	-	-	-	-
Rubidium	µg/L	1.1	1.2	1.2	1.3	1.28	1.04	1.17	1.12	1.08
Scandium	µg/L	-	-	<1	-	-	-	-	-	-
Selenium	µg/L	0.19	<0.05	<0.05	0.1	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	930	990	930	1,260	1,500	1,330	1,450	1,850	1,960
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	27.8	28.3	30.1	31	32	27.8	25.8	29.6	28.4
Strontium	µg/L	42.9	51.6	61.4	61.7	70.6	54	63.5	61.7	61.3
Sulfur	µg/L	1,100	2,400	1,500	1,800	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.9	<0.3	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.04	0.04	0.03	0.03	0.04	0.04	0.05	0.05	0.04
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.05	0.11	0.14	0.18	0.1
Yttrium	µg/L	-	-	<1	-	-	-	-	-	-
Zinc	µg/L	<1	<1	<1	3	1.9	<0.5	<0.5	1.2	<0.5
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-Up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		26								
Sample Date		24-Oct-22	8-Nov-22	10-Jan-23	14-Feb-23	14-Mar-23	29-Jun-23	10-Jul-23	10-Aug-23	25-Sep-23
Sample ID		26	26	26	26	26	26	26	26	26
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV
Laboratory Work Order		481070	482783	488145	490925	C375955	C3J6640	C3K7615	C3O7461	C3T8385
Laboratory Sample ID	Units	1816984	1824047	1842170	1851731	VHW145	WHF369	WJL688	WRX099	XCQ464
Metals, Total										
Aluminum	µg/L	12	11	5	3	2.7	10	9.8	11.7	7.3
Antimony	µg/L	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1
Arsenic	µg/L	18.1	15.4	11.8	11.9	11.6	18.1	21.1	27.6	23.2
Barium	µg/L	13.1	13.8	14.2	15	15.1	13.4	13.2	13	13.9
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	4	4	4	5	5
Cadmium	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	31	32.6	38.7	38.6	38.7	35.5	33.2	32.3	33.5
Cerium	µg/L	-	-	<1	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.4	0.6	0.3	0.4	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	0.4	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	1.1	1	0.7	1.5	0.5	0.4	0.1	0.2	0.1
Europium	µg/L	-	-	<1	-	-	-	-	-	-
Gallium	µg/L	-	-	<1	-	-	-	-	-	-
Iron	µg/L	130	100	50	100	27	68	52	97	75
Lanthanum	µg/L	-	-	<1	-	-	-	-	-	-
Lead	µg/L	0.12	0.1	0.13	0.07	0.32	0.23	<0.05	0.05	0.07
Lithium	µg/L	<1	<1	<1	1	0.6	<0.5	<0.5	<0.5	<0.5
Magnesium	mg/L	6.11	6.01	7.33	7.02	7.12	5.67	5.67	6.12	5.95
Manganese	µg/L	19.4	16.8	5	5.5	4.4	51.6	41.6	57.8	50.8
Mercury	µg/L	<0.1	<0.1	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.08	0.11	0.15	0.1	0.11	0.07	0.06	0.06	0.06
Nickel	µg/L	<0.5	<0.5	<0.5	<0.5	0.2	<0.1	<0.1	<0.1	<0.1
Niobium	µg/L	-	-	<1	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	<5	<5	<5
Potassium	mg/L	0.55	0.57	0.7	0.69	0.732	0.58	0.58	0.64	0.60
Rhodium	µg/L	-	-	<1	-	-	-	-	-	-
Rubidium	µg/L	1.1	1.2	1.2	1.3	1.40	1.07	1.15	1.14	1.14
Scandium	µg/L	-	-	<1	-	-	-	-	-	-
Selenium	µg/L	0.09	0.11	0.29	0.18	<0.05	<0.05	<0.05	<0.05	<0.05
Silicon	µg/L	1,040	1,090	1,330	1,420	1,430	1,350	1,460	1,700	2,010
Silver	µg/L	0.04	0.06	0.04	0.05	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	27.9	27.6	34.7	32.8	33	25.5	24.9	27.6	26.6
Strontium	µg/L	43.6	49.8	61.2	63.1	73.7	56.6	61.3	61.3	60.5
Sulfur	µg/L	1,100	1,800	2,300	2,200	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	0.02	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-
Tin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.7	0.5	0.4	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.04
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.06	0.15	0.16	0.22	0.15
Yttrium	µg/L	-	-	<1	-	-	-	-	-	-
Zinc	µg/L	2	<1	<1	<1	3.6	0.6	<0.5	<0.5	<0.5
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location						28					
Sample Date		13-Oct-22	8-Nov-22	3-Jan-23	7-Feb-23	9-Mar-23	25-May-23	26-Jun-23	3-Jul-23	1-Aug-23	12-Sep-23
Sample ID		28	28	28	28	28	28	28	28	28	28
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480011	482783	487429	490327	C369577	C3F3423	C3J1238	C3J8815	C3N6326	C3S3687
Laboratory Sample ID	Units	1812747	1824036	1839737	1849696	VGN677	VYF417	WGC252	WHR324	WPN819	WZN939
Field Parameters											
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.8	7.68	7.19	7.14	7.05	7.21	7.59	7.52	7.48	7.63
Temperature, Field	deg C	8.1	2.1	1.8	2.6	0.0	11.1	18.1	23.2	18.4	13.2
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-
General Chemistry											
Acidity as CaCO3	mg/L	9	11	10	11	11	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	89	52	119	138	130	43	88	89	110	100
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00852	0.00589	0.00355	0.00309	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	90	52	119	138	140	43	88	89	110	100
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	0.03	0.14	0.060	<0.050	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.0004	<0.0004	<0.00066	<0.00081	<0.00053	<0.0005
Biochemical Oxygen Demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-	-
Chloride	mg/L	7	9.2	5	7.4	7.5	6.2	2.6	2.0	2.3	6.3
Chlorophyll a	µg/L	-	-	-	-	-	-	-	-	-	-
Color, True	TCU	36.9	60.5	45.5	46.7	29	120	62	60	44	56
Cyanide	mg/L	0.004	0.005	<0.002	0.007	<0.00050	0.00078	0.00094	0.00091	<0.00050	0.00088 CYN
Cyanide (Free)	mg/L	<0.001	0.002	<0.001	0.002	0.0038	0.006 ICB	0.0037	0.0035	<0.002	0.0051 ICB
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	12.3	14.9	11.6	12.9	10	19	17	16	13	15
Electrical Conductivity, Lab	µS/cm	216	195	230	271	282	97	186	189	210	225
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	96.4	90.3	111	134	140	54	98	100	110	120
Nitrate (as N)	mg/L	<0.02	0.03	0.09	0.08	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	-	-	-	-	-	-
pH, lab	S.U.	7.7	7.54	7.32	7.26	7.81	7.56	7.90	7.88	7.92	8.01
Phaeophytin A	µg/L	-	-	-	-	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.007	<0.001	<0.001	<0.001	0.0042	0.0051	0.012	0.013	0.0064	0.0060
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-
Radium-226	Bq/L	-	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	<0.3	2.4	1.3	1.9	3.1	4.6	3.3	2.8	2.5	3.2
Total Dissolved Solids	mg/L	225	120	160	200	185	90	115	145	135	120
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	0.47	0.57	0.46	0.57	0.56	0.45
Total Organic Carbon	mg/L	12.4	10.4	11.8	13.1	10	19	16	16	14	15
Total Suspended Solids	mg/L	<0.67	1	<0.67	1.3	<1	<1	2	1	<1	1
Turbidity, Lab	NTU	2.1	1.6	2.1	1.3	1.3	0.6	0.8	0.9	1.0	1.2
Metals, Dissolved											
Aluminum	µg/L	6	8	7	5	3.6	25	5.4	5.1	6	4.6
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4
Arsenic	µg/L	20.4	15.3	5.9	11.8	12.6	12.7	41.5	39.9	41.6	37.3
Barium	µg/L	7.7	6.9	8.2	8.5	7.9	4.6	6.8	7.3	8.8	9.8
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	3	3	5	5	6	7
Cadmium	µg/L	0.03	<0.005	0.007	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	36	29.6	34.8	37.2	43.5	16.3	30.0	30.8	35.9	36.8
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.6	0.4	0.3	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	0.1	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	4.1	0.6	1.2	0.4	0.3	0.7	0.6	0.5	7.7	2.2
Iron	µg/L	200	180	450	250	237	124	102	149	133	147
Lead	µg/L	0.05	<0.05	0.1	0.07	0.06	<0.05	<0.05	<0.05	<0.05	0.11
Lithium	µg/L	1	<1	<1	<1	0.7	<0.5	0.6	0.7	0.6	0.8
Magnesium	mg/L	6.34	5.63	6.4	8.49	7.86	3.28	5.61	5.48	6.04	6.32
Manganese	µg/L	15.2	13.3	132	92.3	27.8	10.2	26.6	23.9	28.1	30.6
Mercury	µg/L	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.35	0.06	0.08	0.06	0.06	0.07	0.13	0.11	0.09	0.12
Nickel	µg/L	0.7	0.6	0.8	0.8	0.3	0.3	0.3	0.3	0.3	0.5
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	<5	<5	6	<5
Potassium	mg/L	0.4	0.36	0.34	0.45	0.457	0.23	0.26	0.27	0.21	0.32
Rubidium	µg/L	1	0.9	0.9	1.2	1.10	0.57	0.88	0.93	0.67	0.88
Selenium	µg/L	<0.05	<0.05	0.11	<0.05	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	2,450	2,140	2,910	3,520	3,920	1,140	1,430	1,720	2,140	2,990
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	4.66	5.22	2.9	4.94	4.48	1.86	2.58	2.71	2.56	5.10
Strontium	µg/L	30.7	28.2	27.4	33.1	42.7	16.5	33.7	33.5	37.3	39.5
Sulfur	µg/L	1,500	1,600	800	900	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.7	0.5	0.8	0.8	<0.5	0.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.04	0.03	0.03	0.04	0.06	0.01	0.04	0.04	0.05	0.05
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.07	0.16	0.21	0.17	0.17	0.16
Zinc	µg/L	<1	<1	2	1	0.6	0.9	<0.5	<0.5	1.8	2.9
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location						28					
Sample Date		13-Oct-22	8-Nov-22	3-Jan-23	7-Feb-23	9-Mar-23	25-May-23	26-Jun-23	3-Jul-23	1-Aug-23	12-Sep-23
Sample ID		28	28	28	28	28	28	28	28	28	28
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480011	482783	487429	490327	C369577	C3F3423	C3J1238	C3J8815	C3N6326	C3S3687
Laboratory Sample ID	Units	1812747	1824036	1839737	1849696	VGN677	VYF417	WGC252	WHR324	WPN819	WZN939
Metals, Total											
Aluminum	µg/L	11	14	14	10	5.8	26.7	12.6	8.1	7.8	7.9
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	21.4	15.8	6.4	11.1	15.6	13.6	45.7	44.5	48.3	42.6
Barium	µg/L	7.1	7	8.2	8	8.0	4.8	7.4	7.5	8.4	8.5
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	3	3	5	5	6	5
Cadmium	µg/L	0.006	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	34.6	29.1	35.2	36.8	43.6	16.0	30.1	30.5	35.6	36.9
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.4	0.3	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	<0.1	0.1	<0.05	<0.05	0.08	0.06	<0.05	<0.05
Copper	µg/L	0.5	1.5	1.8	0.5	0.2	0.5	0.6	0.6	0.4	0.5
Iron	µg/L	290	290	660	400	383	149	199	230	226	251
Lead	µg/L	0.18	0.09	0.68	0.16	<0.05	0.08	0.07	0.1	<0.05	0.08
Lithium	µg/L	<1	<1	<1	<1	0.7	<0.5	0.6	0.5	0.7	0.7
Magnesium	mg/L	5.9	5.45	6.38	8.46	7.94	3.25	5.57	5.46	6.07	6.34
Manganese	µg/L	24.7	16	122	89.9	31.8	13.7	75.6	41.5	42.3	37.2
Mercury	µg/L	<0.1	<0.1	<0.1	0.001	0.00145	0.00216	<0.01	0.00196	0.00128	0.00145
Molybdenum	µg/L	0.06	0.07	0.1	0.07	0.06	0.06	0.13	0.12	0.07	0.09
Nickel	µg/L	<0.5	0.5	0.5	<0.5	0.2	0.3	0.3	0.3	0.3	0.3
Phosphorus	µg/L	<50	<50	<50	<50	<5	6	7	10	9	<5
Potassium	mg/L	0.35	0.5	0.36	0.42	0.443	0.23	0.26	0.27	0.20	0.29
Rubidium	µg/L	0.9	0.9	0.9	1.2	1.10	0.57	0.89	0.93	0.7	0.84
Selenium	µg/L	0.12	0.11	0.21	<0.05	<0.05	0.06	0.07	0.08	0.07	0.06
Silicon	µg/L	2,350	2,150	3,130	3,450	4,030	1,130	1,430	1,770	2,010	3,010
Silver	µg/L	0.06	0.05	0.04	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	4.08	5.12	3.02	5.12	4.22	1.85	2.55	2.57	2.51	5.09
Strontium	µg/L	28.4	27.2	29.9	31.7	43.9	17.6	33.3	35.6	39	39.2
Sulfur	µg/L	<500	1,200	<500	<500	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	0.009	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.8	0.8	1.1	0.9	<0.5	0.6	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.04	0.04	0.03	0.04	0.06	0.01	0.04	0.04	0.05	0.05
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.09	0.17	0.27	0.21	0.21	0.18
Zinc	µg/L	1	<1	2	2	0.6	1.2	0.7	0.7	0.8	1
Zirconium	µg/L	<0.2	<0.2	0.3	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-Up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		38								
Sample Date		4-Oct-22	2-Nov-22	13-Dec-22	18-Apr-23	1-May-23	19-Jun-23	11-Jul-23	10-Aug-23	6-Sep-23
Sample ID		38	38	38	38	38	38	38	38	38
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV
Laboratory Work Order		479018	482202	486047	C3B0311	C3C4719	C3I2472	C3K9086	C3O7600	C3R6726
Laboratory Sample ID	Units	1808303	1821942	1835327	VPC859	VSC159	WEH082	WJT595	WRX709	WYE138
Field Parameters										
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.67	7.96	7.56	7.16	7.23	7.37	7.19	7.85	7.91
Temperature, Field	deg C	11.6	6.6	1.7	1.4	1.7	18.5	20.1	21.9	19.6
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-
General Chemistry										
Acidity as CaCO3	mg/L	13	9	<5	<5.0	6.8	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	73	74	93	87	93	61	66	76	79
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00331	0.00725	0.00646	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	73	74	94	88	94	61	67	76	80
Ammonia	mg/L	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	0.03	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.0004	<0.0004	<0.00041	<0.0004	<0.0016	<0.0015
Biochemical Oxygen Demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-
Chloride	mg/L	2.1	2.6	2.6	2.6	3.1	1.9	2.2	3.0	2.2
Chlorophyll a	µg/L	-	-	-	-	-	-	-	-	-
Color, True	TCU	39.8	42.6	36.6	37	40	69	58	43	37
Cyanide	mg/L	0.007	0.003	<0.002	0.00052 CYN	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cyanide (Free)	mg/L	<0.001	<0.001	<0.001	0.0022 ICB	<0.002	0.0032	0.0045	0.003	0.0021
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	11.2	12.6	11.6	12	13	13	13	12	12
Electrical Conductivity, Lab	µS/cm	171	166	183	191	205	135	146	157	172
Fluoride	mg/L	<0.05	<0.06	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	99.3	82	90.1	100	110	68	75	85	86
Nitrate (as N)	mg/L	<0.02	<0.05	<0.02	0.21	0.12	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	0.21	0.12	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.05	0.11	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	-	-	-	-	-
pH, lab	S.U.	7.29	7.63	7.58	7.78	7.87	7.67	7.81	7.80	7.83
Phaeophytin A	µg/L	-	-	-	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.01	0.002	0.015	0.0091	0.0074	0.0087	0.0075	0.012	0.018
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	1	1.2	1.6	5.3	6.5	3.8	3.3	3.3	3.0
Total Dissolved Solids	mg/L	170	130	110	105	130	105	80	110	170
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	0.32	0.35	0.39	0.53	0.47	0.45
Total Organic Carbon	mg/L	11.5	12.6	11.6	12	13	13	13	12	12
Total Suspended Solids	mg/L	5	2.3	<0.67	6	5	5	2	1	45
Turbidity, Lab	NTU	3.4	2.4	1.7	0.9	1.0	0.8	0.8	1.0	2.9
Metals, Dissolved										
Aluminum	µg/L	4	5	2	6.9	6.1	8.2	6.6	5.8	12
Antimony	µg/L	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	6.2	2.9	5	4.9	3.7	3	6	7.1	7.1
Barium	µg/L	7.6	6.2	7.5	9.6	8.6	5.8	10.2	6.5	7.6
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	4	7	4	6	4	5
Cadmium	µg/L	0.008	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	27.7	25.4	27.5	30.4	31.8	20.5	22.7	25.6	26.0
Cesium	µg/L	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.3	0.4	1.0	<0.5	<0.5	<0.5	0.8	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	1.1	0.5	0.7	0.8	1.5	0.7	6.5	0.6	0.6
Iron	µg/L	210	90	20	60	56	81	59	50	56
Lead	µg/L	0.08	<0.05	<0.05	<0.05	0.08	<0.05	0.26	<0.05	<0.05
Lithium	µg/L	<1	<1	<1	0.8	0.9	0.5	0.6	0.6	0.6
Magnesium	mg/L	5.6	5.28	5.49	6.18	6.43	3.97	4.40	5.12	4.97
Manganese	µg/L	9.3	16.1	10.5	15.8	13.5	4.6	3.1	2.5	8.9
Mercury	µg/L	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.09	0.07	<0.05	0.09	0.1	0.06	0.09	0.12	0.09
Nickel	µg/L	0.8	0.6	0.7	0.3	0.3	0.2	0.3	0.2	0.3
Phosphorus	µg/L	<50	<50	<50	<5	<5	<5	<5	<5	<5
Potassium	mg/L	0.44	0.4	0.54	0.668	0.63	0.39	0.50	0.50	0.45
Rubidium	µg/L	1	0.9	1.2	1.49	1.35	1.15	1.43	1.39	1.29
Selenium	µg/L	0.11	<0.05	<0.05	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	1,350	1,630	1,710	2,780	2,830	1,660	2,010	2,180	2,350
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	1.78	1.62	2.14	2.96	3.87	2.09	2.30	2.42	2.03
Strontium	µg/L	22.2	23.6	20.6	29.0	28.3	17.7	21.6	23.2	24.5
Sulfur	µg/L	<500	<500	1,700	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.7	0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.08	0.09	0.08	0.13	0.13	0.05	0.06	0.07	0.08
Vanadium	µg/L	<0.5	<0.5	<0.5	0.15	0.13	0.18	0.24	0.3	0.32
Zinc	µg/L	<1	<1	<1	1.9	1.1	<0.5	3.7	1.3	0.6
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.1	<0.1	0.1	0.1	0.1	0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-Up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		38								
Sample Date		4-Oct-22	2-Nov-22	13-Dec-22	18-Apr-23	1-May-23	19-Jun-23	11-Jul-23	10-Aug-23	6-Sep-23
Sample ID		38	38	38	38	38	38	38	38	38
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV
Laboratory Work Order		479018	482202	486047	C3B0311	C3C4719	C3I2472	C3K9086	C3O7600	C3R6726
Laboratory Sample ID	Units	1808303	1821942	1835327	VPC859	VSC159	WEH082	WJT595	WRX709	WYE138
Metals, Total										
Aluminum	µg/L	45	44	15	41.2	38.1	41.7	30.5	16	261
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
Arsenic	µg/L	5.4	3	5	5.3	4.3	3.5	6.4	7.2	8.9
Barium	µg/L	7.4	6	7.7	9.6	8.9	6.1	7.6	6.9	11.9
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	4	4	3	5	4	6
Cadmium	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.015
Calcium	mg/L	28.7	21.2	28.1	30.5	31.1	20.4	23.5	25.5	31.9
Cesium	µg/L	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	0.04
Chromium	µg/L	0.7	0.2	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.2	<0.1	<0.1	0.05	<0.05	<0.05	<0.05	<0.05	0.39
Copper	µg/L	0.8	0.5	0.8	0.9	0.7	0.7	0.7	0.7	2.1
Iron	µg/L	450	240	170	157	151	167	108	94	560
Lead	µg/L	0.12	0.07	<0.05	0.07	0.06	0.09	<0.05	<0.05	0.68
Lithium	µg/L	<1	<1	<1	0.8	0.9	0.5	0.6	0.6	1
Magnesium	mg/L	5.86	4.34	5.59	6.2	6.38	4.08	4.61	4.93	6.84
Manganese	µg/L	26.7	26	14.2	25.0	22.6	19.4	24.4	17.9	84.1
Mercury	µg/L	<0.1	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.18	0.07	<0.05	0.09	0.08	0.07	0.08	0.09	0.09
Nickel	µg/L	<0.5	<0.5	<0.5	0.4	0.3	0.2	0.4	0.2	0.9
Phosphorus	µg/L	70	<50	<50	7	5	10	9	12	48
Potassium	mg/L	0.49	0.33	0.55	0.662	0.62	0.40	0.49	0.49	0.52
Rubidium	µg/L	1.2	0.8	1.3	1.45	1.41	1.24	1.44	1.36	1.8
Selenium	µg/L	0.27	0.18	0.1	0.05	0.06	0.05	0.05	0.06	0.06
Silicon	µg/L	2,130	1,530	1,900	2,790	2,890	1,730	1,970	2,290	2,650
Silver	µg/L	0.08	0.01	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	1.97	1.33	2.16	2.99	3.70	2.16	2.36	2.28	2.32
Strontium	µg/L	21.7	19.2	20.6	26.9	28.9	17.9	20.2	22.7	26.5
Sulfur	µg/L	1,300	<500	2,200	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	0.008
Thorium	µg/L	<0.1	<0.1	<0.1	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	2.6	2.2	1	2.3	2.2	2.1	1.4	0.9	15.1
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.09	0.08	0.1	0.14	0.13	0.05	0.05	0.06	0.11
Vanadium	µg/L	<0.5	<0.5	<0.5	0.25	0.22	0.28	0.32	0.33	1.03
Zinc	µg/L	1	<1	<1	0.8	0.8	0.7	0.5	<0.5	3.4
Zirconium	µg/L	<0.2	<0.2	<0.2	0.1	0.1	0.1	0.1	0.1	0.3

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location							39						
Sample Date		19-Oct-22	8-Nov-22	9-Jan-23	13-Feb-23	8-Mar-23	15-Mar-23	11-Apr-23	31-May-23	29-Jun-23	10-Jul-23	10-Aug-23	18-Sep-23
Sample ID		39	39	39	39	39	39	39	39	39	39	39	39
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480701	482783	487939	490785	C369594	C376074	C3A4623	C3F9817	C3J6640	C3K7615	C3O7461	C3T1094
Laboratory Sample ID	Units	1815506	1824046	1841531	1851310	VGN752	VHW776	VNY232	VZO638	WHF370	WJL689	WRX100	XBA939
Field Parameters													
Depth, Field	m	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.91	7.87	6.59	7.38	6.96	-	7.35	7.94	7.52	7.67	7.71	7.95
Temperature, Field	deg C	6	4.9	3	1.2	2.1	-	0.9	20.6	18.2	20.6	21.2	15.8
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-	-	-
General Chemistry													
Acidity as CaCO3	mg/L	23	12	10	25	11	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	144	85	201	114	130	-	62	87	120	120	140	140
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1.0	-	<1.0	<1.0	1.3	1.2	1.2	1.7
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00458	0.01	0.00777	0.00112	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	144	85	202	114	130	-	63	88	120	120	140	140
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	0.02	0.03	<0.050	-	0.064	<0.050	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.0004	-	<0.0004	<0.0017	<0.00057	<0.00095	<0.0011	<0.0013
Anion Sum	meq/L	-	-	-	-	-	-	-	-	-	-	-	-
Biochemical Oxygen Demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-	-	-	<2
Cation Sum	meq/L	-	-	-	-	-	-	-	-	-	-	-	-
Chemical Oxygen Demand	mg/L	-	-	-	-	-	-	-	-	-	-	-	32
Chloride	mg/L	34.8	42.1	32.9	1	1.1	-	1.5	<1.0	2.9	1.3	3.4	5.6
Chlorophyll a	µg/L	1.1	-	-	-	-	-	-	-	<2.1	-	-	-
Color, True	TCU	26.5	24.5	20.7	22	22	-	10	47	41	40	31	29
Cyanide	mg/L	<0.002	0.002	<0.002	0.004	0.00061	-	0.00104	0.00071	<0.00050	<0.00050	<0.00050	<0.00050
Cyanide (Free)	mg/L	<0.001	0.003	<0.001	0.002	0.0028	-	<0.002 ICB	0.0052 ICB	0.0031	<0.002	0.0035	<0.002 ICB
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	9.1	8.6	8	11.1	11	-	4.3	12	13	12	12	10
Electrical Conductivity, Lab	µS/cm	427	440	449	223	248	-	130	180	237	243	271	289
Fluoride	mg/L	<0.05	0.08	<0.05	<0.05	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	199	177	193	129	130	-	82	100	140	130	160	150
Ion Balance	%	-	-	-	-	-	-	-	-	-	-	-	-
Nitrate (as N)	mg/L	<0.02	<0.02	<0.02	0.03	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.010	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	-	-	-	-	-	-	-	<0.010
pH, lab	S.U.	7.43	7.77	7.66	6.82	7.85	-	7.71	7.97	8.06	8.04	7.96	8.10
Phaeophytin A	µg/L	<0.5	-	-	-	-	-	-	-	-	-	-	-
Pheophytin a	µg/L	-	-	-	-	-	-	-	-	<2.1	-	-	-
Phosphorus, Total	mg/L	0.001	<0.001	0.002	0.001	0.0041	-	0.0071	0.012	0.0069	0.0077	0.0049	0.0041
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Radium-226	Bq/L	-	-	-	-	-	-	-	-	<0.010	-	-	-
Sulfate	mg/L	1.9	2.6	2.5	2.2	3.5	-	2.6	3.5	3.1	1.7	3.5	3.9
Total Dissolved Solids	mg/L	285	270	245	125	125	-	50	125	145	170	155	175
Total Kjeldahl Nitrogen	mg/L	<1	<1	1	<1	0.43	-	0.23	0.35	0.40	0.35	0.34	0.32
Total Organic Carbon	mg/L	9.4	16.8	8.1	11	12	-	6.2	12	13	13	11	12
Total Suspended Solids	mg/L	2.3	<1	<0.67	1.3	2	-	5	9	2	2	1	1
Turbidity, Lab	NTU	1.5	1.3	1.1	1.9	0.9	-	1.4	3.7	0.7	1.1	0.5	0.7
Speciated Metals													
Methyl Mercury	µg/L	0.00009	0.00003	0.00012	0.00002	-	0.00011	0.00015	0.00006	0.00026	<0.00005	0.00019	-
Metals, Dissolved													
Aluminum	µg/L	4	2	2	3	2.4	-	1.7	12.2	8.2	7	6.4	13.4
Antimony	µg/L	<0.1	<0.1	<0.1	0.1	<0.1	-	0.2	<0.1	<0.1	0.1	0.2	0.1
Arsenic	µg/L	6.7	6.5	4.3	3.7	3.4	-	2.5	3.7	6.9	7.1	8.2	8.1
Barium	µg/L	10.7	11.4	10.7	9.5	10.3	-	6.9	9.4	13.3	13.4	12.5	12.3
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	5	-	3	4	5	5	13	6
Cadmium	µg/L	<0.005	<0.005	0.01	0.007	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	54.6	57.9	59.2	38.9	39.8	-	25.2	30.9	43.8	42.7	49.0	47.4
Cerium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.4	0.3	0.4	0.6	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	<0.1	<0.1	<0.05	-	<0.05	0.07	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	0.8	0.8	1.3	0.7	2.3	-	0.4	0.9	1	1.2	1.8	2.8
Europium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Gallium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Iron	µg/L	50	80	130	10	33	-	19	49	32	29	37	36
Lanthanum	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Lead	µg/L	<0.05	<0.05	<0.05	0.06	0.05	-	<0.05	0.06	<0.05	<0.05	0.14	<0.05
Lithium	µg/L	<1	1	<1	<1	0.7	-	<0.5	0.6	0.7	0.8	0.9	0.9
Magnesium	mg/L	10.6	10.9	11.3	6.76	7.02	-	4.61	5.48	6.84	6.80	7.96	7.74
Manganese	µg/L	5.7	5.8	92.1	14.5	15.1	-	22.2	12.3	3.7	2.1	1.7	9.1
Mercury	µg/L	-	-	<0.1	-	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.3	0.19	0.19	0.18	0.23	-	0.41	0.26	0.37	0.43	0.48	0.39
Nickel	µg/L	<0.5	0.6	<0.5	0.6	0.4	-	0.3	0.5	0.5	0.6	0.6	0.6
Niobium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	<5	-	<5	<5	<5	<5	<5	<5
Potassium	mg/L	0.66	0.7	0.64	0.88	0.89	-	0.577	0.77	1.09	1.06	1.06	1.13
Rhodium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Rubidium	µg/L	1.8	2	1.7	1.8	1.83	-	1.21	1.61	2.25	2.52	2.38	2.83
Scandium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Selenium	µg/L	<0.05	<0.05	0.36	<0.05	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	2,950	3,410	4,010	1,960	2,160	-	1,500	2,130	1,890	1,790	1,370	1,220
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	20	21.4	19.1	1.11	1.1	-	1.04	1.43	1.97	1.86	3.65	3.26
Strontium	µg/L	42.9	51.3	49.1	35	38.4	-	26.4	28.1	34.4	43.1	49.3	52.2
Sulfur	µg/L	600	2,100	1,100	1,100	-	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	-	<0.005	0.006	0.008	0.007	0.006	0.007
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Tin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1	0.7	0.7	0.4	<0.5	-	<0.5	<0.5	<0.5	<0.5	0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	0.1	<0.1
Uranium	µg/L	0.11	0.1	0.08	0.13	0.14	-	0.06	0.2	0.19	0.22	0.25	0.27
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.18	-	0.12	0.57	0.33	0.33	0.29	0.24
Yttrium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Zinc	µg/L	1	1	3	3	3.1	-	<0.5	1.4	3.3	3.9	1.8	2.9
Zirconium	µg/L	<0.2	<0.2	0.5	0.2	<0.1	-	0.2	0.2	0.1	0.1	0.2	0.2

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location							39						
Sample Date		19-Oct-22	8-Nov-22	9-Jan-23	13-Feb-23	8-Mar-23	15-Mar-23	11-Apr-23	31-May-23	29-Jun-23	10-Jul-23	10-Aug-23	18-Sep-23
Sample ID		39	39	39	39	39	39	39	39	39	39	39	39
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480701	482783	487939	490785	C369594	C376074	C3A4623	C3F9817	C3J6640	C3K7615	C3O7461	C3T1094
Laboratory Sample ID	Units	1815506	1824046	1841531	1851310	VGN752	VHW776	VNY232	VZO638	WHF370	WJL689	WRX100	XBA939
Metals, Total													
Aluminum	µg/L	8	5	4	59	24.4	-	67.7	129	22	33.1	13.1	19.6
Antimony	µg/L	0.2	<0.1	<0.1	0.1	<0.1	-	0.2	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	7.5	6.7	4.3	3.7	3.5	-	2.0	4	7.3	7.5	8	7.8
Barium	µg/L	11.3	11.4	9.7	10.7	11.0	-	6.3	11.6	13.8	14	12.9	12.2
Beryllium	µg/L	0.03	<0.02	<0.02	<0.02	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	4	-	2	4	4	5	5	5
Cadmium	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	-	0.009	0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	56.8	58.6	60.4	43	42.4	-	21.3	31.4	42.9	41.4	47.1	46.4
Cerium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Cesium	µg/L	0.03	<0.01	<0.01	<0.01	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.2	0.3	0.4	0.8	<0.5	-	<0.5	0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.2	0.1	0.2	0.1	<0.05	-	0.08	0.19	0.05	0.05	<0.05	<0.05
Copper	µg/L	0.8	0.7	3.7	1	0.6	-	0.7	1.3	1	1.1	1.1	0.9
Europium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Gallium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Iron	µg/L	200	150	270	190	75	-	94	246	80	87	58	48
Lanthanum	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Lead	µg/L	0.1	<0.05	<0.05	0.11	0.11	-	0.25	0.23	<0.05	0.06	<0.05	<0.05
Lithium	µg/L	<1	1	<1	1	0.8	-	<0.5	0.7	0.7	0.8	0.8	0.9
Magnesium	mg/L	10.4	10.6	10.4	7.58	7.1	-	3.74	5.66	6.45	6.60	7.98	7.81
Manganese	µg/L	43.5	31.4	97.9	18.8	18.0	-	23.0	34.7	19.7	11.7	10.6	13.7
Mercury	µg/L	0.001	0.0006	0.0008	0.001	0.00139	0.00122	0.00110	0.00147	0.00197	0.00169	0.00100	<0.01
Molybdenum	µg/L	0.25	0.24	0.25	0.24	0.23	-	0.12	0.23	0.36	0.38	0.44	0.44
Nickel	µg/L	1.1	<0.5	<0.5	<0.5	0.4	-	0.3	0.7	0.6	0.6	0.6	0.6
Niobium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	7	-	7	13	7	8	7	<5
Potassium	mg/L	0.68	0.76	0.6	0.99	0.884	-	0.475	0.76	1.03	1.06	1.10	1.15
Rhodium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Rubidium	µg/L	1.8	1.9	1.7	2	1.86	-	1.03	1.97	2.37	2.62	2.57	2.77
Scandium	µg/L	-	-	2	-	-	-	-	-	-	-	-	-
Selenium	µg/L	0.15	0.07	0.9	<0.05	0.07	-	<0.05	0.06	0.07	0.08	0.06	0.07
Silicon	µg/L	2,980	3,710	3,880	2,450	2,350	-	1,320	2,180	2,040	1,700	1,410	1,120
Silver	µg/L	<0.01	0.06	0.06	0.05	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	20.2	21.1	16.6	1.25	1.14	-	0.861	1.35	1.94	1.87	2.37	3.37
Strontium	µg/L	42.8	49.2	55.6	38.2	39.2	-	20.4	29.7	37.4	42.4	48.5	52.2
Sulfur	µg/L	600	1,500	1,500	2,400	-	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	0.05	<0.01	<0.01	<0.01	<0.005	-	<0.005	0.009	0.008	0.008	0.007	0.007
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Tin	µg/L	0.2	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.8	1	1	2.9	1.7	-	2.3	7.8	0.9	2.1	0.5	0.9
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	<0.01	0.13	0.12	0.16	0.15	-	0.07	0.21	0.19	0.22	0.24	0.26
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.22	-	0.20	0.82	0.37	0.41	0.31	0.27
Yttrium	µg/L	-	-	<1	-	-	-	-	-	-	-	-	-
Zinc	µg/L	1	1	2	2	3.0	-	1.7	2.7	4	4.8	3.7	4.2
Zirconium	µg/L	<0.2	<0.2	0.3	0.4	0.1	-	0.1	0.4	0.2	0.2	0.2	0.2

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-Up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location							40						
Sample Date		4-Oct-22	2-Nov-22	13-Dec-22	3-Jan-23	1-Feb-23	7-Mar-23	13-Apr-23	25-May-23	26-Jun-23	3-Jul-23	1-Aug-23	6-Sep-23
Sample ID		40	40	40	40	40	40	40	40	40	40	40	40
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		479018	482202	486047	487429	489832	C367124	C3A5784	C3F3423	C3J1238	C3J8815	C3N6326	C3R6726
Laboratory Sample ID	Units	1808306	1821941	1835328	1839739	1848035	VGA339	VOE535	VYF419	WGC253	WHR326	WPN821	WYE139
Field Parameters													
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.86	7.99	7.61	7.43	7.28	7.08	6.78	7.26	7.59	7.82	7.49	8.01
Temperature, Field	deg C	11.4	6.2	2.1	1.1	3.3	1.6	3.2	13.2	19.3	23.5	20.6	20.4
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-	-	-
General Chemistry													
Acidity as CaCO3	mg/L	13	10	6	9	9	9.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	71	81	104	104	112	110	62	38	58	59	67	75
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00381	0.00661	0.00725	0.00447	0.00355	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	71	82	104	104	112	110	62	39	58	59	68	75
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	0.02	0.1	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0004	<0.0004	<0.0004	<0.00072	<0.0016	<0.00063	<0.002
Biochemical Oxygen Demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Chloride	mg/L	10.7	14.9	11.5	12.4	11.9	13	7.9	2.8	5.7	4.5	5.0	6.9
Chlorophyll a	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Color, True	TCU	49.1	43.8	52.7	56.4	57.4	44	23	110	92	84	63	46
Cyanide	mg/L	0.007	0.003	0.004	<0.002	<0.002	0.00051	0.00056	<0.00050	0.00112	<0.00050	0.00063	<0.00050
Cyanide (Free)	mg/L	<0.001	<0.001	0.002	<0.001	<0.001	<0.002	<0.002 ICB	0.0049	<0.002	0.0033	<0.002	<0.002
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	14.7	14.6	15.5	15.8	16.8	15	7.6	18	18	16	15	14
Electrical Conductivity, Lab	µS/cm	228	240	235	234	269	265	161	92	146	149	159	192
Fluoride	mg/L	<0.05	<0.06	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	110	101	109	112	109	120	65	48	69	72	78	86
Nitrate (as N)	mg/L	<0.02	<0.05	<0.02	0.03	0.07	0.13	0.12	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	-	0.13	0.12	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.05	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.023
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
pH, lab	S.U.	7.35	7.59	7.63	7.42	7.32	7.69	7.49	7.54	7.81	7.83	7.73	7.88
Phaeophytin A	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.018	0.015	0.001	<0.001	0.019	0.0047	0.019	0.0073	0.020	0.026	0.027	0.024
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	9.1	14.7	5.6	6.3	5.6	7.8	4.9	3.9	6.3	5.6	6.0	8.0
Total Dissolved Solids	mg/L	255	140	145	165	215	125	95	75	90	115	85	145
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	<1	0.51	0.46	0.57	0.50	0.50	0.51	0.53
Total Organic Carbon	mg/L	14.4	14.1	14.8	15.6	16.5	15	7.9	18	17	17	16	15
Total Suspended Solids	mg/L	3.3	1	<0.67	<0.67	<1.3	<1	2	1	5	3	3	7
Turbidity, Lab	NTU	3.6	1.5	1.5	0.9	1	0.8	0.8	0.7	1.5	2.2	1.5	3.3
Metals, Dissolved													
Aluminum	µg/L	6	5	4	4	3	3.4	2.3	21.5	6.5	5.1	3.9	26
Antimony	µg/L	0.7	0.8	0.5	0.5	0.5	0.4	0.4	<0.1	0.4	0.4	0.6	0.8
Arsenic	µg/L	70.6	50.1	29.3	25.4	23.5	16.3	8.9	12.6	50.7	52.5	73.9	74.8
Barium	µg/L	11	8.9	7.8	8.2	9	8.1	5.1	4.1	5.9	6.2	6.5	7.9
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	<2	5	3	4	6	6	6	7
Cadmium	µg/L	0.006	0.02	0.01	0.01	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	32.8	30.6	34.4	33.1	36.3	36.7	19.7	14.2	20.3	21.6	23.5	25.5
Cesium	µg/L	<0.01	0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.4	0.3	0.6	0.5	0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.2	0.1	<0.1	<0.1	<0.1	0.05	0.14	<0.05	<0.05	<0.05	<0.05	0.12
Copper	µg/L	5.5	4.9	2	2.9	2.7	1.4	2.2	0.7	2.5	2.8	2.8	3.4
Iron	µg/L	180	30	50	60	70	120	78	110	127	79	84	214
Lead	µg/L	0.17	<0.05	<0.05	0.1	0.06	<0.05	0.79	<0.05	0.07	<0.05	0.06	0.23
Lithium	µg/L	<1	<1	<1	<1	<1	0.7	<0.5	<0.5	0.5	0.6	0.5	0.7
Magnesium	mg/L	7.1	6.81	6.84	6.68	7.13	7.41	3.77	2.99	4.36	4.43	4.71	5.32
Manganese	µg/L	7.1	6.9	4.2	9.6	17.8	17.1	36.0	5.5	1.5	1	1.3	11.6
Mercury	µg/L	-	-	-	-	-	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01
Molybdenum	µg/L	0.16	0.2	<0.05	0.08	0.08	0.09	0.06	0.06	0.09	0.14	0.11	0.1
Nickel	µg/L	1.4	1.6	1.2	1.1	0.8	0.5	0.5	0.3	0.9	0.9	0.9	1
Phosphorus	µg/L	<50	<50	<50	<50	<50	<5	13	5	<5	11	7	9
Potassium	mg/L	0.76	1.03	0.53	0.49	0.55	0.507	0.301	0.29	0.53	0.54	0.52	0.58
Rubidium	µg/L	1.3	1.4	1.1	1.1	1.1	1.02	0.55	0.72	1.31	1.39	1.33	1.4
Selenium	µg/L	0.09	0.07	<0.05	<0.05	0.11	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	2,210	1,940	2,080	2,330	2,320	3,350	1,780	1,340	1,620	1,740	2,150	2,230
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	8.23	8.3	7.61	7.55	7.87	8.05	4.4	2.64	4.47	4.48	4.81	5.78
Strontium	µg/L	47.8	51.8	35.3	35.9	39.9	45.6	25.8	16.1	29.4	30.4	33.4	38.7
Sulfur	µg/L	3,900	5,100	3,300	2,600	1,800	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.8	0.5	0.5	0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1
Tungsten	µg/L	0.2	0.1	0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.2	0.4
Uranium	µg/L	0.06	0.7	0.04	0.04	0.04	0.05	0.03	0.01	0.03	0.02	0.03	0.04
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.10	0.07	0.14	0.18	0.23	0.26	0.35
Zinc	µg/L	2	2	<1	4	<1	1.0	14.5	1.3	<0.5	<0.5	<0.5	0.9
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-Up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location							40						
Sample Date		4-Oct-22	2-Nov-22	13-Dec-22	3-Jan-23	1-Feb-23	7-Mar-23	13-Apr-23	25-May-23	26-Jun-23	3-Jul-23	1-Aug-23	6-Sep-23
Sample ID		40	40	40	40	40	40	40	40	40	40	40	40
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		479018	482202	486047	487429	489832	C367124	C3A5784	C3F3423	C3J1238	C3J8815	C3N6326	C3R6726
Laboratory Sample ID	Units	1808306	1821941	1835328	1839739	1848035	VGA339	VOE535	VYF419	WGC253	WHR326	WPN821	WYE139
Metals, Total													
Aluminum	µg/L	26	33	6	7	6	3.6	29.1	29.9	40.5	5.3	27.2	37.7
Antimony	µg/L	0.6	0.6	0.5	0.4	0.5	0.4	0.4	<0.1	0.4	0.4	0.5	0.8
Arsenic	µg/L	62.2	48.4	28.2	24.4	23	15.8	11.6	13.4	59.4	51.4	81.3	76.2
Barium	µg/L	8.6	7.6	7.9	8	9	8.3	5.7	4.2	6.5	5.8	7.1	8.8
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	<2	4	2	3	5	6	6	7
Cadmium	µg/L	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	32.8	27.4	34.4	33.7	35.9	37.4	20.5	14.0	20.2	20.8	23.2	26.7
Cesium	µg/L	0.01	0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.7	0.2	0.5	0.3	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.3	0.1	<0.1	<0.1	<0.1	0.05	0.16	<0.05	0.15	<0.05	0.11	0.16
Copper	µg/L	3.6	3.3	2.1	2.7	0.8	1.3	2.3	0.7	3	2.6	2.9	4
Iron	µg/L	390	240	160	180	190	116	167	141	325	87	252	302
Lead	µg/L	0.14	0.13	<0.05	0.49	0.1	<0.05	1.97	0.08	0.25	0.07	0.22	0.37
Lithium	µg/L	<1	<1	<1	1	<1	0.7	0.5	<0.5	0.6	0.5	0.6	0.7
Magnesium	mg/L	7.17	6.02	6.79	6.68	7.36	7.38	3.83	2.99	4.33	4.33	4.75	5.47
Manganese	µg/L	12.3	9.4	5.8	10.2	18.9	17.3	39.3	7.9	17.7	0.7	21.5	17.7
Mercury	µg/L	<0.1	<0.1	<0.1	<0.1	0.002	0.00172	0.00121	0.00233	0.00319	0.00221	0.00188	0.00300
Molybdenum	µg/L	0.13	0.09	<0.05	0.1	0.07	0.08	0.06	0.06	0.09	0.09	0.09	0.12
Nickel	µg/L	1.2	0.9	0.8	0.8	<0.5	0.6	0.5	0.3	1	0.9	1	1.2
Phosphorus	µg/L	70	<50	<50	<50	<50	<5	21	7	13	6	18	12
Potassium	mg/L	0.75	0.67	0.55	0.51	0.54	0.493	0.323	0.29	0.53	0.51	0.51	0.63
Rubidium	µg/L	1.3	1.1	1.1	1	1.1	1.09	0.64	0.72	1.34	1.32	1.36	1.42
Selenium	µg/L	0.22	0.06	<0.05	0.07	<0.05	0.06	<0.05	0.05	0.07	0.06	0.07	0.08
Silicon	µg/L	3,070	1,780	2,240	2,450	2,360	3,340	1,980	1,350	1,650	1,720	2,050	2,320
Silver	µg/L	0.07	0.02	0.04	0.04	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	8.83	7.36	7.88	7.7	7.9	8.09	4.43	2.62	4.44	4.32	4.79	6.09
Strontium	µg/L	42.3	42	34.5	35.2	40	45.3	26.7	16.2	29.5	31.5	34.1	39.8
Sulfur	µg/L	4,600	3,700	3,700	1,800	800	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1.7	2.8	0.7	0.7	0.6	<0.5	0.8	0.8	2	<0.5	1.2	1.5
Tungsten	µg/L	0.3	0.2	0.1	0.1	0.1	<0.1	<0.1	<0.1	0.2	0.1	0.3	0.4
Uranium	µg/L	0.06	0.06	0.05	0.05	0.05	0.04	0.03	0.01	0.03	0.03	0.02	0.04
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.10	0.12	0.16	0.37	0.18	0.38	0.4
Zinc	µg/L	<1	<1	<1	2	<1	1.0	20.6	1.5	1.2	0.7	0.8	6.5
Zirconium	µg/L	<0.2	<0.2	<0.2	0.2	<0.2	<0.1	0.2	<0.1	0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location						46						
Sample Date		5-Oct-22	8-Nov-22	4-Jan-23	6-Feb-23	6-Mar-23	3-Apr-23	30-May-23	14-Jun-23	4-Jul-23	8-Aug-23	11-Sep-23
Sample ID		46	46	46	46	46	46	46	46	46	46	46
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		479154	482783	487567	490194	C365616	C399854	C3F8864	C3H7129	C3K0765	C3O2537	C3S2923
Laboratory Sample ID	Units	1808890	1824034	1840229	1849337	VFS059	VMZ387	VZJ711	WDD951	WIB176	WQV774	WZJ690
Field Parameters												
Depth, Field	m	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.88	8.14	7.8	7.62	7.16	7.26	7.69	7.80	8.07	7.92	7.92
Temperature, Field	deg C	11.6	4.3	0.7	0.6	0.3	0.5	17.5	18.0	22.3	21.8	16.4
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-	-
General Chemistry												
Acceptable Percent Difference	none	-	-	-	-	-	-	-	-	-	-	-
Acidity as CaCO3	mg/L	8	9	33	6	13	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	82	37	102	111	110	110	61	74	79	85	89
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.011	0.00956	0.00123	0.00693	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	83	38	102	111	110	110	61	75	80	85	90
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	<0.01	0.27	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.0004	<0.0004	<0.00079	<0.0011	<0.0026	<0.0018	<0.0012
Anion Sum	meq/L	-	-	-	-	-	-	-	-	-	-	-
Biochemical Oxygen Demand (BOD)	mg/L	-	5.1	-	-	-	-	-	-	-	-	-
Cation Sum	meq/L	-	-	-	-	-	-	-	-	-	-	-
Chemical Oxygen Demand	mg/L	-	30	-	-	-	-	-	-	-	-	-
Chloride	mg/L	1	4.5	0.6	0.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.4
Chlorophyll a	µg/L	0.6	-	-	-	-	-	-	6.7	-	-	-
Color, True	TCU	43.9	27.8	26.3	28	21	22	64	52	43	30	26
Cyanide	mg/L	0.006	0.003	<0.002	0.004	0.00347	<0.00050	<0.00050 CYN	0.00059	0.00051	0.00050	<0.00050
Cyanide (Free)	mg/L	<0.001	0.003	<0.001	<0.001	<0.002	<0.002 ICB	0.0034 ICB	0.0029	0.0038	0.0028	<0.002 ICB
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	10.8	10.1	9.2	9.6	9.9	9.6	13	13	12	11	10
Electrical Conductivity, Lab	µS/cm	182	218	205	205	222	217	129	156	166	185	200
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	98.1	97.9	111	102	120	120	66	85	89	97	100
Ion Balance	%	-	-	-	-	-	-	-	-	-	-	-
Langelier Index	none	-	-	-	-	-	-	-	-	-	-	-
Langelier Index Temperature	deg C	-	-	-	-	-	-	-	-	-	-	-
Nitrate (as N)	mg/L	<0.02	<0.02	<0.02	0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.01	<0.01	0.02	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	-	-	-	-	-	-	-
pH, lab	S.U.	7.81	7.75	6.86	7.61	7.93	7.83	7.83	7.93	8.06	7.93	8.12
Phaeophytin A	µg/L	<0.5	-	-	-	-	-	-	-	-	-	-
Pheophytin a	µg/L	-	-	-	-	-	-	-	<2.1	-	-	-
Phosphate	mg/L	-	0.016	-	-	-	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.014	<0.001	0.002	<0.001	0.0028	0.0037	0.0065	0.0078	0.0054	0.0076	0.0079
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Radium-226	Bq/L	<0.005	<0.005	<0.005	<0.005	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Sulfate	mg/L	1.9	9.2	1.2	1.3	3.0	2.5	5.6	5.0	5.4	10	10
Total Dissolved Solids	mg/L	150	140	110	150	180	120	95	115	125	125	130
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	0.33	0.30	0.42	0.45	0.34	0.33	0.38
Total Organic Carbon	mg/L	10.5	9.9	9.3	9.6	10	9.7	13	13	12	11	10
Total Suspended Solids	mg/L	2.3	<1	<0.67	1.3	<1	<1	<1	2	1	1	2
Turbidity, Lab	NTU	1.9	2	0.8	0.9	0.6	0.5	0.6	0.6	0.4	0.6	2.1
Speciated Metals												
Methyl Mercury	µg/L	-	-	-	-	-	-	-	-	-	-	-
Metals, Dissolved												
Aluminum	µg/L	5	2	6	2	1.6	2.0	13.7	11.8	5.6	3.5	3.7
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	5.3	4.8	0.8	0.8	0.7	0.7	1.7	2.3	2.8	5.3	5.6
Barium	µg/L	11.3	11.1	12.2	12.1	12.2	12.8	7.2	9.4	9.6	10	10.5
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	4	5	3	4	5	6	5
Cadmium	µg/L	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	29.1	29.5	34	31.8	35.7	36.2	19.6	25.3	26.8	28.6	29.3
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.6	0.3	0.5	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	0.6	0.6	0.6	1.2	0.4	0.8	0.4	0.5	0.5	0.8	0.5
Iron	µg/L	60	60	20	10	35	31	53	56	33	19	28
Lead	µg/L	0.1	<0.05	<0.05	0.37	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	1	<1	<1	0.9	0.9	0.6	0.7	0.8	0.8	0.9
Magnesium	mg/L	5.96	6.28	6.48	6.52	7.27	7.08	4.23	5.16	5.36	6.31	6.42
Manganese	µg/L	1.4	1.1	3	2.7	5.7	4.9	3.3	3.4	0.9	1.4	2.7
Mercury	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.2	0.1	0.13	<0.05	0.13	0.12	0.08	0.09	0.11	0.13	0.12
Nickel	µg/L	1.1	0.6	<0.5	<0.5	0.2	0.2	0.2	0.4	0.2	0.3	0.3
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	<5	<5	<5	6	<5
Potassium	mg/L	0.87	0.92	0.8	0.86	0.867	0.848	0.55	0.68	0.67	0.79	0.80
Rubidium	µg/L	1.9	2.2	1.9	1.8	1.90	1.90	1.41	1.66	1.8	2	2.03
Selenium	µg/L	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	2,270	2,140	2,100	1,910	2,990	2,980	1,740	2,050	1,900	2,200	2,490
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	1.25	6.6	0.81	0.84	0.901	0.875	1.34	1.53	1.91	4.29	4.64
Strontium	µg/L	22.9	27.5	26.3	22.2	30.2	29.3	17.2	21.4	22.5	25.8	26.7
Sulfur	µg/L	800	4,000	<500	<500	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1.1	0.4	0.7	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.2	0.17	0.29	0.22	0.29	0.27	0.1	0.13	0.15	0.16	0.19
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.12	0.11	0.19	0.26	0.24	0.32	0.31
Zinc	µg/L	<1	<1	<1	4	<0.5	0.9	0.5	<0.5	<0.5	0.8	<0.5
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location						46						
Sample Date		5-Oct-22	8-Nov-22	4-Jan-23	6-Feb-23	6-Mar-23	3-Apr-23	30-May-23	14-Jun-23	4-Jul-23	8-Aug-23	11-Sep-23
Sample ID		46	46	46	46	46	46	46	46	46	46	46
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		479154	482783	487567	490194	C365616	C399854	C3F8864	C3H7129	C3K0765	C3O2537	C3S2923
Laboratory Sample ID	Units	1808890	1824034	1840229	1849337	VFS059	VMZ387	VZJ711	WDD951	WIB176	WQV774	WZJ690
Metals, Total												
Aluminum	µg/L	25	22	7	13	2.6	3.1	22.9	22.1	8.1	7.6	13.6
Antimony	µg/L	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	5	4.6	0.8	0.8	0.8	0.7	1.8	2.5	2.9	5.6	6.1
Barium	µg/L	11.7	12.1	11.7	12	12.2	12.0	8.4	10	10.1	9.9	11
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	4	5	3	4	5	6	5
Cadmium	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	28.4	29.9	32	32.8	36.6	35.4	20.5	24.1	25.4	27.8	29.5
Cesium	µg/L	<0.01	0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.4	1	0.1	0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	0.9	0.9	0.7	0.6	0.4	0.4	0.5	0.5	0.5	0.5	0.5
Iron	µg/L	270	270	140	130	67	70	88	108	63	48	95
Lead	µg/L	0.12	0.07	<0.05	0.12	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	0.05
Lithium	µg/L	<1	1	<1	1	0.9	1.0	0.6	0.8	0.8	0.9	0.9
Magnesium	mg/L	5.83	6.26	6.5	6.79	6.97	7.04	4.48	4.91	5.35	6.33	6.42
Manganese	µg/L	13.3	9.7	5.3	5	9.9	9.6	9.7	14.6	8.6	13	18.8
Mercury	µg/L	-	<0.1	<0.1	0.0009	0.00083	0.00069	0.00163	0.00109	0.00153	0.00084	0.000900
Molybdenum	µg/L	0.09	0.23	0.13	0.12	0.13	0.13	0.07	0.09	0.11	0.12	0.12
Nickel	µg/L	<0.5	1.3	<0.5	<0.5	0.2	0.2	0.3	0.3	0.2	0.3	0.3
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	5	8	<5	8	<5
Potassium	mg/L	0.83	0.96	0.77	0.88	0.83	0.808	0.57	0.65	0.67	0.76	0.80
Rubidium	µg/L	1.9	2.3	1.8	1.9	1.83	1.80	1.49	1.69	1.85	2.02	2.03
Selenium	µg/L	0.19	0.13	<0.05	<0.05	0.06	0.06	<0.05	0.06	0.07	0.06	<0.05
Silicon	µg/L	2,470	2,210	2,220	2,010	2,940	2,870	1,780	2,010	1,940	2,150	2,520
Silver	µg/L	0.07	0.06	0.05	0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	1.23	6.57	0.81	0.9	0.86	0.895	1.44	1.40	1.82	4.26	4.57
Strontium	µg/L	22.4	27	24.7	22.6	29.4	27.6	17.6	21.8	23.4	25.9	26.7
Sulfur	µg/L	1,100	3,500	800	<500	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1.8	1.2	0.8	0.7	<0.5	<0.5	0.8	0.9	<0.5	<0.5	0.7
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.2	0.21	0.29	0.28	0.28	0.28	0.09	0.13	0.14	0.15	0.19
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.13	0.14	0.21	0.29	0.25	0.34	0.37
Zinc	µg/L	<1	<1	<1	2	<0.5	<0.5	0.7	0.5	<0.5	<0.5	<0.5
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-Up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location						47					
Sample Date		20-Oct-22	8-Nov-22	3-Jan-23	8-Feb-23	7-Mar-23	25-May-23	15-Jun-23	3-Jul-23	8-Aug-23	7-Sep-23
Sample ID		47	47	47	47	47	47	47	47	47	47
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480798	482783	487429	490500	C367124	C3F3423	C3H9198	C3J8815	C3O2537	C3R9201
Laboratory Sample ID	Units	1815914	1824040	1839743	1850231	VGA340	VYF416	WDP484	WHR328	WQV771	WYR007
Field Parameters											
Depth, Field	m	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	8.08	8.03	7.73	7.53	7.33	7.54	7.55	7.94	7.85	8.03
Temperature, Field	deg C	5.3	4.7	0.8	0.1	1.5	12.5	16.5	22.1	22.0	17.6
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-
General Chemistry											
Acceptable Percent Difference	none	-	-	-	-	-	-	-	-	-	-
Acidity as CaCO3	mg/L	13	9	7	9	6.2	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	69	63	98	105	110	50	64	70	76	79
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00339	0.00852	0.00646	0.00355	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	69	63	99	105	110	50	64	71	77	80
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	0.16	0.01	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.0004	<0.0004	<0.00054	<0.0019	<0.0016	<0.0017
Anion Sum	meq/L	-	-	-	-	-	-	-	-	-	-
Biochemical Oxygen Demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-	-
Cation Sum	meq/L	-	-	-	-	-	-	-	-	-	-
Chloride	mg/L	2.5	3.6	4.5	1.3	1.0	<1.0	1.2	<1.0	1.3	1.7
Chlorophyll a	µg/L	-	-	-	-	-	-	-	-	-	-
Color, True	TCU	37.7	33.3	33.8	31.6	26	80	64	52	38	32
Cyanide	mg/L	0.005	<0.002	0.003	0.006	<0.00050	0.00077	0.00082	<0.00050	<0.00050	<0.00050
Cyanide (Free)	mg/L	0.006	<0.001	<0.001	<0.001	<0.002	0.0055 ICB	0.0027	0.0028	0.004	0.0021
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	11.7	11.4	11.9	10.9	11	15	14	13	12	11
Electrical Conductivity, Lab	µS/cm	175	180	204	215	213	111	139	152	159	177
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	88.1	88.3	104	110	120	61	73	81	88	94
Ion Balance	%	-	-	-	-	-	-	-	-	-	-
Langelier Index	none	-	-	-	-	-	-	-	-	-	-
Langelier Index Temperature	deg C	-	-	-	-	-	-	-	-	-	-
Nitrate (as N)	mg/L	<0.02	<0.02	<0.02	0.04	0.11	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	0.11	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	-	-	-	-	-	-
pH, lab	S.U.	7.3	7.7	7.58	7.32	7.74	7.68	7.84	7.96	7.88	8.03
Phaeophytin A	µg/L	-	-	-	-	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.005	0.011	<0.001	<0.001	0.0029	0.0081	0.0080	0.0075	0.0090	0.013
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-
Silica (as SiO2)	mg/L	-	-	-	-	-	-	-	-	-	-
Silicon (as SiO2)	mg/L	-	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	2.8	4.2	6.6	2.5	2.8	5.4	5.3	4.7	5.6	7.8
Total Dissolved Solids	mg/L	110	120	145	125	100	105	90	100	115	120
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	0.39	0.52	0.39	0.38	0.34	0.34
Total Organic Carbon	mg/L	12	11.5	11.7	10.9	12	15	14	13	13	11
Total Suspended Solids	mg/L	3.3	1.5	<0.67	<0.67	<1	2	2	1	1	2
Turbidity, Lab	NTU	3	1.9	0.7	0.6	0.6	1.2	0.5	0.5	1.2	0.7
Metals, Dissolved											
Aluminum	µg/L	7	2	2	3	2.6	22.1	13.8	6.4	2	2.6
Antimony	µg/L	0.2	0.2	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1
Arsenic	µg/L	20.9	18	18.2	3.3	1.6	3.9	6.5	6.5	15.6	19.9
Barium	µg/L	10.2	10.2	11	11.9	12.1	6.5	8.6	8.9	9.2	9.2
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	5	3	5	5	5	5
Cadmium	µg/L	0.005	0.005	0.008	0.006	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	26.2	27.5	30.6	31.9	34.3	18.0	21.7	24.3	26.0	28.4
Cerium	µg/L	-	-	-	<1	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.3	0.3	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	1.8	1.6	1.7	1.7	1.3	0.7	1	1	1.1	1
Europium	µg/L	-	-	-	<1	-	-	-	-	-	-
Gallium	µg/L	-	-	-	<1	-	-	-	-	-	-
Iron	µg/L	90	60	30	60	41	61	78	41	17	21
Lanthanum	µg/L	-	-	-	<1	-	-	-	-	-	-
Lead	µg/L	<0.05	<0.05	0.05	<0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	1	<1	1	0.9	<0.5	0.6	0.7	0.7	0.8
Magnesium	mg/L	5.29	5.54	6.35	5.96	7.17	3.89	4.56	5.03	5.56	5.53
Manganese	µg/L	1.6	1.2	0.7	4.4	3.6	5.1	5.5	0.5	0.8	1.3
Mercury	µg/L	-	-	-	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.13	0.12	0.14	0.11	0.12	0.08	0.09	0.09	0.14	0.1
Nickel	µg/L	0.7	0.7	1	<0.5	0.3	0.3	0.3	0.3	0.4	0.4
Niobium	µg/L	-	-	-	<1	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	6	<5	6	<5
Potassium	mg/L	0.74	0.77	0.86	0.76	0.839	0.56	0.61	0.63	0.71	0.69
Rhodium	µg/L	-	-	-	<1	-	-	-	-	-	-
Rubidium	µg/L	1.7	1.8	1.9	1.8	1.84	1.27	1.51	1.69	1.76	1.77
Scandium	µg/L	-	-	-	<1	-	-	-	-	-	-
Selenium	µg/L	<0.05	<0.05	<0.05	0.09	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	1,640	1,780	1,980	2,410	3,090	1,830	1,880	1,890	2,180	2,380
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	2.29	2.87	4.37	1.7	1.08	1.76	1.79	1.98	2.84	3.42
Strontium	µg/L	23.1	26.6	28.9	27.9	29.2	16.2	20	20.8	24.7	25.5
Sulfur	µg/L	900	2,300	3,100	1,000	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	0.01	<0.005	0.006	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-
Tin	µg/L	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.7	0.4	0.4	0.4	<0.5	0.6	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.13	0.12	0.12	0.2	0.24	0.08	0.09	0.11	0.11	0.14
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.11	0.19	0.25	0.19	0.32	0.3
Yttrium	µg/L	-	-	-	<1	-	-	-	-	-	-
Zinc	µg/L	<1	<1	<1	2	2.3	1.1	0.6	<0.5	<0.5	<0.5
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-Up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location						47					
Sample Date		20-Oct-22	8-Nov-22	3-Jan-23	8-Feb-23	7-Mar-23	25-May-23	15-Jun-23	3-Jul-23	8-Aug-23	7-Sep-23
Sample ID		47	47	47	47	47	47	47	47	47	47
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480798	482783	487429	490500	C367124	C3F3423	C3H9198	C3J8815	C3O2537	C3R9201
Laboratory Sample ID	Units	1815914	1824040	1839743	1850231	VGA340	VYF416	WDP484	WHR328	WQV771	WYR007
Metals, Total											
Aluminum	µg/L	27	23	4	7	4.1	50.2	20.4	8.9	5.4	18.1
Antimony	µg/L	0.2	0.2	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1
Arsenic	µg/L	19.3	17.7	16	2.9	1.7	4.1	6.8	7.1	16.3	22.4
Barium	µg/L	10.2	11.3	10.9	12.4	11.8	7.3	9	9.3	9.3	10
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	4	3	4	5	6	6
Cadmium	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	24.9	28.5	30.6	32.7	35.2	17.4	21.9	23.4	24.6	28.4
Cerium	µg/L	-	-	-	<1	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.2	0.4	0.3	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	1.9	1.9	2.1	1.2	0.4	0.7	0.8	0.7	1.2	1.3
Europium	µg/L	-	-	-	<1	-	-	-	-	-	-
Gallium	µg/L	-	-	-	<1	-	-	-	-	-	-
Iron	µg/L	140	140	90	120	72	108	98	65	43	93
Lanthanum	µg/L	-	-	-	<1	-	-	-	-	-	-
Lead	µg/L	0.08	0.08	0.14	<0.05	0.12	0.06	0.06	<0.05	0.08	0.08
Lithium	µg/L	<1	1	1	2	1.0	0.5	0.6	0.6	0.8	0.8
Magnesium	mg/L	5.26	5.6	6.37	6.59	6.91	3.69	4.37	4.96	5.39	5.71
Manganese	µg/L	8.9	8.7	2	8.2	6.9	8.1	9.4	7	11.9	23.6
Mercury	µg/L	<0.1	<0.1	<0.1	0.001	0.00117	0.00207	0.00096	0.00151	0.00076	0.00244
Molybdenum	µg/L	0.11	0.12	0.14	0.14	0.12	0.07	0.08	0.1	0.13	0.11
Nickel	µg/L	<0.5	<0.5	0.6	<0.5	0.2	0.3	0.3	0.3	0.4	0.4
Niobium	µg/L	-	-	-	<1	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	6	7	7	6	10	9
Potassium	mg/L	0.69	0.9	0.84	0.82	0.806	0.54	0.60	0.63	0.66	0.73
Rhodium	µg/L	-	-	-	<1	-	-	-	-	-	-
Rubidium	µg/L	1.6	1.9	1.9	2	1.80	1.29	1.47	1.71	1.78	1.86
Scandium	µg/L	-	-	-	<1	-	-	-	-	-	-
Selenium	µg/L	0.1	<0.05	<0.05	<0.05	0.06	0.05	0.06	0.06	0.06	0.06
Silicon	µg/L	1,690	1,930	2,120	2,730	3,160	1,850	1,950	1,850	2,080	2,480
Silver	µg/L	0.06	0.06	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	2.31	2.9	4.32	1.59	1.05	1.63	1.69	1.92	2.73	3.48
Strontium	µg/L	21.6	26.1	28.3	29.7	28.5	16	19.7	22.5	24.4	26.4
Sulfur	µg/L	<500	2,100	2,100	1,200	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-
Tin	µg/L	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1.6	1.2	0.6	0.7	<0.5	1.6	0.8	<0.5	<0.5	0.8
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.13	0.15	0.16	0.26	0.24	0.08	0.09	0.1	0.11	0.13
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.13	0.25	0.28	0.26	0.32	0.43
Yttrium	µg/L	-	-	-	<1	-	-	-	-	-	-
Zinc	µg/L	<1	<1	1	1	1.0	1.1	0.6	<0.5	<0.5	1.2
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location						49						
Sample Date		5-Oct-22	7-Nov-22	4-Jan-23	6-Feb-23	6-Mar-23	3-Apr-23	30-May-23	14-Jun-23	4-Jul-23	8-Aug-23	11-Sep-23
Sample ID		49	49	49	49	49	49	49	49	49	49	49
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		479154	482900	487567	490194	C365616	C399854	C3F8864	C3H7129	C3K0765	C3O2537	C3S2923
Laboratory Sample ID	Units	1808892	1824500	1840227	1849335	VFS060	VMZ386	VZJ712	WDD949	WIB178	WQV772	WZJ691
Field Parameters												
Depth, Field	m	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.81	8.04	7.7	7.43	7.22	7.27	7.73	7.86	7.99	7.82	7.94
Temperature, Field	deg C	11.8	4.9	0.3	1.1	1.1	0.5	18.1	18.3	21.9	22.7	17.1
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-	-
General Chemistry												
Acceptable Percent Difference	none	-	-	-	-	-	-	-	-	-	-	-
Acidity as CaCO3	mg/L	7	<5	25	6	9.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	79	90	111	115	110	110	60	71	77	80	82
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.011	0.0195	0.00162	0.00603	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	80	91	111	115	110	110	60	72	78	80	83
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	<0.01	0.14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.0004	<0.0004	<0.00091	<0.0012	<0.0021	<0.00041	<0.0014
Anion Sum	meq/L	-	-	-	-	-	-	-	-	-	-	-
Biochemical Oxygen Demand (BOD)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Cation Sum	meq/L	-	-	-	-	-	-	-	-	-	-	-
Chloride	mg/L	2	3.9	1.3	0.8	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0
Chlorophyll a	µg/L	-	-	-	-	-	-	-	-	-	-	-
Color, True	TCU	31.3	33.6	33.4	29.7	22	21	67	52	43	34	30
Cyanide	mg/L	0.007	0.002	0.004	<0.002	<0.00050	0.00068	0.00062	0.00067	0.00074	<0.00050	<0.00050
Cyanide (Free)	mg/L	0.002	0.003	<0.001	<0.001	<0.002	<0.002 ICB	0.0032 ICB	0.0022	0.005	0.0026	0.0021 ICB
Cyanide (Weak Acid Dissociable)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	10.9	14	10.8	10.3	11	11	13	13	12	12	11
Electrical Conductivity, Lab	µS/cm	178	188	218	208	219	215	126	153	167	170	186
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	93.2	91.5	113	102	120	120	65	82	88	91	91
Ion Balance	%	-	-	-	-	-	-	-	-	-	-	-
Langelier Index	none	-	-	-	-	-	-	-	-	-	-	-
Langelier Index Temperature	deg C	-	-	-	-	-	-	-	-	-	-	-
Nitrate (as N)	mg/L	<0.02	<0.05	0.03	0.02	<0.10	0.11	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	<0.10	0.11	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.05	0.04	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	-	-	-	-	-	-	-
pH, lab	S.U.	7.81	8.06	6.98	7.55	7.91	7.73	7.82	7.88	8.07	7.90	8.11
Phaeophytin A	µg/L	-	-	-	-	-	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.012	<0.001	<0.001	<0.001	0.0041	0.0033	0.0066	0.0090	0.0040	0.0086	0.0097
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Radium-226	Bq/L	<0.005	<0.005	<0.005	0.006	<0.010	<0.010	-	<0.010	<0.010	<0.010	<0.010
Silica (as SiO2)	mg/L	-	-	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	2.6	7	2.4	1.5	3.4	2.5	4.9	5.2	6.4	7.8	8.3
Total Dissolved Solids	mg/L	170	360	135	170	145	120	105	100	115	130	125
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	0.37	0.25	0.40	0.45	0.38	0.34	0.35
Total Organic Carbon	mg/L	11.2	14.2	10.8	10.1	10	10	13	13	12	12	11
Total Suspended Solids	mg/L	2.3	1.3	<0.67	1.3	<1	<1	2	2	1	1	2
Turbidity, Lab	NTU	1.6	2.27	0.8	0.7	0.6	0.5	0.8	0.6	0.4	0.6	1.0
Speciated Metals												
Methyl Mercury	µg/L	-	-	-	-	-	-	-	-	-	-	-
Metals, Dissolved												
Aluminum	µg/L	5	3	8	2	1.7	2.0	13.5	8	4.8	2.8	3.1
Antimony	µg/L	0.1	0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
Arsenic	µg/L	10.8	11	3.9	1.2	1.1	1.1	2.6	2.6	3.6	10.7	14.4
Barium	µg/L	10.9	11.2	14.5	11.4	12.0	12.3	7	9.3	9.7	9.4	9.5
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	5	5	3	4	5	5	5
Cadmium	µg/L	0.01	0.007	<0.005	0.007	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	28.2	27.7	35	30.5	35.3	35.6	19.3	24.3	26.5	26.8	27.1
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.5	0.4	0.4	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Hexavalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	1	1	1.3	0.5	0.8	1.0	0.4	0.7	0.5	0.9	0.9
Iron	µg/L	50	70	60	<10	29	32	54	45	32	18	25
Lead	µg/L	<0.05	<0.05	0.06	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	1	<1	<1	0.9	0.9	0.6	0.7	0.8	0.8	0.8
Magnesium	mg/L	5.8	5.76	6.88	6.09	7.26	6.95	4.13	5.15	5.39	5.86	5.78
Manganese	µg/L	1.8	1.2	3.7	4.1	3.1	3.2	3.1	1.1	0.9	1.6	0.9
Mercury	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.11	0.1	0.13	0.08	0.14	0.12	0.08	0.09	0.1	0.13	0.11
Nickel	µg/L	1.1	0.7	0.6	<0.5	0.2	0.2	0.2	0.3	0.2	0.3	0.3
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	<5	<5	<5	6	<5
Potassium	mg/L	0.81	0.8	0.86	0.81	0.852	0.821	0.54	0.67	0.67	0.74	0.72
Rubidium	µg/L	1.8	1.9	1.9	1.7	1.85	1.79	1.37	1.65	1.78	1.82	1.83
Selenium	µg/L	<0.05	<0.05	0.27	<0.05	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	2,260	1,920	2,230	1,810	3,010	3,020	1,710	2,000	1,910	2,140	2,320
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	1.76	3.94	2.28	0.91	0.963	0.879	1.06	1.67	2.26	3.33	3.86
Strontium	µg/L	23.2	26.6	28.4	21.5	29.6	29.2	17.3	20.9	22.2	24.9	25.9
Sulfur	µg/L	900	2,900	1,200	<500	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1.1	0.4	0.8	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.17	0.15	0.27	0.21	0.28	0.27	0.1	0.13	0.14	0.13	0.15
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.11	0.11	0.19	0.25	0.23	0.3	0.3
Zinc	µg/L	<1	<1	2	2	0.6	<0.5	0.5	<0.5	<0.5	<0.5	<0.5
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location						49						
Sample Date		5-Oct-22	7-Nov-22	4-Jan-23	6-Feb-23	6-Mar-23	3-Apr-23	30-May-23	14-Jun-23	4-Jul-23	8-Aug-23	11-Sep-23
Sample ID		49	49	49	49	49	49	49	49	49	49	49
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		479154	482900	487567	490194	C365616	C399854	C3F8864	C3H7129	C3K0765	C3O2537	C3S2923
Laboratory Sample ID	Units	1808892	1824500	1840227	1849335	VFS060	VMZ386	VZJ712	WDD949	WIB178	WQV772	WZJ691
Metals, Total												
Aluminum	µg/L	26	25	8	5	2.6	2.8	25	20.5	8.8	6.8	11.4
Antimony	µg/L	0.1	0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	10.9	10.3	3.4	1.4	1.1	1.1	2.8	2.8	3.8	11.3	15.7
Barium	µg/L	11.2	11.1	12.4	12.5	11.8	11.8	8.5	10	9.8	9.7	10.1
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	4	5	3	4	5	6	5
Cadmium	µg/L	<0.005	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	26	28	33.7	34.4	35	35.4	20.7	24.0	25.5	25.9	27.6
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.5	0.3	0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (Trivalent)	µg/L	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	1.3	1.2	1.3	0.7	0.4	0.4	0.5	0.5	0.5	0.9	1
Iron	µg/L	270	160	150	110	57	63	89	93	60	48	77
Lead	µg/L	0.11	0.09	0.15	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05
Lithium	µg/L	<1	1	1	1	0.9	1.0	0.6	0.7	0.7	0.8	0.8
Magnesium	mg/L	5.52	5.94	6.93	6.98	6.86	7.05	4.24	4.84	5.49	5.68	5.82
Manganese	µg/L	13.1	8.7	6.8	6.1	5.9	8.0	8.9	11	7.2	14.4	19.9
Mercury	µg/L	-	<0.1	<0.1	0.002	0.00107	0.00075	0.00174	0.00098	0.00146	0.00079	0.00077
Molybdenum	µg/L	0.12	0.12	0.14	0.13	0.12	0.12	0.07	0.09	0.11	0.12	0.11
Nickel	µg/L	<0.5	<0.5	<0.5	<0.5	0.2	0.2	0.3	0.3	0.2	0.3	0.4
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	6	7	<5	9	<5
Potassium	mg/L	0.78	0.84	0.85	0.92	0.806	0.792	0.56	0.64	0.69	0.70	0.74
Rubidium	µg/L	1.8	2	1.9	2	1.82	1.76	1.45	1.68	1.84	1.88	1.89
Selenium	µg/L	0.16	<0.05	0.14	<0.05	0.06	0.06	0.05	0.05	0.06	0.06	0.07
Silicon	µg/L	2,210	2,170	2,440	2,150	2,930	2,890	1,760	2,030	1,910	2,050	2,400
Silver	µg/L	0.06	0.07	0.05	0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	1.75	4.31	1.96	1.02	0.897	0.927	1.13	1.53	2.31	3.17	3.86
Strontium	µg/L	22.8	26.5	26.7	23.8	29.0	27.4	17.2	21.2	23.7	24.8	26.4
Sulfur	µg/L	1,300	3,000	1,500	<500	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-
Tin	µg/L	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1.7	1.3	0.8	0.8	<0.5	<0.5	0.8	0.8	<0.5	<0.5	0.6
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.17	0.19	0.27	0.28	0.27	0.29	0.09	0.12	0.13	0.13	0.14
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.14	0.13	0.22	0.29	0.27	0.34	0.38
Zinc	µg/L	<1	<1	2	3	<0.5	<0.5	0.7	0.5	<0.5	<0.5	<0.5
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		52											
Sample Date		26-Oct-22	9-Nov-22	13-Dec-22	11-Jan-23	16-Feb-23	14-Mar-23	11-Apr-23	9-May-23	22-Jun-23	12-Jul-23	16-Aug-23	26-Sep-23
Sample ID		52	52	52	52	52	52	52	52	52	52	52	52
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		481427	482918	486093	488304	491089	C375955	C3A4623	C3D3660	C3I7565	C3K9170	C3P1170	C3U0580
Laboratory Sample ID	Units	1818973	1824564	1835471	1842637	1852178	VHW149	VNY231	VTX939	WFI374	WJU091	WSQ526	XDC460
Field Parameters													
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.92	7.64	6.51	7.62	7.61	7.64	7.54	4.1	7.73	7.70	7.91	7.90
Temperature, Field	deg C	7.5	3.6	0.6	0.5	0.2	0.5	1.7	7.11	24.7	17.1	18.2	15.7
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-	-	-
General Chemistry													
Acidity as CaCO3	mg/L	9	9	7	9	13	<5.0	<5.0	5.4	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	85	86	106	69	102	110	100	77	82	80	86	88
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00538	0.00833	0.00502	0.00152	0.00276	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	85	86	106	216	102	110	100	77	83	80	86	89
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	0.03	<0.01	0.02	0.07	<0.01	<0.050	0.074	0.065	<0.050	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0004	<0.0004	<0.0004	<0.0015	<0.00079	<0.0014	<0.0011
Biochemical Oxygen Demand (BOD)	mg/L	2.4	<1	1.4	<0.5	1.6	<2	<2	<2	<2	<2	<2	<2
Chemical Oxygen Demand	mg/L	26	30	30	34	42	32	31	37	35	33	30	31
Chloride	mg/L	0.5	0.6	0.5	0.5	0.5	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorophyll a	µg/L	1.9	-	-	-	-	-	-	-	3.8	-	-	-
Color, True	TCU	26.4	25.9	23.8	23.1	20.6	20	21	59	44	35	27	24
Cyanide	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	0.00074	:0.00050 CYI	0.00060 CYN	<0.00050	<0.00050	<0.00050	<0.00050
Cyanide (Free)	mg/L	<0.001	0.003	0.002	<0.001	<0.001	0.0041	0.0029 ICB	0.0034 ICB	0.0032	0.0076	<0.002	0.0028
Dissolved Organic Carbon (DOC)	mg/L	10.7	10.3	11.2	10.3	10.5	11	11	14	12	11	11	10
Electrical Conductivity, Lab	µS/cm	184	184	190	369	187	207	205	154	167	164	169	177
Fluoride	mg/L	<0.05	0.06	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	94.2	94.3	101	114	111	120	110	83	88	90	91	100
Mineral Oil and Grease	mg/L	-	-	-	-	-	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Nitrate (as N)	mg/L	<0.05	<0.02	<0.02	<0.02	<0.02	<0.10	0.14	0.16	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	-	<0.10	0.14	0.16	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.05	<0.01	<0.01	<0.01	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Oil and Grease, Total	mg/L	1	<1	<1	<1	2	-	-	-	-	-	-	-
Orthophosphate (as P)	mg/L	-	-	-	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
pH, lab	S.U.	7.5	7.69	7.47	8.03	7.21	7.90	7.92	7.62	7.88	7.89	7.76	7.96
Phaeophytin A	µg/L	1.2	-	-	-	-	-	-	-	-	-	-	-
Pheophytin a	µg/L	-	-	-	-	-	-	-	-	>2.2	-	-	-
Phosphate	mg/L	0.021	0.02	0.071	0.018	0.029	-	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.006	<0.001	0.024	<0.001	<0.001	0.0036	0.0075	0.0048	0.0021	0.0074	0.0038	0.0053
Phosphorus, Total (Dissolved)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	1.8	1.5	1.6	1.8	1.5	2.8	4.1	4.4	3.0	3.0	2.7	2.6
Total Dissolved Solids	mg/L	70	140	155	135	110	120	60	130	90	95	105	100
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	<1	0.32	0.41	0.43	0.43	0.51	0.39	0.46
Total Organic Carbon	mg/L	11	10.5	10.3	9.9	10.3	11	11	15	13	12	11	11
Total Suspended Solids	mg/L	<1	1.5	4	2	<1.3	2	<1	<1	2	2	1	2
Turbidity, Lab	NTU	1.6	0.9	0.6	0.7	0.5	0.3	0.3	0.5	0.7	0.7	0.6	0.6
Speciated Metals													
Methyl Mercury	µg/L	0.00003	0.00003	0.00003	0.00008	0.00004	<0.00005	0.00008	0.00007	0.00012	<0.00005	-	<0.00005
Metals, Dissolved													
Aluminum	µg/L	5	3	2	1	2	21.6	2.5	28.5	8.6	10.7	8.5	8.3
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	4	3.8	3.9	3.3	2.9	2.6	2.4	2.2	3.8	3.5	4	4.4
Barium	µg/L	11.7	11.7	12.2	11.3	12.3	12.2	12.1	9.2	10.1	12.7	11	12.8
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	<2	6	4	6	4	5	4	5
Cadmium	µg/L	0.009	<0.005	0.01	0.006	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	31	30.4	33.3	31.9	32.3	38	32.4	25.4	27.1	27.4	28.1	31.9
Cerium	µg/L	-	-	-	-	<1	-	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.3	0.4	0.5	0.7	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5
Cobalt	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	0.5	0.5	1.5	3.8	1.7	0.8	0.5	0.9	0.4	6.8	0.4	1
Europium	µg/L	-	-	-	-	<1	-	-	-	-	-	-	-
Gallium	µg/L	-	-	-	-	<1	-	-	-	-	-	-	-
Iron	µg/L	100	110	10	70	80	27	34	72	43	53	45	34
Lanthanum	µg/L	-	-	-	-	<1	-	-	-	-	-	-	-
Lead	µg/L	<0.05	<0.05	0.27	<0.05	0.29	0.19	<0.05	0.13	<0.05	0.48	<0.05	<0.05
Lithium	µg/L	<1	1	<1	<1	<1	0.7	0.6	0.5	0.6	0.6	0.6	0.6
Magnesium	mg/L	5.66	5.63	6.23	5.51	6.51	6.53	6	4.79	4.99	5.16	5.14	5.56
Manganese	µg/L	3.4	3.2	2.9	2.8	3.1	4.3	10.3	10.1	8.9	6	5.2	5.5
Mercury	µg/L	-	-	-	-	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.16	0.13	0.48	0.19	0.15	0.16	0.24	0.08	0.1	0.11	0.12	0.13
Nickel	µg/L	0.7	0.6	0.9	0.8	0.9	0.2	0.3	0.3	0.3	0.3	0.2	0.3
Niobium	µg/L	-	-	-	-	<1	-	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	70	<5	<5	<5	5	<5	<5	<5
Potassium	mg/L	0.74	0.72	0.8	0.71	0.8	0.788	0.731	0.54	0.59	0.60	0.53	0.61
Rhodium	µg/L	-	-	-	-	<1	-	-	-	-	-	-	-
Rubidium	µg/L	1.7	1.7	1.7	1.6	1.6	1.49	1.53	1.2	1.39	1.34	1.26	1.27
Scandium	µg/L	-	-	-	-	<1	-	-	-	-	-	-	-
Selenium	µg/L	<0.05	<0.05	<0.05	0.22	<0.05	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	1,470	1,370	1,250	1,310	1,570	2,120	2,080	2,350	1,910	2,120	2,360	2,160
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	0.69	0.74	0.95	0.74	0.97	0.842	0.749	0.64	0.66	0.67	0.67	0.72
Strontium	µg/L	23.5	25.6	24	26.8	26.9	28.8	31.6	22.3	23.4	25.6	26.2	28.6
Sulfur	µg/L	900	1,300	2,200	<500	1,300	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	0.03	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	<0.2	-	-
Tin	µg/L	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1
Titanium	µg/L	0.4	0.3	<0.3	0.4	0.6	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.11	0.1	0.08	0.13	0.11	0.13	0.13	0.07	0.08	0.1	0.13	0.15
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.16	0.16	0.13	0.23	0.3	0.39	0.33
Yttrium	µg/L	-	-	-	-	<1	-	-	-	-	-	-	-
Zinc	µg/L	<1	<1	3	2	6	0.9	<0.5	0.9	<0.5	3.4	1.2	0.9
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location													
							52						
Sample Date		26-Oct-22	9-Nov-22	13-Dec-22	11-Jan-23	16-Feb-23	14-Mar-23	11-Apr-23	9-May-23	22-Jun-23	12-Jul-23	16-Aug-23	26-Sep-23
Sample ID		52	52	52	52	52	52	52	52	52	52	52	52
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		481427	482918	486093	488304	491089	C375955	C3A4623	C3D3660	C3I7565	C3K9170	C3P1170	C3U0580
Laboratory Sample ID	Units	1818973	1824564	1835471	1842637	1852178	VHW149	VNY231	VTX939	WFI374	WJU091	WSQ526	XDC460
Metals, Total													
Aluminum	µg/L	12	9	6	6	4	2.5	8.2	34	15.1	18.2	12.9	13.6
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	3.8	3.6	3.3	2.9	2.6	2.6	2.4	2.2	4.1	3.8	4.2	3.7
Barium	µg/L	11.3	11.8	11.6	11.3	11.4	12.6	12.2	9.4	11	11	11.2	11.8
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	<2	4	4	3	4	4	5	4
Cadmium	µg/L	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01
Calcium	mg/L	30	30.2	33.1	34	31.7	35.3	35	27.0	27.9	28.5	29.5	30.0
Cerium	µg/L	-	-	-	-	<1	-	-	-	-	-	-	-
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.5	0.4	0.4	0.3	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	0.5	0.6	0.4	2.4	0.5	0.4	0.4	0.5	0.5	0.5	0.5	1.5
Europium	µg/L	-	-	-	-	<1	-	-	-	-	-	-	-
Gallium	µg/L	-	-	-	-	<1	-	-	-	-	-	-	-
Iron	µg/L	180	150	130	80	130	41	51	102	93	104	75	85
Lanthanum	µg/L	-	-	-	-	<1	-	-	-	-	-	-	-
Lead	µg/L	0.07	0.05	<0.05	0.05	<0.05	0.06	<0.05	<0.05	<0.05	0.05	0.11	0.07
Lithium	µg/L	<1	1	<1	<1	<1	0.7	0.7	<0.5	0.6	0.6	0.6	0.7
Magnesium	mg/L	5.42	5.45	6.15	6.27	6.29	6.08	6.32	5.00	5.10	4.98	5.47	5.45
Manganese	µg/L	9.2	7.7	7.5	6.2	4.6	5.8	12.4	13.4	35.8	35.2	16.3	16.9
Mercury	µg/L	0.001	0.0007	0.0008	0.001	0.001	0.00083	0.00084	0.00425	0.00183	0.00094	0.00107	0.00138
Molybdenum	µg/L	0.2	0.18	0.07	0.17	0.16	0.19	0.13	0.08	0.12	0.1	0.13	0.13
Nickel	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.2	0.3	0.3	0.3	0.3	0.2	0.3
Niobium	µg/L	-	-	-	-	<1	-	-	-	-	-	-	-
Phosphorus	µg/L	<50	<50	<50	<50	<50	<5	<5	<5	8	8	<5	<5
Potassium	mg/L	0.74	0.73	0.77	0.77	0.75	0.726	0.728	0.57	0.65	0.59	0.60	0.68
Rhodium	µg/L	-	-	-	-	<1	-	-	-	-	-	-	-
Rubidium	µg/L	1.7	1.7	1.6	1.6	1.6	1.55	1.54	1.18	1.43	1.35	1.31	1.42
Scandium	µg/L	-	-	-	-	<1	-	-	-	-	-	-	-
Selenium	µg/L	0.28	0.1	0.06	0.13	0.06	0.07	0.07	0.06	0.07	0.06	0.07	0.06
Silicon	µg/L	1,580	1,430	1,320	1,520	1,580	1,930	2,260	2,320	1,950	2,120	2,520	2,100
Silver	µg/L	0.05	0.06	0.04	0.04	0.07	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	0.67	0.72	0.75	0.77	0.76	0.755	0.812	0.67	0.63	0.65	0.69	0.76
Strontium	µg/L	22.9	24.4	23.3	27.4	26.2	29.6	29.9	21.2	25.1	24.3	26.2	27
Sulfur	µg/L	900	900	2,500	600	1,400	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-	-	<0.2	-	-
Tin	µg/L	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.8	0.5	0.5	0.6	0.4	<0.5	<0.5	0.7	0.6	0.6	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.11	0.12	0.11	0.12	0.13	0.12	0.13	0.07	0.08	0.09	0.14	0.15
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.16	0.17	0.15	0.27	0.36	0.46	0.39
Yttrium	µg/L	-	-	-	-	<1	-	-	-	-	-	-	-
Zinc	µg/L	<1	<1	<1	1	<1	<0.5	<0.5	0.6	0.6	0.6	<0.5	2.7
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-Up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location						53					
Sample Date		5-Oct-22	8-Nov-22	4-Jan-23	6-Feb-23	6-Mar-23	30-May-23	14-Jun-23	4-Jul-23	8-Aug-23	7-Sep-23
Sample ID		53	53	53	53	53	53	53	53	53	53
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV
Laboratory Work Order		479154	482783	487567	490194	C365616	C3F8864	C3H7129	C3K0765	C3O2537	C3R9201
Laboratory Sample ID	Units	1808891	1824035	1840228	1849336	VFS061	VZJ714	WDD950	WIB179	WQV773	WYR006
Field Parameters											
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.82	8.06	7.89	7.56	7.22	7.76	7.79	8.09	7.89	8.10
Temperature, Field	deg C	11.6	4	0.2	0.1	0.7	19.4	17.5	24.5	21.2	17.2
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-
General Chemistry											
Acidity as CaCO3	mg/L	8	9	28	6	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	84	41	110	118	120	62	74	79	83	82
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.0115	0.00892	0.00166	0.00646	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	84	41	110	118	120	63	74	80	84	82
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	0.09	0.05	<0.050	<0.050	<0.050	<0.050	0.053	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.0004	<0.0011	<0.00099	<0.0032	0.0017	<0.002
Chloride	mg/L	1	2.6	0.6	1.1	<1.0	1.6	<1.0	1.2	<1.0	1.9
Chlorophyll a	µg/L	0.8	-	-	-	-	-	3.2	-	-	-
Color, True	TCU	36.6	28.1	29.8	29	22	67	52	42	30	26
Cyanide	mg/L	0.007	0.003	<0.002	<0.002	<0.00050	0.00069 CYN	0.00070	0.00077	<0.00050	<0.00050
Cyanide (Free)	mg/L	0.002	0.003	<0.001	<0.001	<0.002	0.0044 ICB	0.0027	0.0042	0.0023	0.0028
Dissolved Organic Carbon (DOC)	mg/L	10.5	10	9.8	9.8	10	13	13	12	11	10
Electrical Conductivity, Lab	µS/cm	183	216	217	218	230	131	157	171	186	205
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	98	97.3	112	105	120	68	84	90	98	110
Nitrate (as N)	mg/L	<0.02	<0.02	<0.02	0.02	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
pH, lab	S.U.	7.83	7.72	6.99	7.58	7.92	7.85	7.91	8.08	7.95	7.96
Phaeophytin A	µg/L	<0.5	-	-	-	-	-	-	-	-	-
Pheophytin a	µg/L	-	-	-	-	-	-	3.4	-	-	-
Phosphorus, Total	mg/L	0.002	0.005	<0.001	<0.001	0.0062	0.0058	0.0071	0.0046	0.0061	0.012
Radium-226	Bq/L	<0.005	<0.005	<0.005	-	-	-	-	-	-	-
Sulfate	mg/L	1.8	5.4	1.5	1.6	2.8	7.0	5.8	6.2	10	10
Total Dissolved Solids	mg/L	175	150	145	130	125	80	115	100	125	145
Total Kjeldahl Nitrogen	mg/L	<1	<1	<1	<1	0.35	0.41	0.41	0.41	0.27	0.32
Total Organic Carbon	mg/L	10.5	10.2	9.6	10	11	14	13	12	12	11
Total Suspended Solids	mg/L	3	2	1.3	<0.67	<1	2	2	1	2	3
Turbidity, Lab	NTU	1.7	0.8	1.1	0.8	0.7	0.7	0.6	0.5	0.5	1.0
Metals, Dissolved											
Aluminum	µg/L	5	2	6	2	1.6	13.3	7.6	4.9	3.7	3.9
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	5	5.5	1.1	1.3	1.1	7.7	2.4	3.9	5.8	7
Barium	µg/L	11.4	11.7	12.3	11.9	12.6	7.2	10.3	9.6	9.8	10.1
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	5	3	4	5	6	6
Cadmium	µg/L	0.006	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	28.7	30.3	34.5	31.8	37	20.4	24.6	26.9	28.6	31.8
Cesium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.6	0.3	0.3	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	µg/L	0.1	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	0.6	0.6	0.6	0.5	0.8	0.6	0.5	0.5	0.5	0.4
Iron	µg/L	50	70	40	10	33	56	46	34	16	28
Lead	µg/L	<0.05	<0.05	0.05	0.07	<0.05	0.11	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	1	<1	<1	1.0	0.6	0.7	0.8	0.8	0.9
Magnesium	mg/L	5.91	6.3	6.82	6.32	7.5	4.21	5.53	5.51	6.40	6.39
Manganese	µg/L	1.5	1.2	3	9.1	8.0	3.5	1.2	0.8	1.1	3.8
Mercury	µg/L	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.11	0.09	0.13	0.09	0.14	0.09	0.1	0.11	0.13	0.11
Nickel	µg/L	1	0.6	<0.5	<0.5	0.2	0.3	0.2	0.3	0.2	0.3
Phosphorus	µg/L	<50	<50	<50	<50	<5	<5	<5	<5	5	<5
Potassium	mg/L	0.86	0.94	0.83	0.83	0.89	0.57	0.73	0.69	0.80	0.79
Rubidium	µg/L	1.9	2.2	1.9	1.8	1.96	1.43	1.78	1.81	1.96	2.01
Selenium	µg/L	<0.05	<0.05	<0.05	<0.05	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	2,200	2,180	2,110	1,870	3,080	1,720	2,010	1,930	2,170	2,570
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	1.24	6.58	0.9	1.06	0.994	1.28	1.87	2.38	4.52	4.83
Strontium	µg/L	22.4	28.2	26.1	23.3	31.1	18.5	22.8	23	25.8	26
Sulfur	µg/L	600	4,100	500	<500	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1	0.4	0.6	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.19	0.17	0.3	0.22	0.29	0.1	0.14	0.14	0.16	0.18
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.12	0.21	0.26	0.24	0.31	0.34
Zinc	µg/L	<1	<1	1	2	1.1	0.9	<0.5	<0.5	<0.5	<0.5
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-Up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location						53					
Sample Date		5-Oct-22	8-Nov-22	4-Jan-23	6-Feb-23	6-Mar-23	30-May-23	14-Jun-23	4-Jul-23	8-Aug-23	7-Sep-23
Sample ID		53	53	53	53	53	53	53	53	53	53
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV
Laboratory Work Order		479154	482783	487567	490194	C365616	C3F8864	C3H7129	C3K0765	C3O2537	C3R9201
Laboratory Sample ID	Units	1808891	1824035	1840228	1849336	VFS061	VZJ714	WDD950	WIB179	WQV773	WYR006
Metals, Total											
Aluminum	µg/L	24	19	9	6	3.1	30.7	19.7	9	7.8	22.3
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	5	5.2	1	1.4	1.2	7.5	2.4	4	6.2	7.8
Barium	µg/L	11.6	12.1	12.7	12.4	12.7	8.4	10	9.9	9.7	11.1
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	4	3	4	5	6	6
Cadmium	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005
Calcium	mg/L	27.9	29.9	35.7	34.2	37.7	21.2	24.1	25.7	26.9	31.3
Cesium	µg/L	0.01	0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	0.4	0.5	0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	µg/L	0.2	<0.1	<0.1	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.05
Copper	µg/L	0.9	0.9	0.7	0.5	0.5	0.6	0.5	0.5	0.6	1.1
Iron	µg/L	260	130	150	120	66	103	100	68	51	107
Lead	µg/L	0.07	0.07	0.52	0.21	<0.05	0.05	0.05	<0.05	<0.05	0.08
Lithium	µg/L	<1	1	1	1	1.0	0.7	0.7	0.7	0.9	0.9
Magnesium	mg/L	5.67	6.39	7.05	6.9	7.18	4.42	4.89	5.52	6.43	6.49
Manganese	µg/L	13.2	8.7	6.2	12.3	12.8	9.4	12.7	7.5	13.4	23.8
Mercury	µg/L	-	<0.1	<0.1	0.001	0.00111	0.00134	0.00106	0.00153	0.00089	0.00112
Molybdenum	µg/L	0.14	0.14	0.14	0.13	0.13	0.08	0.09	0.1	0.13	0.12
Nickel	µg/L	<0.5	<0.5	<0.5	<0.5	0.2	0.3	0.3	0.3	0.3	0.3
Phosphorus	µg/L	<50	<50	<50	<50	<5	6	6	5	8	8
Potassium	mg/L	0.83	1.03	0.87	0.91	0.866	0.58	0.65	0.69	0.78	0.82
Rubidium	µg/L	1.9	2.2	1.9	2	1.95	1.51	1.65	1.85	2.03	2.11
Selenium	µg/L	0.15	0.1	<0.05	<0.05	0.06	0.05	0.06	0.06	0.06	0.06
Silicon	µg/L	2,430	2,250	2,390	2,070	3,070	1,760	2,060	1,900	2,090	2,660
Silver	µg/L	0.08	0.06	0.06	0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	1.21	6.59	0.96	1.14	0.946	1.36	1.63	2.35	4.48	4.88
Strontium	µg/L	23.7	27	27	23.8	30.9	18	21.2	23.6	26	26.8
Sulfur	µg/L	900	3,500	1,200	<500	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-
Tin	µg/L	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1.8	1.1	0.8	0.7	<0.5	1.1	0.8	<0.5	<0.5	1
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.2	0.22	0.32	0.3	0.28	0.09	0.12	0.13	0.16	0.18
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.14	0.26	0.29	0.26	0.34	0.4
Zinc	µg/L	<1	<1	<1	2	1.0	1	<0.5	<0.5	<0.5	0.8
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	0.1	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location		54									
Sample Date		17-Jan-23	13-Feb-23	13-Mar-23	15-Mar-23	3-Apr-23	9-May-23	27-Jun-23	10-Jul-23	14-Aug-23	6-Sep-23
Sample ID		54	54	54	54	54	54	54	54	54	54
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		488728	490785	C373279	C376074	C399854	C3D3660	C3J2937	C3K7615	C3P0321	C3R6726
Laboratory Sample ID	Units	1844079	1851309	VHI194	VHW775	VMZ383	VTX938	WGL070	WJL687	WSM216	WYE142
Field Parameters											
pH, Field	S.U.	7.43	7.52	7.35	-	7.38	2.8	7.57	7.49	7.29	7.85
Temperature, Field	deg C	0	0.2	0.2	-	0.2	7.02	18.4	21.4	19.4	19.4
General Chemistry											
Acidity as CaCO3	mg/L	8	24	<5.0	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	<1	100	110	-	110	76	93	98	110	110
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	<0.00001	0.00085	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	106	100	110	-	110	77	94	98	110	110
Ammonia (as N)	mg/L	0.03	0.05	<0.050	-	0.068	0.075	0.058	<0.050	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.0004	-	<0.0004	<0.0004	0.00074	<0.00067	<0.0004	<0.0013
Chloride	mg/L	0.6	0.5	<1.0	-	<1.0	<1.0	1.9	1.3	<1.0	<1.0
Color, True	TCU	25.7	24.9	23	-	21	62	48	46	41	36
Cyanide	mg/L	0.007	<0.002	<0.00050	-	<0.00050	0.00059 CYN	0.00078	<0.00050	0.00078	<0.00050
Cyanide (Free)	mg/L	<0.001	0.001	<0.002	-	<0.002 ICB	0.0031 ICB	0.0038	<0.002	0.0035	<0.002
Dissolved Organic Carbon (DOC)	mg/L	13.2	11.4	11	-	11	14	13	13	13	13
Electrical Conductivity, Lab	µS/cm	204	196	215	-	210	153	192	195	212	225
Fluoride	mg/L	<0.05	<0.05	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	105	116	110	-	120	85	100	110	120	120
Nitrate (as N)	mg/L	<0.02	0.02	<0.10	-	<0.10	0.18	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	<0.10	-	<0.10	0.18	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.01	<0.010	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
pH, lab	S.U.	7.5	6.7	7.73	-	7.76	7.61	7.89	7.90	7.92	7.99
Phosphorus, Total	mg/L	0.009	0.001	0.0043	-	0.0047	0.0069	0.015	0.016	0.018	0.015
Sulfate	mg/L	2.1	2	3.2	-	3.6	4.3	3.1	2.5	2.5	2.4
Total Dissolved Solids	mg/L	125	110	135	-	135	140	140	140	130	155
Total Kjeldahl Nitrogen	mg/L	<1	<1	0.43	-	0.33	0.41	0.53	0.45	0.47	0.50
Total Organic Carbon	mg/L	13.7	11.5	11	-	11	15	13	14	14	14
Total Suspended Solids	mg/L	1	<0.67	<1	-	<1	3	1	10	11	5
Turbidity, Lab	NTU	0.8	0.6	0.4	-	0.3	0.5	0.5	1.1	1.3	1.2
Speciated Metals											
Methyl Mercury	µg/L	0.0001	0.00005	-	0.00015	<0.00005	0.00014	0.00072	0.00029	<0.00005	0.00032
Metals, Dissolved											
Aluminum	µg/L	2	3	1.8	-	2.0	34	9.4	7.2	4.2	4.8
Antimony	µg/L	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	0.1	0.1	0.1
Arsenic	µg/L	3.6	3.4	3.1	-	3.1	2.7	7.2	7.6	8.5	8.1
Barium	µg/L	11.8	11.5	12.3	-	12.5	9.1	13.2	15	16.9	17.6
Beryllium	µg/L	<0.02	<0.02	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	4	-	4	3	4	5	4	5
Cadmium	µg/L	0.01	0.008	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	33.4	32.4	35.1	-	36.5	26.3	31.6	33.9	36.4	36.2
Cesium	µg/L	<0.01	<0.01	<0.02	-	<0.02	<0.02	<0.02	0.02	0.02	0.03
Chromium	µg/L	0.4	0.6	<0.5	-	<0.5	1	1.2	<0.5	<0.5	<0.5
Cobalt	µg/L	<0.1	<0.1	<0.05	-	<0.05	0.06	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	0.8	0.5	0.4	-	0.4	0.5	1.4	0.6	0.4	0.9
Iron	µg/L	40	<10	36	-	42	95	49	27	18	21
Lead	µg/L	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	<1	<1	0.7	-	0.7	0.5	0.6	0.7	0.7	0.7
Magnesium	mg/L	6.25	5.93	6.44	-	6.47	4.80	5.53	5.86	5.95	6.20
Manganese	µg/L	3.3	12.1	19.7	-	25.0	21.9	6.9	4.9	3.8	3.3
Mercury	µg/L	-	-	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.15	0.1	0.16	-	0.17	0.11	0.32	0.35	0.38	0.41
Nickel	µg/L	0.7	0.5	0.3	-	0.3	0.4	0.5	0.5	0.6	0.6
Phosphorus	µg/L	<50	<50	<5	-	<5	<5	7	7	<5	<5
Potassium	mg/L	0.89	0.81	0.835	-	0.867	0.67	1.08	1.32	1.34	1.52
Rubidium	µg/L	1.9	1.8	1.84	-	1.74	1.5	2.64	3.12	3.6	3.96
Selenium	µg/L	<0.05	<0.05	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	1,390	1,630	1,910	-	2,090	2,290	1,690	1,270	935	516
Silver	µg/L	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	0.78	0.71	0.83	-	0.791	0.65	0.69	0.67	0.68	0.68
Strontium	µg/L	27.3	28.6	32.8	-	31.0	24.1	30.1	34.2	36	38
Sulfur	µg/L	<500	600	-	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.005	-	<0.005	<0.005	0.007	0.008	0.009	0.009
Thorium	µg/L	<0.1	<0.1	-	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	<0.3	<0.3	<0.5	-	<0.5	0.6	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.11	0.11	0.14	-	0.13	0.09	0.1	0.11	0.12	0.15
Vanadium	µg/L	<0.5	<0.5	0.14	-	0.14	0.14	0.22	0.26	0.23	0.26
Zinc	µg/L	2	2	0.8	-	0.7	1.7	4.1	2.2	<0.5	1.1
Zirconium	µg/L	<0.2	<0.2	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Metals, Total											
Aluminum	µg/L	8	8	3.6	-	5.9	54.1	20.1	52.9	61.5	29.3
Antimony	µg/L	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	0.1	0.1
Arsenic	µg/L	3.6	3.4	3.2	-	3.1	2.7	7.2	7.7	10	9
Barium	µg/L	12.2	12.6	12.4	-	12.6	8.9	13.6	15.4	18.5	18.8
Beryllium	µg/L	<0.02	<0.02	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	4	-	4	3	4	5	5	5
Cadmium	µg/L	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	35.4	35.6	35.4	-	34.6	26.6	31.7	33.4	39.4	39.8
Cesium	µg/L	<0.01	<0.01	<0.02	-	<0.02	<0.02	<0.02	0.02	0.03	0.03
Chromium	µg/L	0.5	0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	µg/L	<0.1	<0.1	<0.05	-	<0.05	0.07	0.07	0.08	0.09	0.07
Copper	µg/L	2.8	0.7	0.4	-	0.4	0.6	0.9	0.9	0.6	0.9
Iron	µg/L	120	110	55	-	65	130	85	95	113	66
Lead	µg/L	<0.05	0.06	<0.05	-	0.07	<0.05	<0.05	0.08	0.08	0.06
Lithium	µg/L	<1	1	0.7	-	0.7	<0.5	0.6	0.7	0.7	0.7
Magnesium	mg/L	6.42	6.67	6.36	-	6.19	4.98	5.41	5.54	6.27	6.30
Manganese	µg/L	8.7	20.6	25.2	-	29.0	24.7	30.9	24.8	30	26.7
Mercury	µg/L	0.002	0.0009	<0.01	0.00107	0.00095	0.00491	0.00280	0.00346	0.00061	0.0137
Molybdenum	µg/L	0.22	0.16	0.17	-	0.18	0.11	0.32	0.27	0.36	0.4
Nickel	µg/L	<0.5	<0.5	0.3	-	0.3	0.4	0.5	0.7	0.6	0.8
Phosphorus	µg/L	<50	<50	<5	-	8	7	15	17	16	11
Potassium	mg/L	0.94	0.94	0.825	-	0.839	0.72	1.08	1.28	1.50	1.55
Rubidium	µg/L	1.9	2	1.83	-	1.76	1.39	2.64	3.06	3.89	4.08
Selenium	µg/L	0.42	0.08	0.07	-	0.07	0.06	0.06	0.07	0.07	0.07
Silicon	µg/L	1,480	1,960	1,950	-	2,080	2,200	1,680	1,280	1,060	559
Silver	µg/L	0.05	0.04	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	0.82	0.81	0.787	-	0.774	0.70	0.64	0.66	0.70	0.71
Strontium	µg/L	26.6	30.9	32.5	-	30.7	22.2	30	33.1	37.3	37.4
Sulfur	µg/L	<500	2,200	-	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.005	-	<0.005	<0.005	0.008	0.009	0.008	0.008
Thorium	µg/L	<0.1	<0.1	-	-	-	-	-	-	-	-
Tin	µg/L	0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.6	0.4	<0.5	-	<0.5	1.2	0.7	1.6	2.5	0.9
Tungsten	µg/L	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.15	0.15	0.14	-	0.14	0.08	0.09	0.1	0.13	0.16
Vanadium	µg/L	<0.5	<0.5	0.16	-	0.16	0.19	0.26	0.33	0.35	0.32
Zinc	µg/L	1	1	0.8	-	0.9	0.7	3	2.7	1.5	0.8
Zirconium	µg/L	<0.2	0.3	<0.1	-	<0.1	0.1	<0.1	0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location													
							55						
Sample Date		19-Oct-22	10-Nov-22	11-Jan-23	6-Feb-23	9-Mar-23	15-Mar-23	4-Apr-23	29-May-23	23-Jun-23	10-Jul-23	14-Aug-23	19-Sep-23
Sample ID		55	55	55	55	55	55	55	55	55	55	55	55
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480701	483039	488304	490194	C369577	C376074	C3A1264	C3F5169	C3I7565	C3K7615	C3P0321	C3T1122
Laboratory Sample ID	Units	1815507	1824989	1842638	1849339	VGN674	VHW774	VNG419	VYP227	WFI375	WJL685	WSM215	XBB050
Field Parameters													
Dissolved Oxygen, Field	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Field	µS/cm	-	-	-	-	-	-	-	-	-	-	-	-
pH, Field	S.U.	7.28	6.95	6.41	6.94	6.95	-	6.66	7.62	6.95	6.82	6.74	7.15
Temperature, Field	deg C	3.3	3.1	0.8	0.1	0.0	-	0.0	20.2	22.2	17.1	15.6	13.1
Turbidity, Field	NTU	-	-	-	-	-	-	-	-	-	-	-	-
General Chemistry													
Acidity as CaCO3	mg/L	25	13	20	10	27	-	20	<5.0	8.6	13	11	13
Alkalinity, Bicarbonate (as CaCO3)	mg/L	133	110	73	130	130	-	130	110	130	170	190	180
Alkalinity, Carbonate (as CaCO3)	mg/L	<1	<1	<1	<1	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	1.1
Alkalinity, Hydroxide (as CaCO3)	mg/L	0.00235	0.00257	0.0017	0.00282	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	133	110	220	130	130	-	130	110	130	170	190	180
Ammonia	mg/L	-	-	-	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	<0.01	<0.01	0.36	0.11	0.10	-	0.22	<0.050	<0.050	0.057	<0.050	<0.050
Ammonia, Un-ionized (As N)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.0004	-	<0.0004	<0.00082	<0.0004	<0.0004	<0.0004	<0.0004
Chloride	mg/L	34.9	24.7	30.4	5.5	5.7	-	7.2	2.2	3.4	4.6	16	14
Color, True	TCU	69.2	48.3	75.3	39.4	28	-	32	61	65	87	83	75
Cyanide	mg/L	<0.002	<0.002	0.005	0.012	<0.00050	-	0.00051	0.00087	<0.00050	0.00054	0.00094	0.00069
Cyanide (Free)	mg/L	0.002	0.003	<0.001	<0.001	0.0033	-	<0.002 ICB	0.0055 ICB	0.0032	<0.002	0.0033	<0.002
Dissolved Organic Carbon (DOC)	mg/L	15.6	14.5	18.4	12.1	12	-	12	13	16	19	20	19
Electrical Conductivity, Lab	µS/cm	438	315	519	255	266	-	271	221	272	334	424	400
Fluoride	mg/L	<0.05	<0.05	<0.05	<0.05	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	195	131	228	120	140	-	140	120	140	180	200	200
Nitrate (as N)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	-	-	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.010	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
pH, lab	S.U.	7.14	7.18	7.33	7.22	7.62	-	7.57	7.87	7.67	7.67	7.55	7.82
Phosphorus, Total	mg/L	0.018	0.009	0.006	<0.001	0.038	-	0.017	0.027	0.028	0.038	0.077	0.035
Sulfate	mg/L	3.4	0.5	1.5	2.6	4.1	-	4.0	4.1	2.7	1.9	5.2	5.0
Total Dissolved Solids	mg/L	285	230	345	185	140	-	155	150	155	225	255	240
Total Kjeldahl Nitrogen	mg/L	<1	-	<1	<1	0.60	-	0.59	0.52	0.63	0.76	0.82	0.79
Total Organic Carbon	mg/L	18.5	14.8	20.2	12.5	13	-	13	14	17	20	23	20
Total Suspended Solids	mg/L	1.3	<1	5.3	1.3	9	-	3	4	1	2	6	2
Turbidity, Lab	NTU	0.8	1.1	1.9	0.9	0.8	-	0.8	3.4	0.7	1.1	0.8	0.8
Speciated Metals													
Methyl Mercury	µg/L	0.00019	0.00025	0.0023	0.00024	-	0.00098	<0.00005	-	0.00076	0.00036	0.00006	<0.00005
Metals, Dissolved													
Aluminum	µg/L	5	2	4	2	1.8	-	2.9	14.2	5.8	9.8	5.6	3.4
Antimony	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	0.3	0.1	0.3	<0.1	0.1	<0.1
Arsenic	µg/L	63.7	49.1	74.2	13.6	14.7	-	22.1	15	32.4	52.7	46.7	37.9
Barium	µg/L	6.6	5.9	20.6	8.6	8.8	-	10.4	11.4	11.9	14	17	14.8
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	4	-	3	5	22	5	5	3
Cadmium	µg/L	<0.005	<0.005	0.005	<0.005	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	46.8	40.2	53.2	38.9	42.5	-	43.8	37.4	46.4	58.6	65.8	63.0
Cesium	µg/L	0.02	0.03	0.02	<0.01	<0.02	-	0.04	<0.02	<0.02	<0.02	0.03	<0.02
Chromium	µg/L	0.4	1.1	1.1	0.2	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	µg/L	<0.1	<0.1	1.1	0.1	0.14	-	0.19	0.06	0.09	0.23	0.28	0.18
Copper	µg/L	0.6	0.6	2.6	0.4	0.9	-	0.1	3.9	7.6	0.3	0.4	0.7
Iron	µg/L	60	110	1,030	100	188	-	310	54	109	277	276	208
Lead	µg/L	<0.05	<0.05	<0.05	0.07	<0.05	-	<0.05	0.22	0.13	0.07	<0.05	<0.05
Lithium	µg/L	<1	1	<1	<1	0.7	-	0.8	0.6	0.8	0.9	1.2	1.2
Magnesium	mg/L	9.76	8.07	10.5	7.35	7.81	-	8.23	5.47	7.05	8.42	9.85	10.4
Manganese	µg/L	24.6	38.6	2,990	98.7	149	-	256	32.7	102	401	597	296
Mercury	µg/L	-	-	-	-	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.19	0.09	0.18	0.18	0.14	-	0.19	0.29	0.23	0.13	0.09	<0.05
Nickel	µg/L	<0.5	0.6	1.1	<0.5	0.4	-	0.6	0.5	0.5	0.5	0.5	0.5
Phosphorus	µg/L	<50	<50	<50	<50	14	-	18	7	14	29	16	13
Potassium	mg/L	1.36	1.14	1.19	1	1.01	-	1.31	0.85	1.33	2.01	2.48	2.68
Rubidium	µg/L	4	3.5	3.2	2.1	2.23	-	2.64	1.95	3.38	5.02	6.25	6.12
Selenium	µg/L	0.24	0.13	0.3	<0.05	<0.2	-	0.3	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	3,140	3,120	4,760	1,880	2,790	-	3,210	1,430	1,660	2,190	2,680	2,610
Silver	µg/L	<0.01	0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	18.2	13.2	14.4	3.21	2.63	-	3.87	1.91	2.33	2.99	6.28	5.60
Strontium	µg/L	38.2	39	55.5	32.2	42.2	-	45.8	35.3	44.6	63.5	84.7	82.4
Sulfur	µg/L	<500	800	<500	<500	-	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	0.5	<0.2	<0.2	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	0.02	<0.01	<0.01	<0.005	-	<0.005	0.005	0.007	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	0.1	<0.1
Titanium	µg/L	0.7	0.6	1.3	0.4	<0.5	-	<0.5	0.6	<0.5	0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.02	0.03	0.03	0.05	0.04	-	0.10	0.2	0.12	0.06	0.08	0.06
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	<0.05	-	<0.05	0.5	0.31	0.2	0.19	0.13
Zinc	µg/L	11	22	12	7	4.0	-	1.2	4.7	6.3	3	1.5	2.2
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	-	0.3	0.2	0.2	0.2	0.2	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location													
							55						
Sample Date		19-Oct-22	10-Nov-22	11-Jan-23	6-Feb-23	9-Mar-23	15-Mar-23	4-Apr-23	29-May-23	23-Jun-23	10-Jul-23	14-Aug-23	19-Sep-23
Sample ID		55	55	55	55	55	55	55	55	55	55	55	55
Sampling Company		GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory		TESTMARK	TESTMARK	TESTMARK	TESTMARK	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order		480701	483039	488304	490194	C369577	C376074	C3A1264	C3F5169	C3I7565	C3K7615	C3P0321	C3T1122
Laboratory Sample ID	Units	1815507	1824989	1842638	1849339	VGN674	VHW774	VNG419	VYP227	WFI375	WJL685	WSM215	XBB050
Metals, Total													
Aluminum	µg/L	10	9	11	16	16.9	-	45.5	137	18	13.7	12.9	5.2
Antimony	µg/L	0.1	<0.1	0.1	<0.1	<0.1	-	0.3	<0.1	<0.1	<0.1	0.1	<0.1
Arsenic	µg/L	68	43.4	69.4	13.6	16.9	-	23.7	20.4	36.3	54.8	53.5	41.5
Barium	µg/L	10.6	6.1	21	8.6	9.5	-	10.2	12.5	12.9	13.6	17.9	13.8
Beryllium	µg/L	<0.02	<0.02	<0.02	<0.02	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.05	<0.05	<0.05	<0.05	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	<2	<2	<2	<2	4	-	3	4	4	5	5	3
Cadmium	µg/L	<0.005	<0.005	0.006	<0.005	0.005	-	<0.005	0.008	0.005	<0.005	<0.005	<0.005
Calcium	mg/L	56.2	41.2	68.9	40.6	41.6	-	41.4	37.6	48.6	58.0	68.0	61.2
Cesium	µg/L	0.03	0.02	0.03	0.01	<0.02	-	0.05	<0.02	<0.02	<0.02	0.03	<0.02
Chromium	µg/L	0.2	0.4	0.3	0.1	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	µg/L	0.1	<0.1	1	0.1	0.17	-	0.24	0.13	0.12	0.25	0.33	0.19
Copper	µg/L	1.6	0.5	1.1	0.5	0.3	-	0.3	1.5	0.8	0.3	0.2	0.1
Iron	µg/L	120	100	1,030	210	226	-	382	186	162	313	485	284
Lead	µg/L	<0.05	<0.05	0.14	0.15	0.13	-	0.09	0.12	<0.05	0.08	<0.05	<0.05
Lithium	µg/L	<1	1	<1	1	0.8	-	1.0	0.7	0.7	0.9	1.1	1.1
Magnesium	mg/L	11.4	8.1	12.4	7.64	7.84	-	8.47	5.83	7.01	8.08	10.4	10.1
Manganese	µg/L	68.4	45	2,820	106	171	-	264	64.6	116	399	577	309
Mercury	µg/L	0.002	0.001	0.002	0.002	0.00330	0.00355	0.00205	0.00186	0.00315	0.00234	0.00121	0.00284
Molybdenum	µg/L	0.09	0.06	0.19	0.15	0.12	-	0.20	0.27	0.25	0.13	0.1	0.05
Nickel	µg/L	<0.5	<0.5	0.6	<0.5	0.3	-	0.8	0.6	0.4	0.5	0.6	0.5
Phosphorus	µg/L	<50	<50	70	<50	30	-	23	23	28	33	47	27
Potassium	mg/L	2.22	1.16	1.72	1.03	0.997	-	1.28	0.97	1.41	1.99	2.60	2.68
Rubidium	µg/L	5.2	3.4	3.6	2.2	2.22	-	2.54	2.55	3.48	4.89	6.49	6.07
Selenium	µg/L	0.17	<0.05	0.32	<0.05	0.07	-	0.27	0.07	0.1	0.09	0.08	0.06
Silicon	µg/L	4,560	3,250	5,450	2,050	2,690	-	3,270	1,970	1,650	2,140	2,870	2,540
Silver	µg/L	0.05	0.06	0.04	0.06	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	18.7	13.1	16.4	3.4	2.62	-	4	1.95	2.34	3.00	6.56	5.56
Strontium	µg/L	54.7	35.9	71.8	33.2	42.5	-	44.2	38.2	47.6	61	86.2	78.3
Sulfur	µg/L	1,200	900	800	600	-	-	-	-	-	-	-	-
Tellurium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.01	<0.01	<0.01	<0.01	<0.005	-	<0.005	0.009	0.006	<0.005	<0.005	<0.005
Thorium	µg/L	<0.1	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Tin	µg/L	<0.1	<0.1	0.2	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	1.1	0.9	1.8	1.7	<0.5	-	1.0	6.3	1	0.8	0.7	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	0.03	0.02	0.03	0.06	0.04	-	0.12	0.19	0.12	0.06	0.08	0.06
Vanadium	µg/L	<0.5	<0.5	<0.5	<0.5	0.06	-	0.16	0.75	0.36	0.21	0.23	0.13
Zinc	µg/L	6	15	30	6	20.0	-	2.3	4.4	5.9	2.7	1.7	0.9
Zirconium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.1	-	<0.1	0.4	0.2	0.2	0.2	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location				56		
Sample Date		**14-Mar-23**	**19-Jun-23**	**10-Jul-23**	**1-Aug-23**	**12-Sep-23**
Sample ID		**56**	**56**	**56**	**56**	**56**
Sampling Company		**GGM**	**GGM**	**GGM**	**GGM**	**GGM**
Laboratory		**BV**	**BV**	**BV**	**BV**	**BV**
Laboratory Work Order		**C375955**	**C3I2472**	**C3K7615**	**C3N6326**	**C3S3687**
Laboratory Sample ID	**Units**	**VHW146**	**WEH081**	**WJL691**	**WPN822**	**WZN941**
Field Parameters						
pH, Field	S.U.	6.73	7.59	7.84	8.15	7.34
Temperature, Field	deg C	2.6	24.8	20.9	21.5	12.9
General Chemistry						
Acidity as CaCO3	mg/L	21	<5.0	6.2	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	140	73	160	85	130
Alkalinity, Carbonate (as CaCO3)	mg/L	<1.0	<1.0	1.3	<1.0	1.1
Alkalinity, Hydroxide (as CaCO3)	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	140	73	160	85	130
Ammonia (as N)	mg/L	0.11	0.26	0.067	<0.050	0.061
Ammonia, Un-ionized (As N)	mg/L	<0.0004	0.0056	0.0019	<0.0029	<0.0004
Chloride	mg/L	66	14	67	19	41
Color, True	TCU	15	93	48	54	49
Cyanide	mg/L	0.00289	0.00064	0.00054	0.00064	0.00110 CYN
Cyanide (Free)	mg/L	0.0025 BH	0.0059	0.0045	0.0023	0.0053 ICB
Dissolved Organic Carbon (DOC)	mg/L	8.3	17	13	14	13
Electrical Conductivity, Lab	µS/cm	694	220	629	247	435
Fluoride	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	250	91	220	110	160
Nitrate (as N)	mg/L	8.78	<0.10	2.11	<0.10	0.52
Nitrate + Nitrite (as N)	mg/L	8.79	<0.10	2.15	<0.10	0.54
Nitrite (as N)	mg/L	0.015	0.014	0.045	<0.010	0.020
pH, lab	S.U.	7.40	7.59	7.93	7.86	7.97
Phosphorus, Total	mg/L	0.13	0.048	0.078	0.045	0.030
Sulfate	mg/L	58	7.1	31	11	21
Total Dissolved Solids	mg/L	395	150	385	170	240
Total Kjeldahl Nitrogen	mg/L	<0.50 DA	0.83	0.49	0.60	0.51
Total Organic Carbon	mg/L	9.5	17	14	15	14
Total Suspended Solids	mg/L	13	8	10	2	2
Turbidity, Lab	NTU	1.4	1.3	1.5	1.8	0.9
Metals, Dissolved						
Aluminum	µg/L	15.4	14.3	11.1	5.5	3.7
Antimony	µg/L	0.1	0.2	0.2	0.5	0.3
Arsenic	µg/L	8.2	39.2	7	66.6	32.4
Barium	µg/L	13.1	7.1	15.6	7.7	11.7
Beryllium	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	83	13	68	15	27
Cadmium	µg/L	0.02	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	79.1	28.1	70.2	32.6	49.4
Cesium	µg/L	0.03	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	µg/L	0.10	0.07	0.11	0.05	0.06
Copper	µg/L	11.6	2.1	1.1	2.7	2.1
Iron	µg/L	174	152	110	60	73
Lead	µg/L	0.16	0.06	0.08	<0.05	<0.05
Lithium	µg/L	2.2	0.8	2.3	0.9	1.4
Magnesium	mg/L	12	5.06	11.3	5.75	7.90
Manganese	µg/L	65.5	14.2	27.4	2.4	9.2
Mercury	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.24	0.11	0.18	0.13	0.14
Nickel	µg/L	1.3	0.7	0.7	0.8	0.7
Phosphorus	µg/L	37	15	23	17	9
Potassium	mg/L	4.49	0.69	2.47	0.82	1.59
Rubidium	µg/L	4.10	1.34	2.75	1.54	2.11
Selenium	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	4,610	1,200	1,910	1,520	1,180
Silver	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	44.2	11.0	42.5	13.2	27.0
Strontium	µg/L	90.1	34.7	90.6	43.5	64.9
Tellurium	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	0.1	<0.1
Uranium	µg/L	0.07	0.05	0.14	0.04	0.07
Vanadium	µg/L	0.11	0.2	0.19	0.25	0.18
Zinc	µg/L	23.2	1.1	4.5	0.6	2.7
Zirconium	µg/L	0.2	<0.1	<0.1	<0.1	<0.1

Summary of Surface Water Quality Analytical Results
2023 Fish and Fish Habitat Follow-up Monitoring Report
Greenstone Gold Mine GP Inc.

Sample Location				56		
Sample Date		14-Mar-23	19-Jun-23	10-Jul-23	1-Aug-23	12-Sep-23
Sample ID		56	56	56	56	56
Sampling Company		GGM	GGM	GGM	GGM	GGM
Laboratory		BV	BV	BV	BV	BV
Laboratory Work Order		C375955	C3I2472	C3K7615	C3N6326	C3S3687
Laboratory Sample ID	Units	VHW146	WEH081	WJL691	WPN822	WZN941
Metals, Total						
Aluminum	µg/L	143	22.3	61	16.8	9.8
Antimony	µg/L	0.1	0.2	0.2	0.4	0.3
Arsenic	µg/L	8.8	42.4	8.5	67	28.2
Barium	µg/L	13.6	7.2	18.4	8.6	11.9
Beryllium	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	81	12	72	16	28
Cadmium	µg/L	0.023	<0.005	0.009	<0.005	0.005
Calcium	mg/L	77.9	27.3	72.4	31.6	53.0
Cesium	µg/L	0.03	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	µg/L	0.11	0.09	0.15	0.07	0.07
Copper	µg/L	13.1	2.4	2.2	2.8	2
Iron	µg/L	319	222	312	136	108
Lead	µg/L	0.24	0.11	0.34	0.15	0.08
Lithium	µg/L	2.1	0.7	2.4	1	1.5
Magnesium	mg/L	11.8	4.90	11.2	5.76	8.29
Manganese	µg/L	68.9	20.3	38.8	13.6	10.3
Mercury	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	0.22	0.09	0.14	0.11	0.13
Nickel	µg/L	1.3	0.7	0.8	0.9	0.7
Phosphorus	µg/L	118	32	84	34	19
Potassium	mg/L	4.32	0.70	2.68	0.80	1.72
Rubidium	µg/L	4.24	1.4	3.03	1.58	2.19
Selenium	µg/L	0.05	0.06	<0.05	0.07	0.05
Silicon	µg/L	4,260	1,220	1,890	1,420	1,100
Silver	µg/L	0.02	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	43.8	11.0	43.9	12.8	29.7
Strontium	µg/L	94.8	35.4	98.4	45.4	67.7
Tellurium	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	<0.005	<0.005	<0.005	<0.005	<0.005
Tin	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	0.9	0.5	2.4	0.5	<0.5
Tungsten	µg/L	<0.1	<0.1	<0.1	0.1	<0.1
Uranium	µg/L	0.06	0.04	0.13	0.03	0.08
Vanadium	µg/L	0.13	0.24	0.3	0.32	0.24
Zinc	µg/L	24.8	1.5	7.3	0.9	2.8
Zirconium	µg/L	0.3	<0.1	<0.1	<0.1	<0.1

Appendix B.3 Seasonal Trigger Threshold Data

Greenstone Mine - Surface Water Quality Trigger Parameters
October 2022 - September 2023
Station 4

Season			Fall*				Winter					Spring					Summer				
Sample Date					20-Oct-22	8-Nov-22			3-Jan-23	7-Feb-23	7-Mar-23			7-Apr-23	25-May-23	15-Jun-23			3-Jul-23	1-Aug-23	12-Sep-23
Sample ID					4	4			4	4	4			4	4	4			4	4	4
Sampling Company					GGM	GGM			GGM	GGM	GGM			GGM	GGM	GGM			GGM	GGM	GGM
Laboratory					TESTMARK	TESTMARK			TESTMARK	TESTMARK	BV			BV	BV	BV			BV	BV	BV
Laboratory Work Order			95th		480798	482783	95th		487429	490327	C367124	95th		-	C3F3667	C3H9198	95th		C3J8815	C3N6326	C3S3687
Laboratory Sample ID	Units	PWQO	Percentile	RDL	1815915	1824038	Percentile	RDL	1839740	1849698	VGA336	Percentile	RDL	-	VYG693	WDP486	Percentile	RDL	WHR327	WPN823	WZN942
Nutrients																					
Phosphorus, Total	mg/L	0.02_{s4}[C]	0.0318	0.001	0.015	0.016	0.0389	0.001	<0.001	<0.001	0.0063	0.0372	0.001	-	0.03	0.019	0.0446	0.001	**0.018**[C]	**0.028**[C]	**0.029**[C]
Total Metals																					
Antimony	µg/L	20[C]	1.02	0.1	0.7	0.7	0.70	0.10	0.6	0.5	0.5	0.42	0.1	-	<0.1	0.3	1.04	0.1	0.4	0.5	0.8
Arsenic	µg/L	100[A] 5[C]	68.3	0.1	**79**[C]	**56.5**[C]	21.7	0.10	**37.1**[C]	**20.1**[C]	**18.8**[C]	42.4	0.1	-	**19.1**[C]	**58.3**[C]	122.4	0.1	**61.9**[C]	**89.1**[C]	**90.5**[C]
Cobalt	µg/L	0.9[C]	0.26	0.1	0.2	0.2	0.25	0.05	0.1	0.1	<0.05	0.29	0.05	-	0.06	0.18	0.31	0.05	0.1	0.13	0.23
Iron	µg/L	300[A]	633	10	**400**[A]	290	374	5	180	160	96	627	5	-	144	368	591	5	228	209	**335**[A]
Uranium	µg/L	5_a[C]	0.073	0.01	0.07	0.08	0.063	0.01	0.06	0.04	0.05	0.038	0.01	-	0.02	0.03	0.066	0.01	0.03	0.04	0.05

Notes:

PWQO	Provincial Water Quality Objectives of the Ministry of Environment and Energy (MOEE, 1999)
A	PWQO Table 2
B	PWQO Table 2 - Calculated
C	PWQO Table 2 - Interim
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
<0.50	Laboratory reporting limit was greater than the applicable standard.
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
a	This Interim PWQO was set for emergency purposes based on the best information readily available. Employ due caution when applying this value.
s4	Applies to Phosphorus, total. PWQO is 0.03 mg/L for rivers and streams, 0.02 mg/L for lakes, and 0.01 mg/L for lakes naturally below this value.
*	December 2022 was not sampled due to unsafe conditions

Greenstone Mine - Surface Water Quality Trigger Parameters
October 2022 - September 2023
Station 8

Season			Fall*				Winter					Spring					Summer				
Sample Date					19-Oct-22	8-Nov-22			3-Jan-23	6-Feb-23	7-Mar-23			7-Apr-23	1-May-23	15-Jun-23			3-Jul-23	1-Aug-23	6-Sep-23
Sample ID					8	8			8	8	8			8	8	8			8	8	8
Sampling Company					GGM	GGM			GGM	GGM	GGM			GGM	GGM	GGM			GGM	GGM	GGM
Laboratory					TESTMARK	TESTMARK			TESTMARK	TESTMARK	BV			BV	BV	BV			BV	BV	BV
Laboratory Work Order			95th		480701	482783	95th		487429	490194	C367124	95th		C3A5833	C3C44719	C3H9198	95th	Sep-23	C3J8815	C3N6326	C3R6726
Laboratory Sample ID	**Units**	**PWQO**	**Percentile**	**RDL**	1815500	1824042	**Percentile**	**RDL**	1839742	1849342	VGA337	**Percentile**	**RDL**	VOE687	VSC161	WDP485	**Percentile**	**RDL**	WHR329	WPN824	WYE141
Nutrients																					
Phosphorus, Total	mg/L	0.02_{s4}[C]	0.0133	0.001	**0.061**[C]	0.009	0.008	0.001	0.002	<0.001	0.0027	0.0149	0.001	0.0038	0.0047	0.0078	0.0204	0.001	0.0074	0.0085	0.011
Total Metals																					
Antimony	µg/L	20[C]	0.28	0.1	0.2	0.2	0.30	0.10	0.2	0.2	<0.1	0.13	0.1	<0.1	<0.1	<0.1	0.30	0.1	<0.1	<0.1	0.1
Arsenic	µg/L	100[A] 5[C]	17.7	0.1	**20.1**[C]	**17.5**[C]	6.06	0.10	**15.7**[C]	**13.3**[C]	4.3	7.56	0.1	4.6	3.6	**6.4**[C]	23.4	0.1	**8.5**[C]	**14.4**[C]	**21.1**[C]
Cobalt	µg/L	0.9[C]	0.19	0.1	<0.1	<0.1	0.25	0.05	<0.1	<0.1	<0.05	0.05	0.05	<0.05	<0.05	<0.05	0.25	0.05	<0.05	<0.05	<0.05
Iron	µg/L	300[A]	152.1	10	160	140	108	5	90	70	44	141	5	67	99	97	127	5	61	47	76
Uranium	µg/L	5_a[C]	0.166	0.01	0.13	0.15	0.271	0.01	0.16	0.19	0.25	0.126	0.01	0.22	0.17	0.09	0.165	0.01	0.1	0.1	0.11

Notes:

PWQO	Provincial Water Quality Objectives of the Ministry of Environment and Energy (MOEE, 1999)
A	PWQO Table 2
B	PWQO Table 2 - Calculated
C	PWQO Table 2 - Interim
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
<0.50	Laboratory reporting limit was greater than the applicable standard.
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
a	This Interim PWQO was set for emergency purposes based on the best information readily available. Employ due caution when applying this value.
s4	Applies to Phosphorus, total. PWQO is 0.03 mg/L for rivers and streams, 0.02 mg/L for lakes, and 0.01 mg/L for lakes naturally below this value.
*	December 2022 was not sampled due to unsafe conditions

Greenstone Mine - Surface Water Quality Trigger Parameters
October 2022 - September 2023
Station 20A

Season			Fall***					Winter						Spring						Summer					
Sample Date						**19-Oct-22**	**7-Nov-22**				**5-Jan-23**	**8-Feb-23**	**8-Mar-23**				**4-Apr-23**	**18-May-23**	**23-Jun-23**				**4-Jul-23**	**2-Aug-23**	**11-Sep-23**
Sample ID						**20A**	**20A**				**20A**	**20A**	**20A**				**20A**	**20A**	**20A**				**20A**	**20A**	**20A**
Sampling Company						**GGM**	**GGM**				**GGM**	**GGM**	**GGM**				**GGM**	**GGM**	**GGM**				**GGM**	**GGM**	**GGM**
Laboratory						**TESTMARK**	**TESTMARK**				**TESTMARK**	**TESTMARK**	**BV**				**BV**	**BV**	**BV**				**BV**	**BV**	**BV**
Laboratory Work Order			**95th Percentile**	**Predicted EIS/EA**		**480701**	**482900**	**95th Percentile**	**Predicted EIS/EA**		**487639**	**490500**	**C369594**	**95th Percentile**	**Predicted EIS/EA**		**C3A1264**	**C3E5063**	**C3J0006**	**95th Percentile**	**Predicted EIS/EA**		**C3K0765**	**C3N6270**	**C3S2923**
Laboratory Sample ID	**Units**	**PWQO**			**RDL**	**1815502**	**1824498**			**RDL**	**1840474**	**1850232**	**VGN750**			**RDL**	**VNG414**	**VWI323**	**WFV596**			**RDL**	**WIB173**	**WPN396**	**WZJ686**
Nutrients																									
Phosphorus, Total	mg/L	0.03_{s4}[C]	0.0113**	-	0.001	0.005	0.013	0.009	-	0.001	0.002	<0.001	0.0046	0.0463	-	0.001	0.0036	0.0061	0.017	0.0118	-	0.001	0.0076	0.0082	0.007
Cyanide																									
Cyanide	mg/L	n/v	-	0.0053*	0.002	<0.002	0.002	-	0.0053*	0.002	0.002	0.005	-	-	0.0053*	0.002	-	-	-	-	0.0053*	0.002	-	-	-
Cyanide (Free)	mg/L	0.005[A]	-	0.0053	0.001	0.001	0.003	-	0.0053	0.002	0.001	<0.001	<0.002	-	0.0053	0.002	<0.002	<0.002	0.0027	-	0.0053	0.002	0.0047	<0.002	<0.002
Total Metals																									
Antimony	µg/L	20[C]	-	0.73	0.1	<0.1	<0.1	-	0.73	0.1	<0.1	<0.1	<0.1	-	0.73	0.1	<0.1	<0.1	<0.1	-	0.73	0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	100[A] 5[C]	-	9.04	0.1	**5.7**[C]	**11.8**[C]	-	9.04	0.1	4.4	**5.4**[C]	4	-	9.04	0.1	4.9	3.5	4	-	9.04	0.1	**8.6**[C]	**6.2**[C]	**5.4**[C]
Cobalt	µg/L	0.9[C]	-	0.664	0.1	0.1	<0.1	-	0.664	0.05	0.2	0.2	0.17	-	0.664	0.05	**1.55**[C]	0.06	0.06	-	0.664	0.05	0.1	0.06	0.09
Copper	µg/L	5[A] $1/5_{s13}$[C]	-	1.487	0.2	0.4	0.4	-	1.487	0.1	0.6	0.7	0.4	-	1.487	0.1	0.4	0.4	0.4	-	1.487	0.1	0.3	0.2	0.2
Iron	µg/L	300[A]	-	389	10	220	230	-	389	5	270	**350**[A]	275	-	389	5	**444**[A]	81	99	-	389	5	189	97	147
Uranium	µg/L	5[C]	-	3.127	0.01	0.06	0.05	-	3.127	0.01	0.1	0.11	0.1	-	3.127	0.01	0.1	0.02	0.13	-	3.127	0.01	0.15	0.11	0.09

Notes:

PWQO	Provincial Water Quality Objectives of the Ministry of Environment and Energy (MOEE, 1999)
A	PWQO Table 2
B	PWQO Table 2 - Calculated
C	PWQO Table 2 - Interim
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
<0.50	Laboratory reporting limit was greater than the applicable standard.
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
a	This Interim PWQO was set for emergency purposes based on the best information readily available. Employ due caution when applying this value.
s4	Applies to Phosphorus, total. PWQO is 0.03 mg/L for rivers and streams, 0.02 mg/L for lakes, and 0.01 mg/L for lakes naturally below this value.
s13	The interim PWQO for copper is hardness dependent. If hardness <20 mg/L than PWQO is 0.001 mg/L. For hardness >20 mg/L, PWQO is 0.005 mg/L.
*	No EIS/EA predictions were made for total cyanides. Therefore, free cyanides were conservatively used as triggers for both free and total forms of cyanides
**	95th percentile calculated using 4 samples
***	December 2022 was not sampled due to unsafe conditions

Greenstone Mine - Surface Water Quality Trigger Parameters
October 2022 - September 2023
Station 24

Season			Fall***					Winter						Spring					Summer					
Sample Date						5-Oct-22	8-Nov-22				4-Jan-23	6-Feb-23	6-Mar-23			4-Apr-23	18-May-23	14-Jun-23				4-Jul-23	2-Aug-23	11-Sep-23
Sample ID						24	24				24	24	24			24	24	24				24	24	24
Sampling Company						GGM	GGM				GGM	GGM	GGM			GGM	GGM	GGM				GGM	GGM	GGM
Laboratory						TESTMARK	TESTMARK				TESTMARK	TESTMARK	BV			BV	BV	BV				BV	BV	BV
Laboratory Work Order			95th	Predicted EIS/EA		479154	482783	95th	Predict		487567	490194	C365616	95th	Predicted EIS/EA		C3A1264	C3E5063	C3H7129	95th	Predict		C3K0765	C3N6270	C3S2923
Laboratory Sample ID	Units	PWQO	Percentile	concentration + 10%	RDL	1808889	1824043	Percentile	ed	RDL	1840230	1849338	VFS058	Percentile	concentration + 10%	RDL	VNG418	VWI325	WDD948	Percentile	ed	RDL	WIB175	WPN399	WZJ688
Nutrients																									
Phosphorus, Total	mg/L	0.02_{s4}[C]	0.0141	-	0.001	0.011	<0.001	0.0066	-	0.001	0.002	<0.001	0.0034	0.0162	-	0.0010	0.0035	0.0053	0.0075	0.0144	-	0.001	0.0037	0.0054	0.0079
Cyanide																									
Cyanide	mg/L	n/v	-	0.0030*	0.001	0.007	0.003	-	0.0030*	0.0020	0.003	0.005	-	-	0.0030*	0.002	-	-	-	-	0.0030*	0.002	-	-	-
Cyanide (Free)	mg/L	0.005[A]	-	0.0030	0.002	0.002	0.002	-	0.0030	0.002	<0.001	<0.001	<0.002	-	0.0030	0.002	<0.002	<0.002	0.0029	-	0.0030	0.002	0.004	0.0035	<0.002
Total Metals																									
Antimony	µg/L	20[C]	0.30	-	0.1	<0.1	<0.1	0.30	-	0.1	0.1	<0.1	<0.1	0.1	-	0.1	<0.1	<0.1	<0.1	0.30	-	0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	100[A] 5[C]	3.23	-	0.1	3.4	3.8	0.82	-	0.1	0.6	0.7	0.7	1.92	-	0.1	0.7	1.1	1.7	5.03	-	0.1	2.1	3.8	5
Cobalt	µg/L	0.9[C]	0.25	-	0.1	0.1	<0.1	0.25	-	0.05	<0.1	<0.1	<0.05	0.05	-	0.05	<0.05	<0.05	<0.05	0.25	-	0.05	<0.05	<0.05	<0.05
Copper	µg/L	5[A] $1/5_{s13}$[C]	0.50	-	0.2	0.6	0.8	0.59	-	0.1	**1.5**[C]	0.4	0.4	0.75	-	0.1	0.4	0.6	0.5	0.60	-	0.1	0.5	0.5	0.4
Iron	µg/L	300[A]	158	-	10	300	150	113	-	5	150	120	73	140	-	5	78	76	116	169	-	5	74	79	102
Uranium	µg/L	5_a[C]	0.263	-	0.01	0.21	0.23	0.303**	-	0.01	0.29	0.28	0.27	0.186	-	0.01	0.28	0.07	0.13	0.231	-	0.01	0.15	0.16	0.2

Notes:

PWQO	Provincial Water Quality Objectives of the Ministry of Environment and Energy (MOEE, 1999)
[A]	PWQO Table 2
[B]	PWQO Table 2 - Calculated
[C]	PWQO Table 2 - Interim
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
<0.50	Laboratory reporting limit was greater than the applicable standard.
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
[a]	This Interim PWQO was set for emergency purposes based on the best information readily available. Employ due caution when applying this value.
[s4]	Applies to Phosphorus, total. PWQO is 0.03 mg/L for rivers and streams, 0.02 mg/L for lakes, and 0.01 mg/L for lakes naturally below this value.
[s13]	The interim PWQO for copper is hardness dependent. If hardness <20 mg/L than PWQO is 0.001 mg/L. For hardness >20 mg/L, PWQO is 0.005 mg/L.
*	No EIS/EA predictions were made for total cyanides. Therefore, free cyanides were conservatively used as triggers for both free and total forms of cyanides
***	December 2022 was not sampled due to unsafe conditions

Greenstone Mine - Surface Water Quality Trigger Parameters
October 2022 - September 2023
Station 25

Season			Fall**					Winter						Spring						Summer					
Sample Date						19-Oct-22	8-Nov-22				4-Jan-23	6-Feb-23	9-Mar-23				4-Apr-23	9-May-23	23-Jun-23				4-Jul-23	8-Aug-23	7-Sep-23
Sample ID						25	25				25	25	25				25	25	25				25	25	25
Sampling Company						GGM	GGM				GGM	GGM	GGM				GGM	GGM	GGM				GGM	GGM	GGM
Laboratory						TESTMARK	TESTMARK				TESTMARK	TESTMARK	BV				BV	BV	BV				BV	BV	BV
Laboratory Work Order			95th	Predicted EIS/EA		480701	482783	95th	Predicted		487567	490194	C369577	95th	Predicted EIS/EA		C3A1264	C3D3660	C3J0006	95th	Predicted		C3K0765	C3O2537	C3R9201
Laboratory Sample ID	Units	PWQO	Percentile	concentration + 10%	RDL	1815501	1824041	Percentile	EIS/EA	RDL	1840231	1849369	VGN675	Percentile	concentra	RDL	VNG420	VTX937	WFV594	Percentile	EIS/EA	RDL	WIB177	WQV776	WYR005
Nutrients																									
Phosphorus, Total	mg/L	0.03_{s4}[C]	0.0127	-	0.001	0.024	0.02	0.0211	-	0.001	0.009	<0.001	0.013	0.0138	-	0.001	**0.033**[C]	**0.017**[C]	**0.031**[C]	0.0134	-	0.001	0.012	0.02	0.02
Total Metals																									
Antimony	µg/L	20[C]	-	1.88	0.1 - 0.5	<0.1	<0.1	-	1.88	0.1	0.1	<0.1	<0.1	-	1.88	0.1	0.4	0.2	<0.1	-	1.88	0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	100[A] 5[C]	25.16	-	0.1 - 1	**96**[C]	104	42.5	-	0.1	**140**[AC]	**19.6**[C]	**21.6**[C]	46.4	-	0.1	**33.8**[C]	**10.8**[C]	**39.5**[C]	51.4	-	0.1	**48.3**[C]	**53.5**[C]	**56.6**[C]
Cobalt	µg/L	0.9[C]	0.21	-	0.1 - 0.5	0.1	0.1	0.25	-	0.05	**1.3**[C]	0.2	0.16	0.16	-	0.05	0.26	0.32	0.13	0.25	-	0.05	0.1	<0.05	0.15
Iron	µg/L	300[A]	106	-	10 - 100	130	110	799	-	5	**1,350**[A]	240	293	129	-	5	**462**[A]	**485**[A]	206	184	-	5	192	100	**351**[C]
Mercury	µg/L	0.2[A]	0.00253*	-	0.00001	0.002	0.002	0.00253*	-	0.0001	0.004	0.002	0.0028	0.00253*	-	0.0001	0.00279	0.00472	0.00304	0.00253*	-	0.0001	0.00251	0.00104	0.00177
Methyl Mercury	µg/L	n/v	0.000436*	-	0.00002	0.00067	0.00068	0.000436*	-	0.00005	0.00163	0.00042	0.00377	0.000436*	-	0.00005	<0.00005	0.00017	0.00066	0.000436*	-	0.00005	0.00065	<0.00005	0.00029
Uranium	µg/L	5_s[C]	0.189	-	0.01 - 0.1	0.04	0.04	0.095	-	0.01	0.05	0.05	0.03	0.040	-	0.01	0.09	0.18	0.1	0.165	-	0.01	0.08	0.06	0.07

Notes:

PWQO	Provincial Water Quality Objectives of the Ministry of Environment and Energy (MOEE, 1999)
A	PWQO Table 2
B	PWQO Table 2 - Calculated
C	PWQO Table 2 - Interim
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
<0.50	Laboratory reporting limit was greater than the applicable standard.
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
a	This Interim PWQO was set for emergency purposes based on the best information readily available. Employ due caution when applying this value.
s4	Applies to Phosphorus, total. PWQO is 0.03 mg/L for rivers and streams, 0.02 mg/L for lakes, and 0.01 mg/L for lakes naturally below this value.
s13	The interim PWQO for copper is hardness dependent. If hardness <20 mg/L than PWQO is 0.001 mg/L. For hardness >20 mg/L, PWQO is 0.005 mg/L.
*	Annual 95th percentile calculated using a sample count of 13
**	December 2022 was not sampled due to unsafe conditions

Greenstone Mine - Surface Water Quality Trigger Parameters
October 2022 - September 2023
Station 26

Season			Fall*					Winter						Spring						Summer					
Sample Date						24-Oct-22	8-Nov-22				10-Jan-23	14-Feb-23	14-Mar-23				14-Apr-23	14-May-23	29-Jun-23				18-Jul-23	10-Aug-23	25-Sep-23
Sample ID						26	26				26	26	26				26	26	26				26	26	26
Sampling Company						GGM	GGM				GGM	GGM	GGM				GGM	GGM	GGM				GGM	GGM	GGM
Laboratory						TESTMARK	TESTMARK				TESTMARK	TESTMARK	BV				BV	BV	BV				BV	BV	BV
Laboratory Work Order			95th	Predicted EIS/EA		481070	482783	95th	Predicted		488145	490925	C375955	95th	Predicted		-	-	C3J6640	95th	Predicted		C3K7615	C3O7461	C3T8385
Laboratory Sample ID	Units	PWQO	Percentile	concentration + 10%	RDL	1816984	1824047	Percentile	EIS/EA	RDL	1842170	1851731	VHW145	Percentile	EIS/EA	RDL	-	-	WHF369	Percentile	EIS/EA	RDL	WJL688	WRX099	XCQ464
Nutrients																									
Phosphorus, Total	mg/L	0.03$_{s4}$[C]	0.0166	-	0.001	0.003	<0.001	0.0115	-	0.001	0.002	0.001	0.0061	0.0102	-	0.001	-	-	0.0041	0.0170	-	0.001	0.0038	0.0063	0.0063
Total Metals																									
Antimony	µg/L	20[C]	-	1.57	0.1	0.1	0.1	-	1.57	0.10	0.1	0.1	0.2	-	1.57	0.1	-	-	0.2	-	1.57	0.1	0.2	0.1	0.1
Arsenic	µg/L	100[A] 5[C]	26.1	-	0.1	**18.1**[C]	**15.4**[C]	16.5	-	0.10	**11.8**[C]	**11.9**[C]	**11.6**[C]	20.7	-	0.1	-	-	**18.1**[C]	35.2	-	0.1	**21.1**[C]	**27.6**[C]	**23.2**[C]
Cobalt	µg/L	0.9[C]	0.25	-	0.1	<0.1	0.4	0.71	-	0.05	<0.1	<0.1	<0.05	0.18	-	0.05	-	-	<0.05	0.25	-	0.05	<0.05	<0.05	<0.05
Iron	µg/L	300[A]	125	-	10	130	100	48	-	5	50	100	27	91	-	5	-	-	68	131	-	5	52	97	75
Uranium	µg/L	5$_a$[C]	0.062	-	0.01	0.04	0.04	0.063	-	0.01	0.04	0.04	0.04	0.057	-	0.01	-	-	0.04	0.065	-	0.01	0.05	0.05	0.04

Notes:

PWQO	Provincial Water Quality Objectives of the Ministry of Environment and Energy (MOEE, 1999)
[A]	PWQO Table 2
[B]	PWQO Table 2 - Calculated
[C]	PWQO Table 2 - Interim
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
<0.50	Laboratory reporting limit was greater than the applicable standard.
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
[a]	This Interim PWQO was set for emergency purposes based on the best information readily available. Employ due caution when applying this value.
[s4]	Applies to Phosphorus, total. PWQO is 0.03 mg/L for rivers and streams, 0.02 mg/L for lakes, and 0.01 mg/L for lakes naturally below this value.
*	December 2022 was not sampled due to unsafe conditions

Greenstone Mine - Surface Water Quality Trigger Parameters
October 2022 - September 2023
Station 39

Season			Fall**				Winter					Spring					Summer				
Sample Date					19-Oct-22	8-Nov-22			9-Jan-23	13-Feb-23	8-Mar-23			13-Apr-23	31-May-23	29-Jun-23			10-Jul-23	10-Aug-23	18-Sep-23
Sample ID					39	39			39	39	39			39	39	39			39	39	39
Sampling Company					GGM	GGM			GGM	GGM	GGM			GGM	GGM	GGM			GGM	GGM	GGM
Laboratory					TESTMARK	TESTMARK			TESTMARK	TESTMARK	BV			BV	BV	BV			BV	BV	BV
Laboratory Work Order			95th		480701	482783	95th		487939	490785	C369594	95th		C3A4623	C3F9817	C3J6640	95th	Sep-23	C3K7615	C3O7461	C3T1094
Laboratory Sample ID	Units	PWQO	Percentile	RDL	1815506	1824046	Percentile	RDL	1841531	1851310	VGN752	Percentile	RDL	VNY232	VZO638	WHF370	Percentile	RDL	WJL689	WRX100	XBA939
Nutrients																					
Phosphorus, Total	mg/L	0.03_{s4}[C]	0.0104	0.001	0.001	<0.001	0.0053	0.001	0.002	0.001	0.0041	0.008	0.001	0.0071	0.012	0.0069	0.0082	0.001	0.0077	0.0049	0.0041
Total Metals																					
Antimony	µg/L	20[C]	0.12	0.1	0.2	<0.1	0.11	0.10	<0.1	0.1	<0.1	0.05	0.1	0.2	<0.1	<0.1	0.05	0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	100[A] 5[C]	6.64	0.1	**7.5[C]**	**6.7[C]**	5.89	0.10	4.3	3.7	3.5	7.03	0.1	2	4	**7.3[C]**	8.04	0.1	**7.5[C]**	**8[C]**	**7.8[C]**
Cobalt	µg/L	0.9[C]	0.05	0.1	0.2	0.1	0.05	0.05	0.2	0.1	<0.05	0.05	0.05	0.08	0.19	0.05	0.05	0.05	0.05	<0.05	<0.05
Iron	µg/L	300[A]	95	10	200	150	244.4	5	270	190	75	98.2	5	94	246	80	64	5	87	58	48
Mercury	µg/L	0.2[A]	0.00199*	0.00001	0.001	0.0006	0.00199*	0.0001	0.0008	0.001	0.00139	0.00199*	0.0001	0.0011	0.00147	0.00197	0.00199*	0.0001	0.00169	0.001	-
Methyl Mercury	µg/L	n/v	0.000088*	0.00002	0.00009	0.00003	0.000088*	0.000050	0.00012	0.00002	0.00122	0.000088*	0.00005	0.00015	0.00006	0.00026	0.000088*	0.00005	<0.00005	0.00019	-
Uranium	µg/L	5_a[C]	0.096	0.01	<0.01	0.13	0.099	0.010	0.12	0.16	0.15	0.057	0.01	0.07	0.21	0.19	0.075	0.01	0.22	0.24	0.26

Notes:

PWQO	Provincial Water Quality Objectives of the Ministry of Environment and Energy (MOEE, 1999)
[A]	PWQO Table 2
[B]	PWQO Table 2 - Calculated
[C]	PWQO Table 2 - Interim
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
<0.50	Laboratory reporting limit was greater than the applicable standard.
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
[a]	This Interim PWQO was set for emergency purposes based on the best information readily available. Employ due caution when applying this value.
[s4]	Applies to Phosphorus, total. PWQO is 0.03 mg/L for rivers and streams, 0.02 mg/L for lakes, and 0.01 mg/L for lakes naturally below this value.
*	Annual 95th percentile calculated using a sample count of 13
**	December 2022 was not sampled due to unsafe conditions

Appendix D
Summary of Surface Water Analytical Results - 49 - Fall
Baseline Trigger Threshold
Greenstone Mine

Season			Fall*				Winter					Spring					Summer				
Sample Date					5-Oct-22	7-Nov-22			4-Jan-23	6-Feb-23	6-Mar-23			4-Apr-23	########	########			4-Jul-23	8-Aug-23	11-Sep-23
Sample ID					49	49			49	49	49			49	49	49			49	49	49
Sampling Company					GGM	GGM			GGM	GGM	GGM			GGM	GGM	GGM			GGM	GGM	GGM
Laboratory					TESTMARK	TESTMARK			TESTMARK	TESTMARK	BV			BV	BV	BV			BV	BV	BV
Laboratory Work Order			95th		479154	482900	95th	Mar-23	487567	490194	C365616	95th	Jun-23	C399854	C3F8864	C3H7129	95th	Sep-23	C3K0765	C3O2537	C3S2923
Laboratory Sample ID	Units	PWQO	Percentile	RDL	1808892	1824500	Percentile	RDL	1840227	1849335	VFS060	Percentile	RDL	VMZ386	VZI712	WDD949	Percentile	RDL	WIB178	WQV772	WZJ691
Nutrients																					
Phosphorus, Total	mg/L	0.03_{s4} [C]	0.0369	0.001	0.012	<0.001	0.0362	0.001	<0.001	<0.001	0.0041	0.0131	0.001	0.0033	0.0066	0.009	0.0158	0.001	0.004	0.0086	0.01
Total Metals																					
Antimony	µg/L	20 [C]	0.13	0.1	0.1	0.1	0.1085	0.10	0.1	0.1	<0.1	0.05	0.1	<0.1	<0.1	<0.1	0.09	0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	100 [A] 5 [C]	7.02	0.1	**10.9** [C]	**10.3** [C]	1.3475	0.10	3.4	1.4	1.1	3.28	0.1	1.1	2.8	2.8	15.05	0.1	3.8	**11.3** [C]	**15.7** [C]
Cobalt	µg/L	0.9 [C]	0.05	0.1	0.1	<0.1	0.05	0.05	<0.1	<0.1	<0.05	0.11	0.05	<0.05	<0.05	<0.05	0.05	0.05	<0.05	<0.05	<0.05
Iron	µg/L	300 [A]	190	10	270	160	103.3	5	150	110	57	168	5	63	89	93	137	5	60	48	77
Uranium	µg/L	5_a [C]	0.262	0.01	0.17	0.19	0.32305	0.01	0.27	0.28	0.27	0.149	0.01	0.29	0.09	0.12	0.232	0.01	0.13	0.13	0.14

Notes:

PWQO	Provincial Water Quality Objectives of the Ministry of Environment and Energy (MOEE, 1999)
[A]	PWQO Table 2
[B]	PWQO Table 2 - Calculated
[C]	PWQO Table 2 - Interim
6.5 [A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
<0.50	Laboratory reporting limit was greater than the applicable standard.
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
[a]	This Interim PWQO was set for emergency purposes based on the best information readily available. Employ due caution when applying this value.
[s4]	Applies to Phosphorus, total. PWQO is 0.03 mg/L for rivers and streams, 0.02 mg/L for lakes, and 0.01 mg/L for lakes naturally below this value.
*	December 2022 was not sampled due to unsafe conditions

Greenstone Mine - Surface Water Quality Trigger Parameters
October 2022 - September 2023
Station 52

Season			Fall***				Winter					Spring					Summer				
Sample Date					26-Oct-22	9-Nov-22			11-Jan-23	16-Feb-23	14-Mar-23			11-Apr-23	9-May-23	22-Jun-23			12-Jul-23	16-Aug-23	26-Sep-23
Sample ID					52	52			52	52	52			52	52	52			52	52	52
Sampling Company					GGM	GGM			GGM	GGM	GGM			GGM	GGM	GGM			GGM	GGM	GGM
Laboratory					TESTMARK	TESTMARK			TESTMARK	TESTMARK	BV			BV	BV	BV			BV	BV	BV
Laboratory Work Order			95th		481427	482918	95th		488304	491089	C375955	95th		C3A4623	C3D3660	C3I7565	95th		C3K9170	C3P1170	C3U0580
Laboratory Sample ID	Units	PWQO	Percentile	RDL	1818973	1824564	Percentile	RDL	1842637	1852178	VHW149	Percentile	RDL	VNY231	VTX939	WFI374	Percentile	RDL	WJU091	WSQ526	XDC460
Nutrients																					
Phosphorus, Total	mg/L	0.03_{s4}[C]	0.0101**	0.001	0.006	<0.001	0.0058**	0.0010	<0.001	<0.001	0.0036	0.0121	0.001	0.0075	0.0048	0.0021	0.0175	0.001	0.0074	0.0038	0.0053
Total Metals																					
Antimony	µg/L	20[C]	0.12**	0.1	<0.1	<0.1	0.1**	0.10	<0.1	<0.1	<0.1	0.05	0.1	<0.1	<0.1	<0.1	0.05	0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	100[A] 5[C]	6.63**	0.1	3.8	3.6	5.78**	0.10	2.9	2.6	2.6	3.14	0.1	2.4	2.2	4.1	5.40	0.1	3.8	4.2	3.7
Cobalt	µg/L	0.9[C]	0.05**	0.1	<0.1	<0.1	0.05**	0.05	<0.1	<0.1	<0.05	0.05	0.05	<0.05	<0.05	<0.05	0.05	0.05	<0.05	<0.05	<0.05
Iron	µg/L	300[A]	95**	10	180	150	243**	5	80	130	41	99	5	51	102	93	327	5	104	75	85
Mercury	µg/L	0.2[A]	0.00236*	0.00001	0.001	0.0007	0.00236*	0.000100	0.001	0.001	0.00083	0.00236*	0.0001	0.00084	0.00425	0.00183	0.00236*	0.0001	0.00094	0.00107	0.00138
Methyl Mercury	µg/L	n/v	0.000126*	0.00002	0.00003	0.00003	0.000126*	0.000050	0.00008	0.00004	<0.00005	0.000126*	0.00005	0.00008	0.00007	0.00012	0.000126*	0.00005	<0.00005	-	<0.00005
Uranium	µg/L	5_a[C]	0.12**	0.01	0.11	0.12	0.137**	0.010	0.12	0.13	0.12	0.138	0.01	0.13	0.07	0.08	0.192	0.01	0.09	0.14	0.15

Notes:

PWQO	Provincial Water Quality Objectives of the Ministry of Environment and Energy (MOEE, 1999)
[A]	PWQO Table 2
[B]	PWQO Table 2 - Calculated
[C]	PWQO Table 2 - Interim
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
<0.50	Laboratory reporting limit was greater than the applicable standard.
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
a	This Interim PWQO was set for emergency purposes based on the best information readily available. Employ due caution when applying this value.
s4	Applies to Phosphorus, total. PWQO is 0.03 mg/L for rivers and streams, 0.02 mg/L for lakes, and 0.01 mg/L for lakes naturally below this value.
*	Annual 95th percentile calculated using a sample count of 12
**	Due to a limitied seasonal dataset, seasonal data with shoulder months from station 39 has been included in the sample count and 95th percentile calculations
***	December 2021 was not sampled due to unsafe conditions

Greenstone Mine - Surface Water Quality Trigger Parameters
October 2022 - September 2023
Station 53

Season			Fall**				Winter					Spring					Summer				
Sample Date					5-Oct-22	8-Nov-22			4-Jan-23	6-Feb-23	6-Mar-23			13-Apr-23	30-May-23	14-Jun-23			4-Jul-23	8-Aug-23	7-Sep-23
Sample ID					53	53			53	53	53			53	53	53			53	53	53
Sampling Company					GGM	GGM			GGM	GGM	GGM			GGM	GGM	GGM			GGM	GGM	GGM
Laboratory					TESTMARK	TESTMARK			TESTMARK	TESTMARK	BV			BV	BV	BV			BV	BV	BV
Laboratory Work Order			95th		479154	482783	95th		487567	490194	490194	95th		-	C3F8864	C3H7129	95th		C3K0765	C3O2537	C3R9201
Laboratory Sample ID	Units	PWQO	Percentile*	RDL	1808891	1824035	Percentile*	RDL	1840228	1849336	1849336	Percentile*	RDL	-	VZI714	WDD950	Percentile*	RDL	WIB179	WQV773	WYR006
Nutrients																					
Phosphorus, Total	mg/L	0.03_{s4} [C]	0.0369	0.001	0.002	0.005	0.0349	0.0010	<0.001	<0.001	0.0063	0.0130	0.001	-	0.0058	0.0071	0.0154	0.001	0.0046	0.0061	0.012
Total Metals																					
Antimony	µg/L	20[C]	0.13	0.1	<0.1	<0.1	0.1	0.10	<0.1	<0.1	<0.1	0.05	0.10	-	<0.1	<0.1	0.08	0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	100[A] 5[C]	7.02	0.1	5	**5.2[C]**	1.34	0.10	1	1.4	1.2	3.26	0.10	-	**7.5[C]**	2.4	13.56	0.1	4	**6.2[C]**	**7.8[C]**
Cobalt	µg/L	0.9[C]	0.05	0.1	0.2	<0.1	0.05	0.05	<0.1	<0.1	<0.05	0.1	0.10	-	<0.05	<0.05	0.05	0.05	<0.05	<0.05	<0.05
Iron	µg/L	300[A]	190	10	260	130	103	5	150	120	66	190	10	-	103	100	136	5	68	51	107
Uranium	µg/L	5_a[C]	0.262	0.01	0.2	0.22	0.322	0.010	0.32	0.3	0.28	0.148	0.010	-	0.09	0.12	0.229	0.01	0.13	0.16	0.18

Notes:

PWQO	Provincial Water Quality Objectives of the Ministry of Environment and Energy (MOEE, 1999)
[A]	PWQO Table 2
[B]	PWQO Table 2 - Calculated
[C]	PWQO Table 2 - Interim
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
<0.50	Laboratory reporting limit was greater than the applicable standard.
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
[a]	This Interim PWQO was set for emergency purposes based on the best information readily available. Employ due caution when applying this value.
[s4]	Applies to Phosphorus, total. PWQO is 0.03 mg/L for rivers and streams, 0.02 mg/L for lakes, and 0.01 mg/L for lakes naturally below this value.
*	No seasonal data was available for station 53. Seasonal data from station 49 was included in the sample count and 95th percentile calculations
**	December 2022 was not sampled due to unsafe conditions

Appendix B
Summary of Surface Water Quality Trigger Thresholds
Greenstone Mine

Station	Parameter	Units	PWQO	Predicted EIS/EA concentration + 10%	Sample Count Summary	95th Percentile	Sample Count Summary	95th Percentile	Sample Count Summary	95th Percentile	Sample Count Summary	95th Percentile
4	Phosphorus, Total	mg/L	0.02$_{+4}$[C]	-	11	0.0372	14	0.0446	6	0.0318	11	0.0389
	Antimony	µg/L	20[C]	-	13	0.42	18	1.04	9	1.02	13	0.70
	Arsenic	µg/L	100[A] 5[C]	-	13	42.4	18	122.4	9	68.3	13	21.7
	Cobalt	µg/L	0.9[C]	-	13	0.29	18	0.31	9	0.26	13	0.25
	Iron	µg/L	300[A]	-	13	627	18	591	9	633	13	374
	Uranium	µg/L	5[C]	-	8	0.038	14	0.066	7	0.073	8	0.063
8	Phosphorus, Total	mg/L	0.02$_{+4}$[C]	-	10	0.0149	13	0.0204	5	0.0133	10	0.008
	Antimony	µg/L	20[C]	-	13	0.13	17	0.30	7	0.28	13	0.30
	Arsenic	µg/L	100[A] 5[C]	-	13	7.56	17	23.4	7	17.7	13	6.06
	Cobalt	µg/L	0.9[C]	-	13	0.05	17	0.25	7	0.19	13	0.25
	Iron	µg/L	300[A]	-	13	141	17	127	7	152.1	13	108
	Uranium	µg/L	5[C]	-	7	0.126	14	0.165	6	0.166	7	0.271
20A	Phosphorus, Total	mg/L	0.03$_{+4}$[C]	-	7	0.0463	8	0.0118	2	0.0113	7	0.009
	Cyanide	mg/L	n/v	0.0053	3	-	3	-	1	-	3	-
	Cyanide (Free)	mg/L	0.005[A]	0.0053	3	-	3	-	1	-	3	-
	Antimony	µg/L	20[C]	0.73	7	-	8	-	4	-	7	-
	Arsenic	µg/L	100[A] 5[C]	9.04	7	-	8	-	4	-	7	-
	Cobalt	µg/L	0.9[C]	0.664	7	-	8	-	4	-	7	-
	Copper	µg/L	5[A] 1/5...[C]	1.487	7	-	8	-	4	-	7	-
	Iron	µg/L	300[A]	389	7	-	8	-	4	-	7	-
	Uranium	µg/L	5[C]	3.127	7	-	8	-	4	-	7	-
24	Phosphorus, Total	mg/L	0.02$_{+4}$[C]	-	7	0.0162	8	0.0144	2	0.0141	7	0.0066
	Cyanide	mg/L	n/v	0.0030	10	-	12	-	5	-	10	-
	Cyanide (Free)	mg/L	0.005[A]	0.0030	10	-	12	-	5	-	10	-
	Antimony	µg/L	20[C]	-	10	0.1	12	0.30	5	0.30	10	0.30
	Arsenic	µg/L	100[A] 5[C]	-	10	1.92	12	5.03	5	3.23	10	0.82
	Cobalt	µg/L	0.9[C]	-	10	0.05	12	0.25	5	0.25	10	0.25
	Copper	µg/L	5[A] 1/5...[C]	-	10	0.75	12	0.60	5	0.50	10	0.59
	Iron	µg/L	300[A]	-	10	140	12	169	5	158	10	113
	Uranium	µg/L	5[C]	-	10	0.186	9	0.231	3	0.263	4	0.303
25	Phosphorus, Total	mg/L	0.03$_{+4}$[C]	-	9	0.0138	11	0.0134	6	0.0127	9	0.0211
	Antimony	µg/L	20[C]	1.88	12	-	15	-	12	-	12	-
	Arsenic	µg/L	100[A] 5[C]	-	12	46.4	15	51.4	12	25.16	12	42.5
	Cobalt	µg/L	0.9[C]	-	12	0.16	15	0.25	12	0.21	12	0.25
	Iron	µg/L	300[A]	-	12	129	15	184	12	106	12	799
	Mercury	µg/L	0.2[A]	-	3	0.00253	5	0.00253	1	0.00253	3	0.00253
	Methyl Mercury	µg/L	n/v	-	3	0.000436	5	0.000436	1	0.000436	3	0.000436
	Uranium	µg/L	5[C]	-	6	0.040	12	0.165	7	0.189	6	0.095
26	Phosphorus, Total	mg/L	0.03$_{+4}$[C]	-	6	0.0102	9	0.0170	5	0.0166	6	0.0115
	Antimony	µg/L	20[C]	1.57	9	-	13	-	11	-	9	-
	Arsenic	µg/L	100[A] 5[C]	-	9	20.7	13	35.2	11	26.1	9	16.5
	Cobalt	µg/L	0.9[C]	-	9	0.18	13	0.25	11	0.25	9	0.71
	Iron	µg/L	300[A]	-	9	91	13	131	11	125	9	48
	Uranium	µg/L	5[C]	-	5	0.057	10	0.065	6	0.062	5	0.063
39	Phosphorus, Total	mg/L	0.03$_{+4}$[C]	-	8	0.008	10	0.0082	6	0.0104	8	0.0053
	Antimony	µg/L	20[C]	-	8	0.05	10	0.05	6	0.12	8	0.11
	Arsenic	µg/L	100[A] 5[C]	-	8	7.03	10	8.04	6	6.64	8	5.89
	Cobalt	µg/L	0.9[C]	-	8	0.05	10	0.05	6	0.05	8	0.05
	Iron	µg/L	300[A]	-	8	98.2	10	64	6	95	8	244.4
	Mercury	µg/L	0.2[A]	-	2	0.00199*	5	0.00199*	1	0.00199*	2	0.00199*
	Methyl Mercury	µg/L	n/v	-	2	0.000088*	5	0.000088*	1	0.000088*	2	0.000088*
	Uranium	µg/L	5[C]	-	8	0.057	10	0.075	6	0.096	8	0.099
49	Phosphorus, Total	mg/L	0.03$_{+4}$[C]	-	8	0.0131	11	0.0158	7	0.0369	8	0.0362
	Antimony	µg/L	20[C]	-	8	0.05	11	0.09	7	0.13	8	0.1085
	Arsenic	µg/L	100[A] 5[C]	-	8	3.28	11	15.05	7	7.02	8	1.3475
	Cobalt	µg/L	0.9[C]	-	8	0.11	11	0.05	7	0.05	8	0.05
	Iron	µg/L	300[A]	-	8	168	11	137	7	190	8	103.3
	Uranium	µg/L	5[C]	-	8	0.149	11	0.232	7	0.262	8	0.32305
S2	Phosphorus, Total	mg/L	0.03$_{+4}$[C]	-	11***	0.0121	5	0.0175	7**	0.0101**	11**	0.0058**
	Antimony	µg/L	20[C]	-	11***	0.05	5	0.05	7**	0.12**	11**	0.1**
	Arsenic	µg/L	100[A] 5[C]	-	11***	3.14	5	5.40	7**	6.63**	11**	5.78**
	Cobalt	µg/L	0.9[C]	-	11***	0.05	5	0.05	7**	0.05**	11**	0.05**
	Iron	µg/L	300[A]	-	11***	99	5	327	7**	95**	11**	243**
	Mercury	µg/L	0.2[A]	-	2	0.00236***	6***	0.00236***	2	0.00236***	5	0.00236***
	Methyl Mercury	µg/L	n/v	-	2	0.000126***	6***	0.000126***	2	0.000126***	5	0.000126***
	Uranium	µg/L	5[C]	-	11***	0.138	5	0.192	7**	0.12**	11**	0.137**
S3	Phosphorus, Total	mg/L	0.03$_{+4}$[C]	-	9	0.0130	14	0.0154	7	0.0369	9	0.0349
	Antimony	µg/L	20[C]	-	9	0.05	14	0.08	7	0.13	9	0.1
	Arsenic	µg/L	100[A] 5[C]	-	9	3.26	14	13.56	7	7.02	9	1.34
	Cobalt	µg/L	0.9[C]	-	9	0.1	14	0.05	7	0.05	9	0.05
	Iron	µg/L	300[A]	-	9	190	14	136	7	190	9	103
	Uranium	µg/L	5[C]	-	9	0.148	14	0.229	7	0.262	9	0.322

Notes:

PWQO Provincial Water Quality Objectives of the Ministry of Environment and Energy (MOEE, 1999)
[A] PWQO Table 2
[B] PWQO Table 2 - Calculated
[C] PWQO Table 2 - Interim
15.2 Measured concentration did not exceed the indicated standard.
<0.50 Laboratory reporting limit was greater than the applicable standard.
<0.03 Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v No standard/guideline value.
- Parameter not analyzed / not available.
+ This Interim PWQO was set for emergency purposes based on the best information readily available. Employ due caution when applying this value.
+4 Applies to Phosphorus, total. PWQO is 0.03 mg/L for rivers and streams, 0.02 mg/L for lakes, and 0.01 mg/L for lakes naturally below this value.
* Annual 95th percentile calculated using a sample count of 13
** Due to a limitied seasonal dataset, seasonal data with shoulder months from station 39 has been included in the sample count and 95th percentile calculations
*** Annual 95th percentile calculated using a sample count of 12

Appendix B.4 In-situ Dissolved Oxygen and Water Temperature

Greenstone Mine - Surface Water Profile Data
October 2022 - September 2023

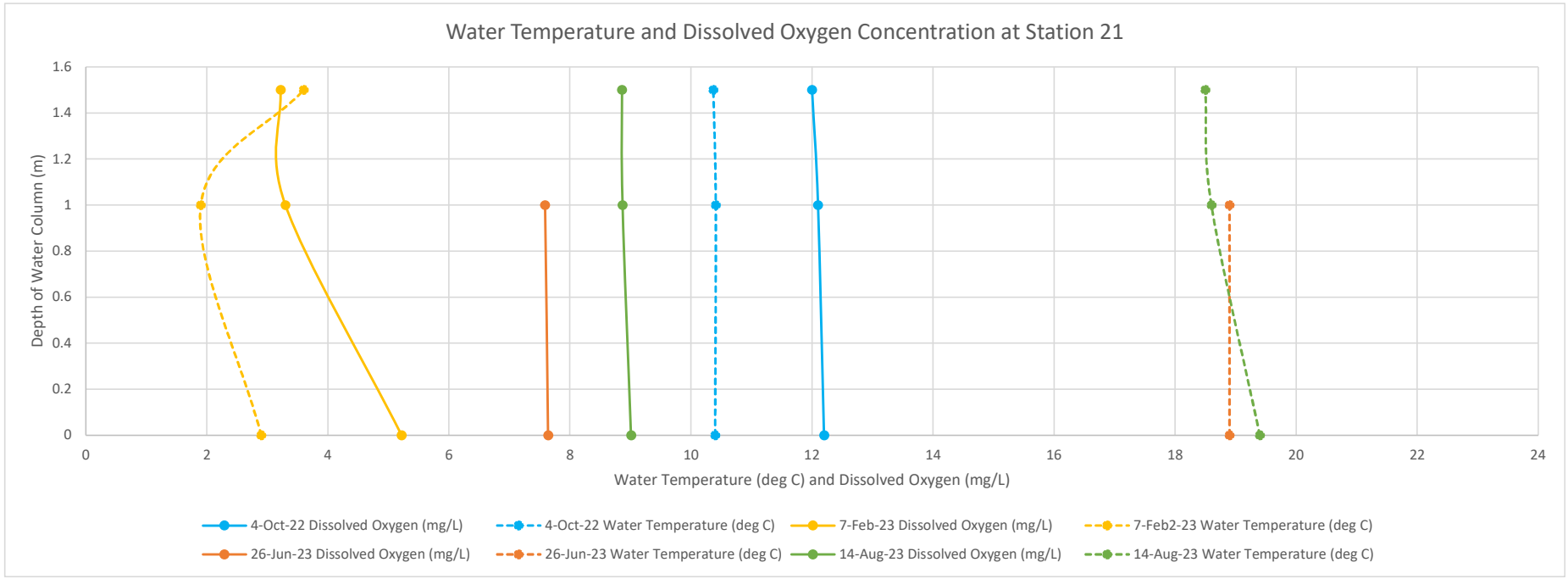
Sub-Location	Station Name	Date	Time	Sample Depth (m)	Dissolved Oxygen, Field (mg/L)	Temperature, Field (deg C)
Lake A-322	21	10/4/2022	14:51	-	12.2	10.40
Lake A-322	21	10/4/2022	14:53	1	12.1	10.41
Lake A-322	21	10/4/2022	10:55	1.5	12.0	10.37
Lake A-322	21	7-Feb-23	9:15	-	5.22	2.9
Lake A-322	21	7-Feb-23	9:17	1	3.30	1.9
Lake A-322	21	7-Feb-23	9:19	1.5	3.22	3.6
Lake A-322	21	6/26/2023	13:37	-	7.64	18.9
Lake A-322	21	6/26/2023	14:12	1	7.59	18.9
Lake A-322	21	8/14/2023	12:11	-	9.01	19.4
Lake A-322	21	8/14/2023	12:11	1	8.87	18.6
Lake A-322	21	8/14/2023	12:11	1.5	8.86	18.5
Mosher Lake	26	11/24/2022	14:48	-	7.3	11.80
Mosher Lake	26	10/24/2022	14:34	1	7.2	11.78
Mosher Lake	26	10/24/2022	14:36	2	7.2	11.78
Mosher Lake	26	10/24/2022	14:38	3	7.1	11.79
Mosher Lake	26	10/24/2022	14:40	4	7.1	11.57
Mosher Lake	26	14-Feb-23	9:33	-	6.95	4.3
Mosher Lake	26	14-Feb-23	9:35	1	2.02	4.3
Mosher Lake	26	14-Feb-23	9:37	2	1.05	4.4
Mosher Lake	26	6/28/2023	10:48	-	8.58	20.1
Mosher Lake	26	6/28/2023	10:49	1	8.59	20.1
Mosher Lake	26	6/28/2023	10:49	2	8.59	20.1
Mosher Lake	26	6/28/2023	10:50	3	8.57	20.1
Mosher Lake	26	6/28/2023	10:51	4	8.48	19.2
Mosher Lake	26	6/28/2023	10:51	4.5	8.54	18.9
Mosher Lake	26	8/10/2023	10:40	-	8.71	21.5
Mosher Lake	26	8/10/2023	10:40	1	8.71	21.4
Mosher Lake	26	8/10/2023	10:40	2	8.71	21.5
Mosher Lake	26	8/10/2023	10:40	3	8.71	21.4
Mosher Lake	26	8/10/2023	10:40	4	8.71	21.4
Mosher Lake	26	8/10/2023	10:40	4.5	8.69	21.3
Southwest Pond 3	39	10/19/2022	13:08	-	6.0	10.64
Southwest Pond 3	39	10/19/2022	13:10	1	6.0	10.59
Southwest Pond 3	39	10/19/2022	13:12	2	6.0	10.55
Southwest Pond 3	39	10/19/2022	13:14	3	6.0	10.53
Southwest Pond 3	39	10/19/2022	13:16	4	5.9	10.52
Southwest Pond 3	39	10/19/2022	13:18	5	5.9	10.50
Southwest Pond 3	39	10/19/2022	13:20	6	5.9	10.35
Southwest Pond 3	39	13-Feb-23	13:58	-	9.93	1.2
Southwest Pond 3	39	13-Feb-23	14:00	1	6.19	1.6
Southwest Pond 3	39	13-Feb-23	14:02	2	4.09	3.2
Southwest Pond 3	39	13-Feb-23	14:04	3	3.50	3.8
Southwest Pond 3	39	13-Feb-23	14:06	4	1.89	4.0
Southwest Pond 3	39	13-Feb-23	14:08	5	0.97	4.1
Southwest Pond 3	39	6/28/2023	12:10	-	7.62	18.2
Southwest Pond 3	39	6/28/2023	12:11	1	7.87	19.3
Southwest Pond 3	39	6/28/2023	12:11	2	7.89	16.8
Southwest Pond 3	39	6/28/2023	12:12	3	5.39	11.4
Southwest Pond 3	39	6/28/2023	12:12	4	3.89	9.6
Southwest Pond 3	39	6/28/2023	12:41	5	1.92	8.0
Southwest Pond 3	39	6/28/2023	12:14	6	0.53	7.7
Southwest Pond 3	39	6/28/2023	12:14	7	0.53	7.7
Southwest Pond 3	39	8/10/2023	11:50	-	8.15	21.2
Southwest Pond 3	39	8/10/2023	11:50	1	8.18	21.1
Southwest Pond 3	39	8/10/2023	11:50	2	8.21	21.1
Southwest Pond 3	39	8/10/2023	11:50	3	8.17	20.7
Southwest Pond 3	39	8/10/2023	11:50	4	7.23	19.5
Southwest Pond 3	39	8/10/2023	11:50	5	4.55	17.1
Southwest Pond 3	39	8/10/2023	11:50	6	0.54	9.8
Southwest Pond 3	39	8/10/2023	11:50	7	1.49	9.3
Southwest Pond 3	39	8/10/2023	11:50	7.5	0.12	8.5
Southwest Arm	46	10/5/2022	12:11	-	11.6	10.46
Southwest Arm	46	10/5/2022	12:15	1	11.6	10.46
Southwest Arm	46	10/5/2022	12:17	2	11.6	10.45
Southwest Arm	46	10/5/2022	12:18	3	11.6	10.45
Southwest Arm	46	10/5/2022	12:11	4	11.6	10.43
Southwest Arm	46	6-Feb-23	12:29	-	12.86	0.6
Southwest Arm	46	6-Feb-23	12:31	1	10.60	1.7
Southwest Arm	46	6-Feb-23	12:33	2	9.60	1.8
Southwest Arm	46	6-Feb-23	12:35	3	10.05	1.5
Southwest Arm	46	6-Feb-23	12:37	4	8.87	3.2
Southwest Arm	46	6/14/2023	1:35	-	9.95	18.3
Southwest Arm	46	6/14/2023	13:36	1	9.95	18.3
Southwest Arm	46	6/14/2023	13:36	2	9.93	18.3
Southwest Arm	46	6/14/2023	14:44	3	9.89	18.3
Southwest Arm	46	6/14/2023	13:36	4	9.87	18.3
Southwest Arm	46	8/8/2023	12:43	-	8.50	21.8
Southwest Arm	46	8/8/2023	12:43	1	8.50	21.7
Southwest Arm	46	8/8/2023	12:43	2	8.50	21.5
Southwest Arm	46	8/8/2023	12:43	3	8.38	21.3
Southwest Arm	46	8/8/2023	12:43	4	8.02	20.9

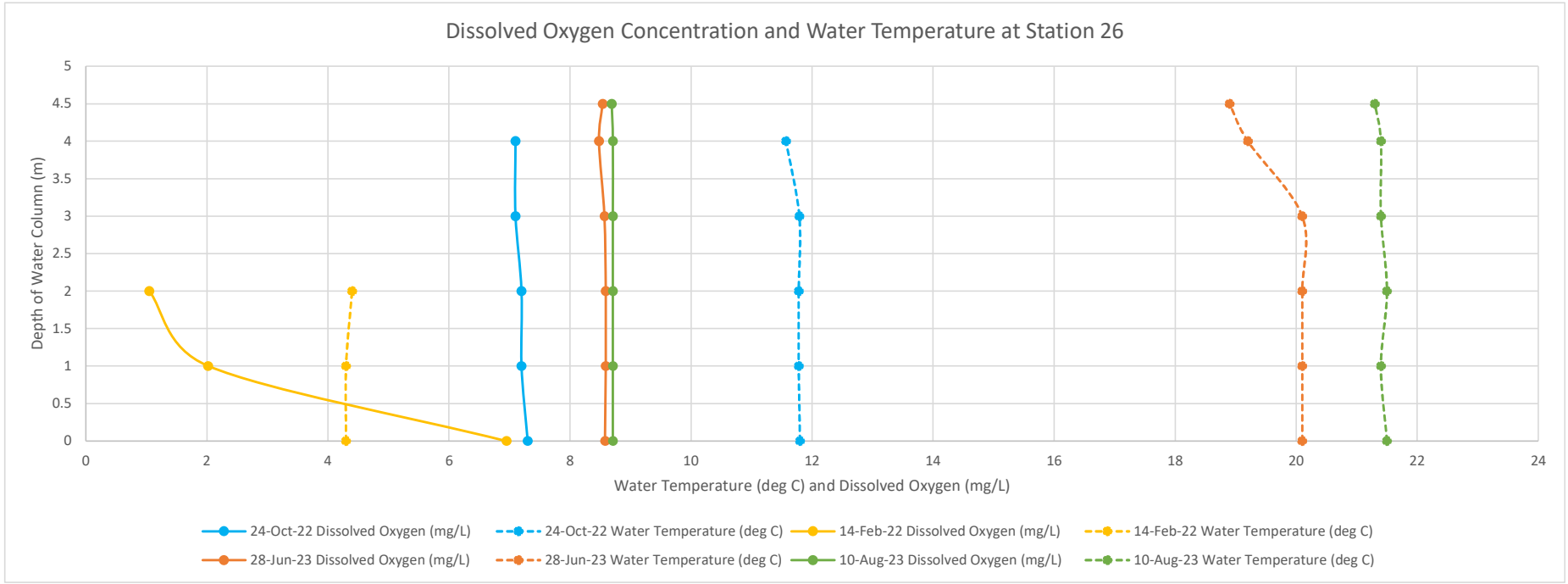
Greenstone Mine - Surface Water Profile Data
October 2022 - September 2023

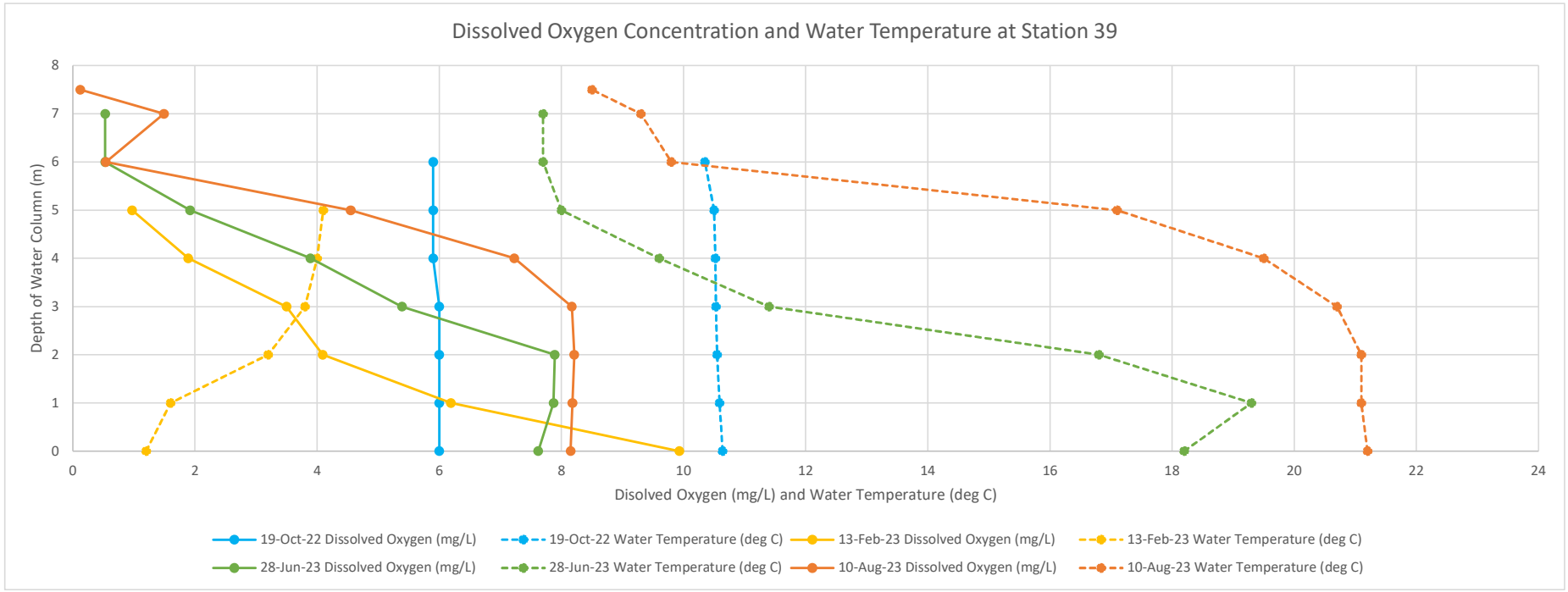
Central Basin	47	10/25/2022	15:30	-	7.2	11.46
Central Basin	47	10/25/2022	15:32	1	7.2	11.54
Central Basin	47	10/25/2022	15:34	2	7.2	11.56
Central Basin	47	10/25/2022	15:36	3	7.2	11.57
Central Basin	47	10/25/2022	15:40	4	7.2	11.58
Central Basin	47	10/25/2022	15:42	5	7.2	11.58
Central Basin	47	10/25/2022	15:44	6	7.2	11.59
Central Basin	47	10/25/2022	15:46	7	7.2	11.58
Central Basin	47	10/25/2022	15:48	7.5	7.2	11.58
Central Basin	47	15-Feb-23	11:44	-	11.22	2.1
Central Basin	47	15-Feb-23	11:46	1	11.24	2.1
Central Basin	47	15-Feb-23	11:48	2	11.65	0.5
Central Basin	47	15-Feb-23	11:50	3	11.69	1.8
Central Basin	47	15-Feb-23	11:52	4	11.40	3.1
Central Basin	47	15-Feb-23	11:54	5	9.45	3.9
Central Basin	47	15-Feb-23	11:56	6	8.03	3.6
Central Basin	47	15-Feb-23	11:58	7	7.83	3.9
Central Basin	47	15-Feb-23	12:00	7.5	6.70	4.3
Central Basin	47	6/15/2023	13:06	-	10.06	16.5
Central Basin	47	6/15/2023	13:08	1	10.00	16.5
Central Basin	47	6/15/2023	13:09	2	9.96	16.5
Central Basin	47	6/15/2023	15:10	3	9.90	16.5
Central Basin	47	6/15/2023	15:11	4	9.86	16.5
Central Basin	47	6/15/2023	15:12	5	9.85	16.4
Central Basin	47	6/15/2023	15:14	6	9.84	16.4
Central Basin	47	6/15/2023	15:15	7	9.83	16.4
Central Basin	47	6/15/2023	15:17	7.5	9.48	16.4
Central Basin	47	8/8/2023	10:35	-	8.53	22.0
Central Basin	47	8/8/2023	10:35	1	8.53	21.6
Central Basin	47	8/8/2023	10:35	2	8.52	21.6
Central Basin	47	8/8/2023	10:35	3	8.50	21.5
Central Basin	47	8/8/2023	10:35	4	8.46	21.5
Central Basin	47	8/8/2023	10:35	5	8.10	21.1
Central Basin	47	8/8/2023	10:35	6	7.81	20.9
Central Basin	47	8/8/2023	10:35	7	7.38	20.8
Outlet Basin	48	10/20/2022	12:26	-	6.8	11.17
Outlet Basin	48	10/20/2022	12:28	1	6.8	11.14
Outlet Basin	48	10/20/2022	12:29	2	6.7	11.12
Outlet Basin	48	10/20/2022	12:31	3	6.7	11.11
Outlet Basin	48	10/20/2022	12:33	4	6.7	11.10
Outlet Basin	48	10/20/2022	12:35	5	6.7	11.09
Outlet Basin	48	10/20/2022	12:36	6	6.7	11.08
Outlet Basin	48	10/20/2022	12:38	7	6.7	11.07
Outlet Basin	48	10/20/2022	12:40	8	6.7	11.07
Outlet Basin	48	10/20/2022	12:41	9	6.7	11.08
Outlet Basin	48	10/20/2022	12:45	9.5	6.7	11.09
Outlet Basin	48	15-Feb-23	14:15	-	11.36	1.2
Outlet Basin	48	15-Feb-23	14:17	1	11.36	1.2
Outlet Basin	48	15-Feb-23	14:19	2	11.19	1.4
Outlet Basin	48	15-Feb-23	14:21	3	11.10	2.4
Outlet Basin	48	15-Feb-23	14:23	4	9.91	3.1
Outlet Basin	48	15-Feb-23	14:25	5	9.80	3.2
Outlet Basin	48	15-Feb-23	14:27	6	9.71	3.4
Outlet Basin	48	15-Feb-23	14:29	7	9.26	3.6
Outlet Basin	48	15-Feb-23	14:31	8	8.87	3.5
Outlet Basin	48	15-Feb-23	14:33	9	9.26	3.5
Outlet Basin	48	15-Feb-23	14:35	10	9.30	3.6
Outlet Basin	48	6/19/2023	14:13	-	9.27	22.2
Outlet Basin	48	6/19/2023	14:14	1	9.30	21.5
Outlet Basin	48	6/19/2023	14:16	2	8.87	18.2
Outlet Basin	48	6/19/2023	14:17	3	8.20	17.2
Outlet Basin	48	6/19/2023	14:19	4	7.82	16.9
Outlet Basin	48	6/19/2023	14:21	5	6.76	16.2
Outlet Basin	48	6/19/2023	14:22	6	6.62	13.9
Outlet Basin	48	6/19/2023	14:24	7	6.62	10.7
Outlet Basin	48	6/19/2023	14:26	8	4.2	9.6
Outlet Basin	48	6/19/2023	14:28	9	4.33	9.0
Outlet Basin	48	8/8/2023	14:36	-	9.22	21.5
Outlet Basin	48	8/8/2023	14:36	1	9.11	21.0
Outlet Basin	48	8/8/2023	14:36	2	9.04	20.8
Outlet Basin	48	8/8/2023	14:36	3	9.04	20.6
Outlet Basin	48	8/8/2023	14:36	4	9.01	20.5
Outlet Basin	48	8/8/2023	14:36	5	8.75	20.4
Outlet Basin	48	8/8/2023	14:36	6	8.49	20.2
Outlet Basin	48	8/8/2023	14:36	7	8.44	20.3
Outlet Basin	48	8/8/2023	14:36	8	7.31	19.8
Outlet Basin	48	8/8/2023	14:36	9	5.40	19.25
Southwest Arm	49	10/5/2022	13:33	-	11.8	10.24
Southwest Arm	49	10/5/2022	13:38	1	11.8	10.23
Southwest Arm	49	10/5/2022	13:40	2	11.8	10.22
Southwest Arm	49	10/5/2022	13:41	3	11.7	10.21
Southwest Arm	49	10/5/2022	13:42	4	11.7	10.20
Southwest Arm	49	10/5/2022	13:44	5	11.7	10.17
Southwest Arm	49	10/5/2022	13:46	5.5	11.7	10.11
Southwest Arm	49	6-Feb-23	11:13	-	12.08	1.1
Southwest Arm	49	6-Feb-23	11:15	1	9.93	2.1
Southwest Arm	49	6-Feb-23	11:17	2	8.55	2.8
Southwest Arm	49	6-Feb-23	11:19	3	7.99	3.5
Southwest Arm	49	6-Feb-23	11:21	4	7.71	3.6
Southwest Arm	49	6-Feb-23	11:23	5	7.52	3.7
Southwest Arm	49	6/14/2023	1:35	-	9.95	18.3
Southwest Arm	49	6/14/2023	1:36	1	9.95	18.3
Southwest Arm	49	6/14/2023	1:36	2	9.93	18.3
Southwest Arm	49	6/14/2023	1:36	3	9.89	18.3
Southwest Arm	49	6/14/2023	1:36	4	9.87	18.3
Southwest Arm	49	6/14/2023	1:36	5	9.79	18.1
Southwest Arm	49	6/14/2023	1:37	5.5	9.14	17.8
Southwest Arm	49	8/8/2023	11:16	-	8.34	22.7
Southwest Arm	49	8/8/2023	11:16	1	8.33	22.2
Southwest Arm	49	8/8/2023	11:16	2	8.31	21.9
Southwest Arm	49	8/8/2023	11:16	3	8.31	21.8
Southwest Arm	49	8/8/2023	11:16	4	8.17	21.5
Southwest Arm	49	8/8/2023	11:16	5	7.41	20.8

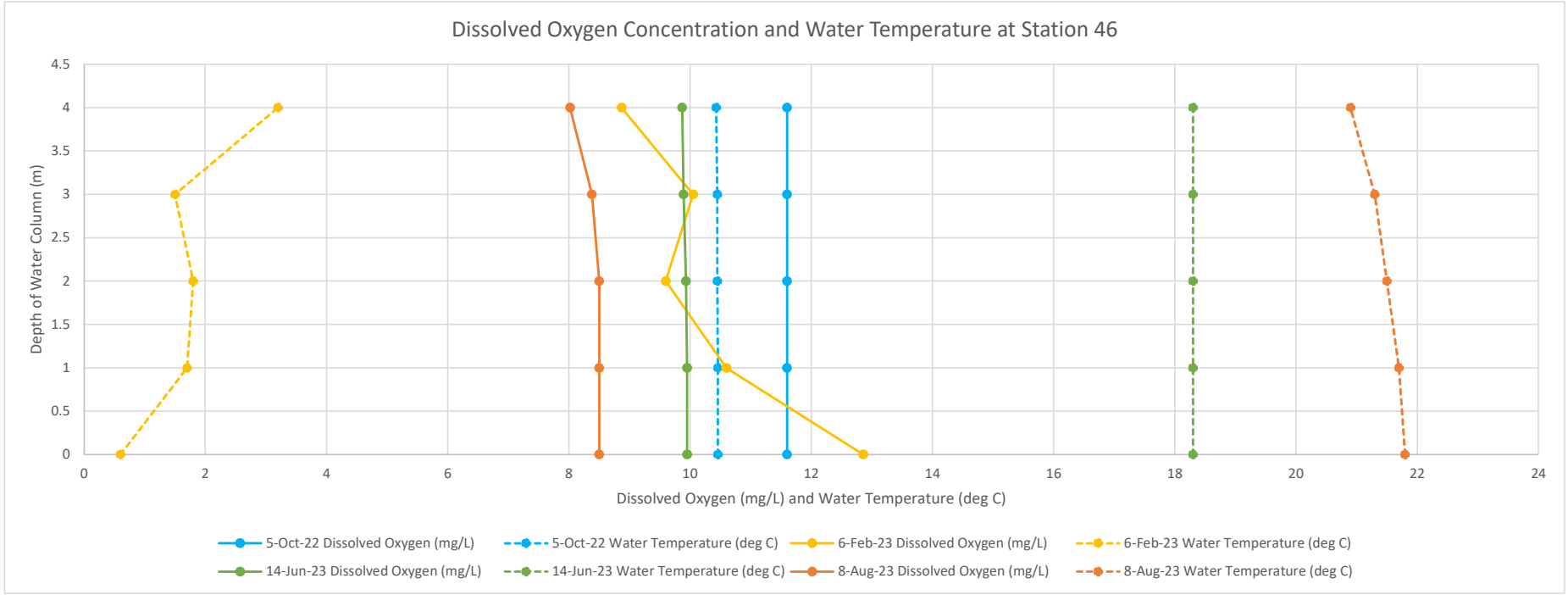
Greenstone Mine - Surface Water Profile Data
October 2022 - September 2023

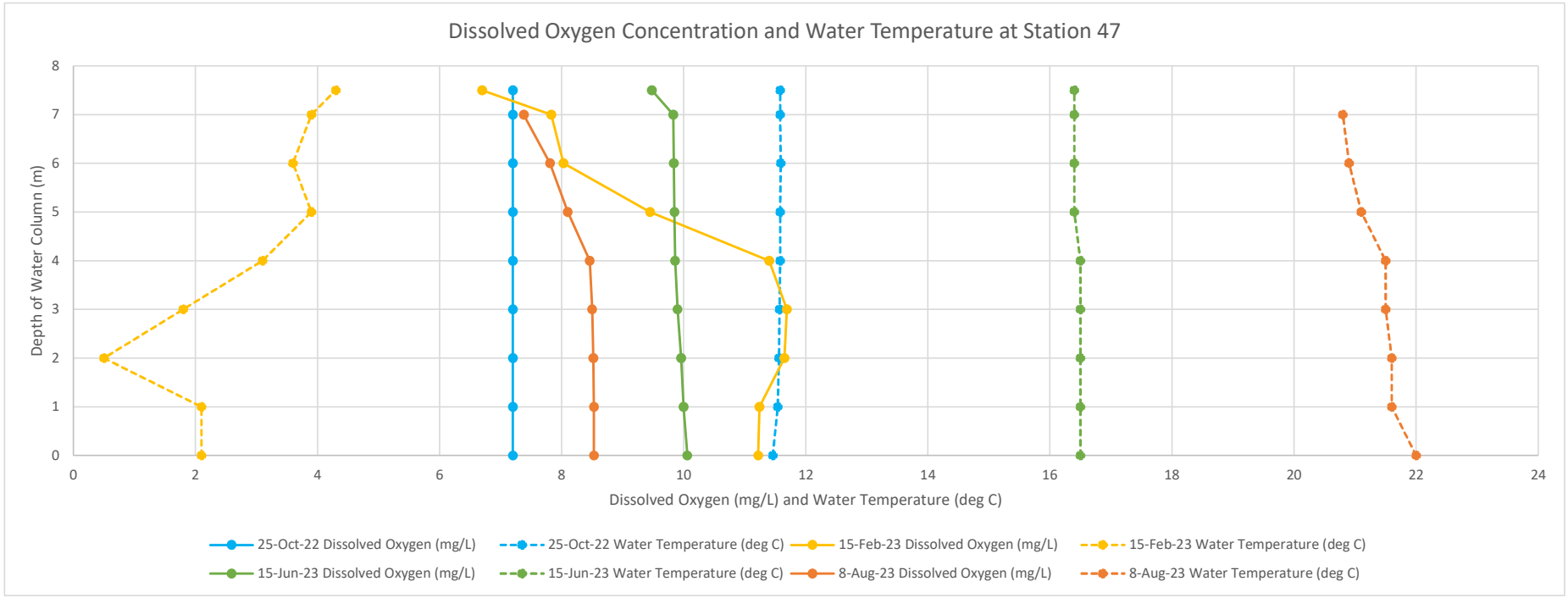
Gamsby Lake	50	10/24/2022	12:09	-	6.4	11.75
Gamsby Lake	50	10/24/2022	12:11	1	6.4	11.77
Gamsby Lake	50	10/24/2022	12:13	2	6.4	11.78
Gamsby Lake	50	10/24/2022	12:15	3	6.4	11.78
Gamsby Lake	50	10/24/2022	12:17	4	6.4	11.78
Gamsby Lake	50	10/24/2022	12:19	5	6.4	11.77
Gamsby Lake	50	10/24/2022	12:21	6	6.4	11.76
Gamsby Lake	50	15-Feb-23	13:16	-	11.35	0.5
Gamsby Lake	50	15-Feb-23	13:18	1	11.24	0.7
Gamsby Lake	50	15-Feb-23	13:20	2	10.55	2.3
Gamsby Lake	50	15-Feb-23	13:22	3	9.45	3.5
Gamsby Lake	50	15-Feb-23	13:24	4	8.35	3.8
Gamsby Lake	50	15-Feb-23	13:26	5	6.41	4.4
Gamsby Lake	50	15-Feb-23	13:28	6	4.93	4.6
Gamsby Lake	50	6/28/2023	1:13	-	7.81	19.2
Gamsby Lake	50	6/27/2023	1:19	1	7.80	19.0
Gamsby Lake	50	6/27/2023	1:21	2	7.80	19.1
Gamsby Lake	50	6/27/2023	1:24	3	7.74	18.7
Gamsby Lake	50	6/27/2023	1:28	4	7.64	18.7
Gamsby Lake	50	6/27/2023	1:31	5	3.24	13.6
Gamsby Lake	50	6/27/2023	1:47	6	2.52	13.4
Gamsby Lake	50	8/4/2023	13:17	-	8.77	21.4
Gamsby Lake	50	8/4/2023	13:17	1	8.75	21.4
Gamsby Lake	50	8/4/2023	13:17	2	8.70	21.3
Gamsby Lake	50	8/4/2023	13:17	3	8.68	21.2
Gamsby Lake	50	8/4/2023	13:17	4	8.63	21.1
Gamsby Lake	50	8/4/2023	13:17	5	4.91	15.6

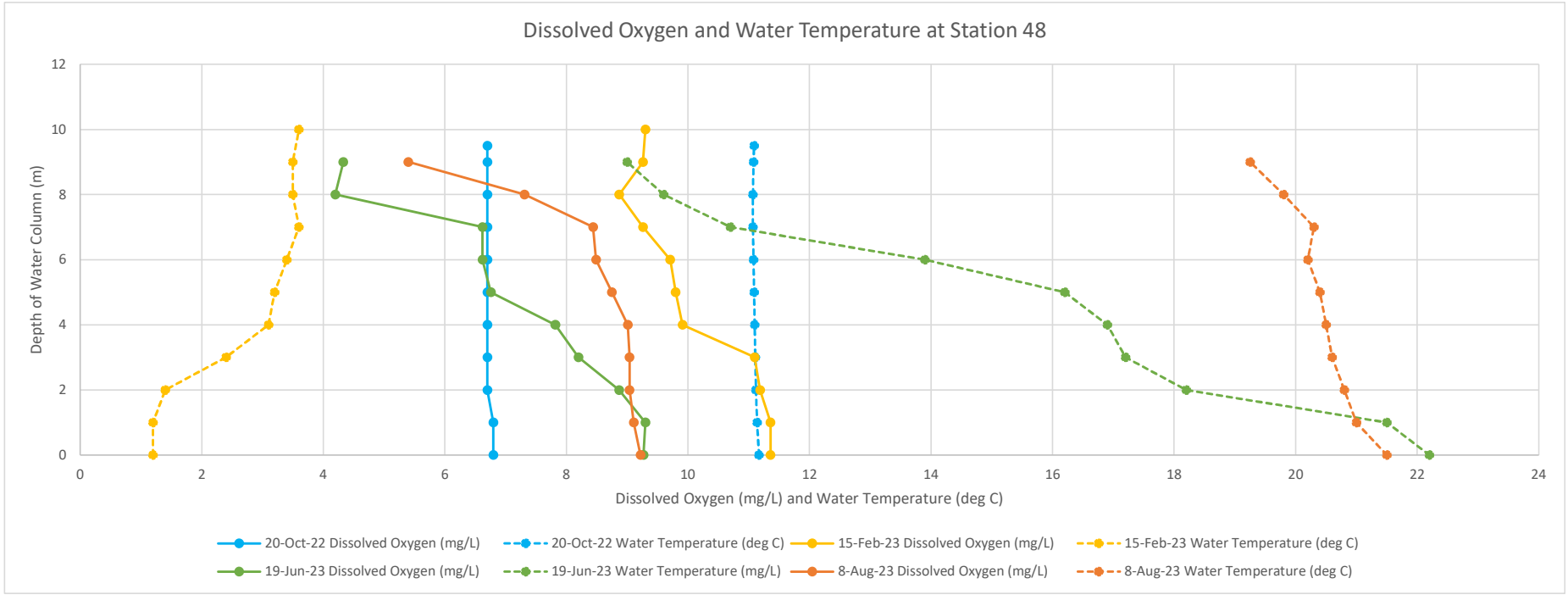

Water Temperature and Dissolved Oxygen Concentration at Station 21
Depth of Water Column (m)
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
2
4
6
8
10
12
14
16
18
20
22
24
Water Temperature (deg C) and Dissolved Oxygen (mg/L)
4-Oct-22 Dissolved Oxygen (mg/L)
4-Oct-22 Water Temperature (deg C)
7-Feb-23 Dissolved Oxygen (mg/L)
7-Feb2-23 Water Temperature (deg C)
26-Jun-23 Dissolved Oxygen (mg/L)
26-Jun-23 Water Temperature (deg C)
14-Aug-23 Dissolved Oxygen (mg/L)
14-Aug-23 Water Temperature (deg C)

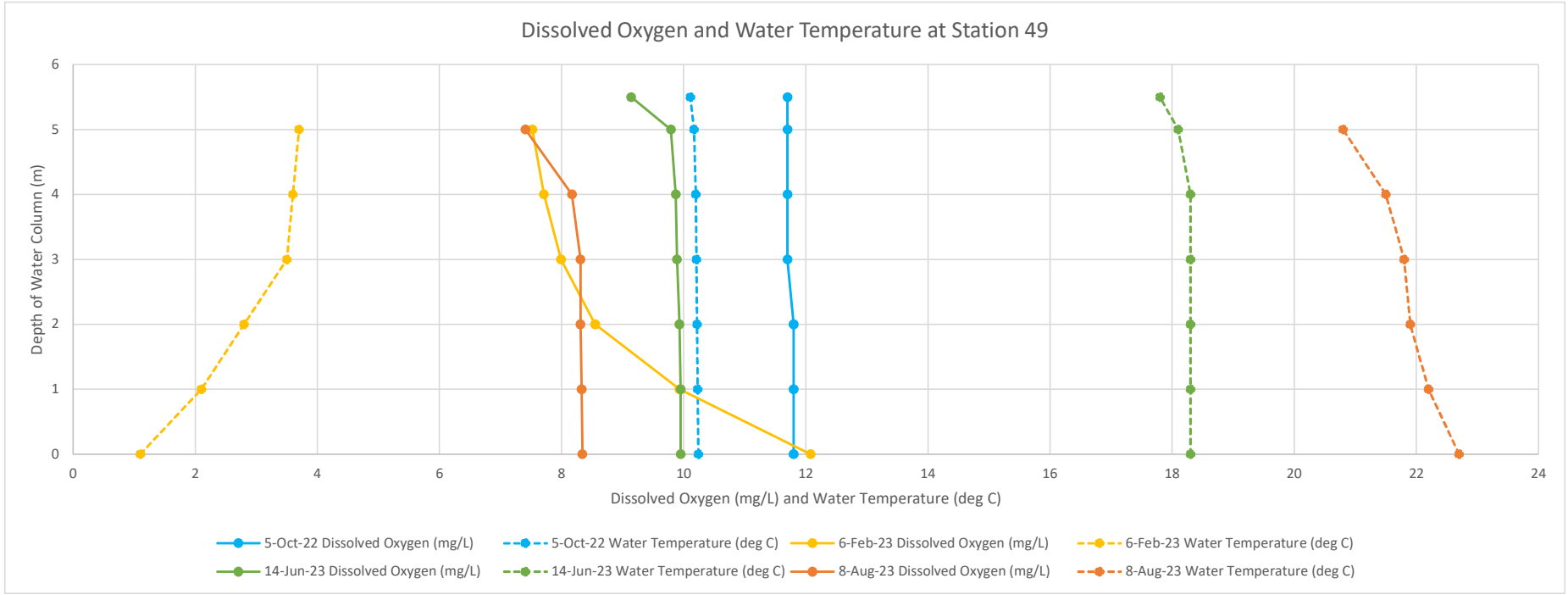

Dissolved Oxygen Concentration and Water Temperature at Station 26
Depth of Water Column (m)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
0
2
4
6
8
10
12
14
16
18
20
22
24
Water Temperature (deg C) and Dissolved Oxygen (mg/L)
24-Oct-22 Dissolved Oxygen (mg/L)
24-Oct-22 Water Temperature (deg C)
14-Feb-22 Dissolved Oxygen (mg/L)
14-Feb-22 Water Temperature (deg C)
28-Jun-23 Dissolved Oxygen (mg/L)
28-Jun-23 Water Temperature (deg C)
10-Aug-23 Dissolved Oxygen (mg/L)
10-Aug-23 Water Temperature (deg C)

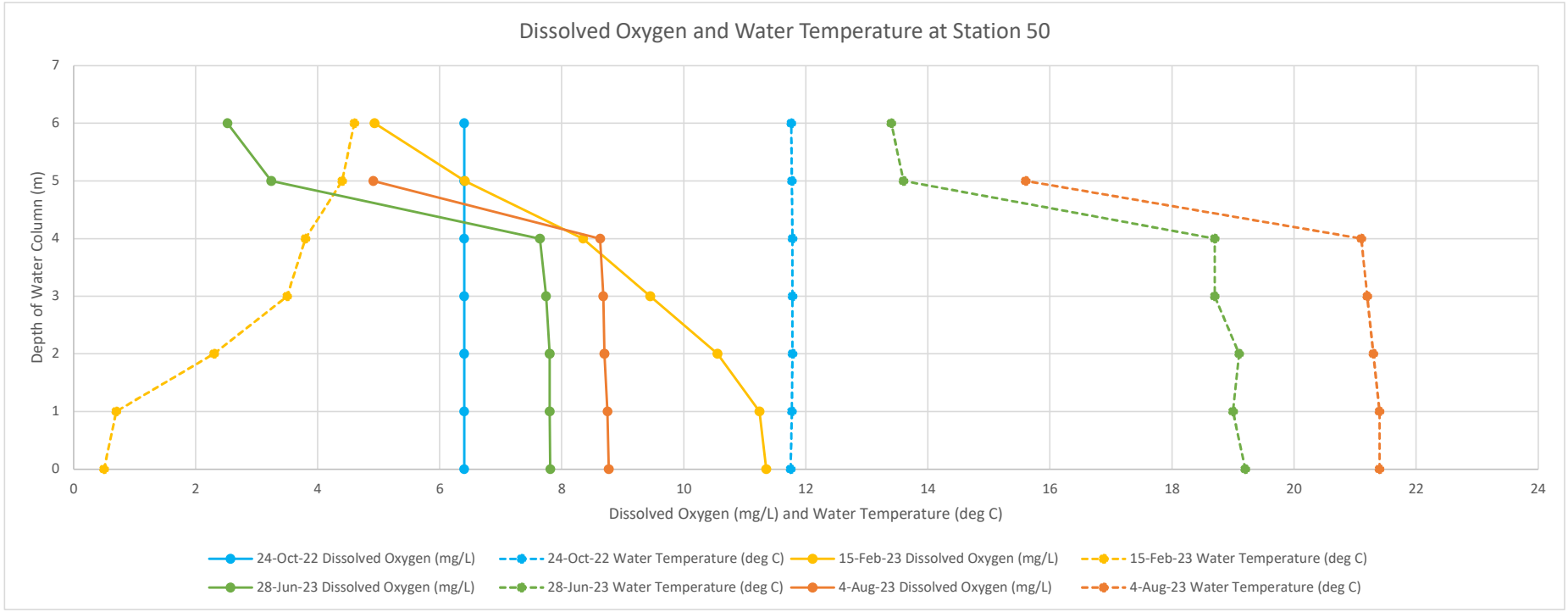

Dissolved Oxygen Concentration and Water Temperature at Station 39
Depth of Water Column (m)
0
1
2
3
4
5
6
7
8
0
2
4
6
8
10
12
14
16
18
20
22
24
Disolved Oxygen (mg/L) and Water Temperature (deg C)
19-Oct-22 Dissolved Oxygen (mg/L)
19-Oct-22 Water Temperature (deg C)
13-Feb-23 Dissolved Oxygen (mg/L)
13-Feb-23 Water Temperature (deg C)
28-Jun-23 Dissolved Oxygen (mg/L)
28-Jun-23 Water Temperature (deg C)
10-Aug-23 Dissolved Oxygen (mg/L)
10-Aug-23 Water Temperature (deg C)


Dissolved Oxygen Concentration and Water Temperature at Station 46
Depth of Water Column (m)
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
0
2
4
6
8
10
12
14
16
18
20
22
24
Dissolved Oxygen (mg/L) and Water Temperature (deg C)
5-Oct-22 Dissolved Oxygen (mg/L)
5-Oct-22 Water Temperature (deg C)
6-Feb-23 Dissolved Oxygen (mg/L)
6-Feb-23 Water Temperature (deg C)
14-Jun-23 Dissolved Oxygen (mg/L)
14-Jun-23 Water Temperature (deg C)
8-Aug-23 Dissolved Oxygen (mg/L)
8-Aug-23 Water Temperature (deg C)


Dissolved Oxygen Concentration and Water Temperature at Station 47
Depth of Water Column (m)
0
1
2
3
4
5
6
7
8
0
2
4
6
8
10
12
14
16
18
20
22
24
Dissolved Oxygen (mg/L) and Water Temperature (deg C)
25-Oct-22 Dissolved Oxygen (mg/L)
25-Oct-22 Water Temperature (deg C)
15-Feb-23 Dissolved Oxygen (mg/L)
15-Feb-23 Water Temperature (deg C)
15-Jun-23 Dissolved Oxygen (mg/L)
15-Jun-23 Water Temperature (deg C)
8-Aug-23 Dissolved Oxygen (mg/L)
8-Aug-23 Water Temperature (deg C)


Dissolved Oxygen and Water Temperature at Station 48
Depth of Water Column (m)
0
2
4
6
8
10
12
0
2
4
6
8
10
12
14
16
18
20
22
24
Dissolved Oxygen (mg/L) and Water Temperature (deg C)
20-Oct-22 Dissolved Oxygen (mg/L)
20-Oct-22 Water Temperature (deg C)
15-Feb-23 Dissolved Oxygen (mg/L)
15-Feb-23 Water Temperature (deg C)
19-Jun-23 Dissolved Oxygen (mg/L)
19-Jun-23 Water Temperature (mg/L)
8-Aug-23 Dissolved Oxygen (mg/L)
8-Aug-23 Water Temperature (deg C)


Dissolved Oxygen and Water Temperature at Station 49
Depth of Water Column (m)
0
1
2
3
4
5
6
0
2
4
6
8
10
12
14
16
18
20
22
24
Dissolved Oxygen (mg/L) and Water Temperature (deg C)
5-Oct-22 Dissolved Oxygen (mg/L)
5-Oct-22 Water Temperature (deg C)
6-Feb-23 Dissolved Oxygen (mg/L)
6-Feb-23 Water Temperature (deg C)
14-Jun-23 Dissolved Oxygen (mg/L)
14-Jun-23 Water Temperature (deg C)
8-Aug-23 Dissolved Oxygen (mg/L)
8-Aug-23 Water Temperature (deg C)


Dissolved Oxygen and Water Temperature at Station 50
Depth of Water Column (m)
0
1
2
3
4
5
6
7
0
2
4
6
8
10
12
14
16
18
20
22
24
Dissolved Oxygen (mg/L) and Water Temperature (deg C)
24-Oct-22 Dissolved Oxygen (mg/L)
24-Oct-22 Water Temperature (deg C)
15-Feb-23 Dissolved Oxygen (mg/L)
15-Feb-23 Water Temperature (deg C)
28-Jun-23 Dissolved Oxygen (mg/L)
28-Jun-23 Water Temperature (deg C)
4-Aug-23 Dissolved Oxygen (mg/L)
4-Aug-23 Water Temperature (deg C)

Appendix B.5 Trigger Exceedance Investigation Reports

Stantec

Memo

To:	Shane Hayes	From:	Igor Iskra
	Greenstone Gold Mines		Stantec Consulting Ltd.
File:	160900981	Date:	October 31, 2022

Reference: Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 8 for Reporting Period May through September 2022

Greenstone Gold Mines (GGM) is constructing a new open pit gold mine that includes a processes plant and ancillary facilities, collectively known as the Greenstone Mine (the Mine). Construction and operation of the gold mine are governed by a series of permits issued by the Ministry of Environment, Conservation and Parks (MECP) each with various monitoring requirements. Monitoring requirements for the Mine are also detailed in the decision statement issued for the federal Environmental Impact Statement (EIS) and notice of approval for the provincial Environmental Assessment (EA).

A surface water quality adaptive management plan was implemented in October 2021 for the Mine. The adaptive management plan for the surface water quality monitoring program is a requirement of the following permits and/or monitoring plans for the Mine.

- Conditions 7.16 through 7.17 of the temporary effluent treatment plant (TETP) Environmental Compliance Approval (ECA) number 9561-CBFLCC.
- The Multi-Media Monitoring and Management Plan (GGM 2021)[1], developed in accordance with condition 13 of the provincial EA Notice of Approval.
- The Fish and Fish Habitat Follow-Up Monitoring Plan (GGM 2021)[2], developed in accordance with conditions 3.14, 3.15, 3.16, 3.17, 3.2, 5.4, and 5.5.1. of the federal EIS Decision Statement.

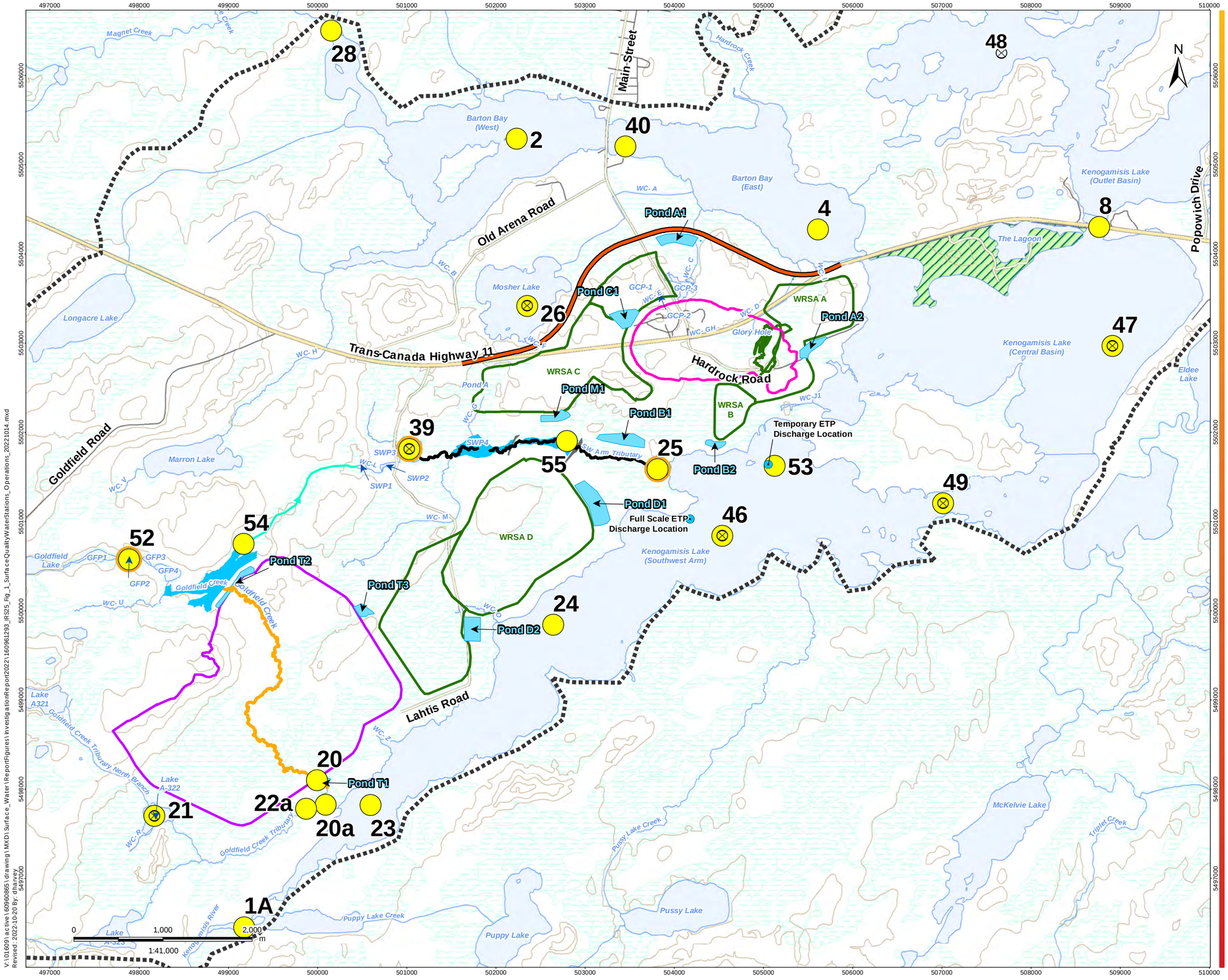
The adaptive management plan for surface water quality is consistent among the TETP ECA, Multi-Media Monitoring and Management Plan, and Fish and Fish Habitat Follow-Up Monitoring Plan. The adaptive management plan defines triggers for additional assessment of cause and associated action plans that will be carried out should exceedances to the triggers occur. There are two trigger thresholds for surface water quality indicator parameters with a corresponding action plan, should the threshold be exceeded. The action plan identifies notification, investigation, and mitigation measures and strategies that may be carried out when exceedances of the triggers occur and those exceedances are determined to be mine related. Trigger Threshold 1 and 2 were exceeded for iron at Station 8 and therefore the respective action plans were initiated. The objective of the action plan is to assess whether the exceedance is mine related and, if it is mine related, to undertake a quantitative risk evaluation, identify exceedance source, and mitigate effects of the mine, as required.

Please accept this letter as the investigation report for the Trigger Threshold 2 exceedance for iron at Station 8.

Station 8 is located in Central Basin at the bridge on HWY 11 (**Figure 1**). Station 8 is located downstream of Barton Bay and Southwest Arm and downstream of mine activities.

[1] Greenstone Gold Mines (GGM). 2021. Hardrock Project – Multi-Media Monitoring Plan – Order in Council 404/2019 Condition 13. Document control number: HP-MG003-EV-130-0004_3. March 25, 2021.

[2] Greenstone Gold Mines (GGM). 2021. Hardrock Project Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan. Document control number HP-MG003-EV-130-0008_0. February 16, 2021.



Stantec

Legend

- Local Assessment Area
- Regional Assessment Area
- Discharge Location
- Routine Water Quality Monitoring
- Temperature/ DO Profile
- Mercury and Methylmercury Monitoring

Site Plan Revised Post Final EA/EIS

- New Highway 11 Alignment
- Diversion Channel
- Collection Ponds
- Open Pit- Full Extent
- Tailings Management Facility
- Grade Control Structure
- Inundated Area ; Backwater effect
- Waste Rock Storage Area

Existing Features

- Highway
- Major Road
- Local Road
- Existing SW Arm Tributary Channel
- Existing Portion of Goldfield Creek (to be overprinted)
- Watercourse
- Provincial Park
- Wetland (Eco-Site Based)
- Waterbody

Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

October 2022
160961293

Client/Project

Greenstone Gold Mines GP Inc. (GGM)
Hardrock Project

Figure No.

1

Title

Surface Water
Quality Monitoring Locations

V:\01609\active\160960865\drawing\MXD\Surface_Water\ReportFigures\InvestigationReport2022\160961293_IR525_Fig_1_SurfaceQualityWaterStations_Operations_20221014.mxd
Revised: 2022-10-20 By: dhavey

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 8 for Reporting Period May through September 2022**

SURFACE WATER QUALITY TRIGGER THRESHOLD 1 EVALUATION

The trigger thresholds and associated action plans are described in conditions 7.16 through 7.17 of the TETP ECA, Section 4.2.4 of the Multi-Media Monitoring Plan, and Section 2.2.2.2 of the Fish and Fish Habitat Follow-Up Monitoring Plan.

Surface water quality Trigger Threshold 1 is defined as three consecutive monthly parameter concentration exceedances above the seasonal 95th percentile baseline concentration AND five times the detection limit. For those stations where the 95th percentile is less than the predicted surface water quality concentrations from the EIS/EA, Trigger Threshold 1 is defined as 10% above the predicted surface water quality concentration from the EIS/EA for the surface water feature at a given monitoring station, AND five times the detection limit.

The 95th percentile for each season for a given parameter is calculated based on data collected prior to September 15th 2021.

The concentration of iron at Station 8 exceeded the spring seasonal 95th percentile baseline concentration in May and June of 2022 and the summer seasonal 95th percentile baseline concentration in July, August and September. Therefore, the surface water quality Trigger Threshold 1 was exceeded for iron at Station 8 in July. The exceedance of the summer seasonal 95th percentile was confirmed in August and September.

The Trigger Threshold 1 action plan was undertaken. Trigger Threshold 1 action plan is to confirm the result (QA/QC review and resampling) and, if the result is confirmed, to complete a trend analysis of the concentration over time.

As per the action plan, a QA/QC review of the sampling methods, laboratory report, and chain of custody was completed for the surface water quality samples collected at Station 8. No anomalies in the sampling methods, sample handling, or laboratory reporting were noted. Therefore, resampling of Station 8 was completed in August 2022, which also accounted for the scheduled August monthly surface water sampling event.

The results of the August and September sampling event showed that iron at Station 8 continued to exceed the associated summer seasonal 95th percentile. As such, the Trigger Threshold 1 exceedance for iron at Station 8 was confirmed. Where a Trigger Threshold 1 exceedance is confirmed, the previous concentration data is reviewed for trends and an assessment of Trigger Threshold 2 is completed.

SURFACE WATER QUALITY TRIGGER THRESHOLD 2 EVALUATION

Surface water quality Trigger Threshold 2 is defined as an exceedance of Trigger Threshold 1 and a statistically significant upward trend for a given indicator parameter, or for stations that have a statistically significant upward trend compared to baseline data, an increase in the magnitude of the trend compared to baseline.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 8 for Reporting Period May through September 2022**

The trend analysis for iron at Station 8 was completed using the Mann-Kendall test. The Mann-Kendall test is a non-parametric test used to determine whether a time series has a monotonic upward or downward trend, the trend may or may not be linear. The test does not require that the data be normally distributed or linear. However, the test does require that there is no autocorrelation. The trend analysis was initially completed on baseline data to confirm if an upward trend in concentration of the indicator parameter is observed under baseline conditions. Surface water quality data collected prior to September 15, 2022 was considered baseline data. No upward trend was observed in the baseline concentration of iron at Station 8.

The trend analysis was then completed on the entire available data set for iron at Station 8. A statistically significant increasing trend in the concentration of iron at Station 8 was identified through the Mann-Kendall analysis. Therefore, Trigger Threshold 2 is exceeded for iron at Station 8 and the Trigger Threshold 2 action plan was undertaken for this parameter and station.

Figure 2 shows the concentration of iron over time at Station 8 with a linear trendline. Monthly sampling of Station 8 commenced in October 2013.

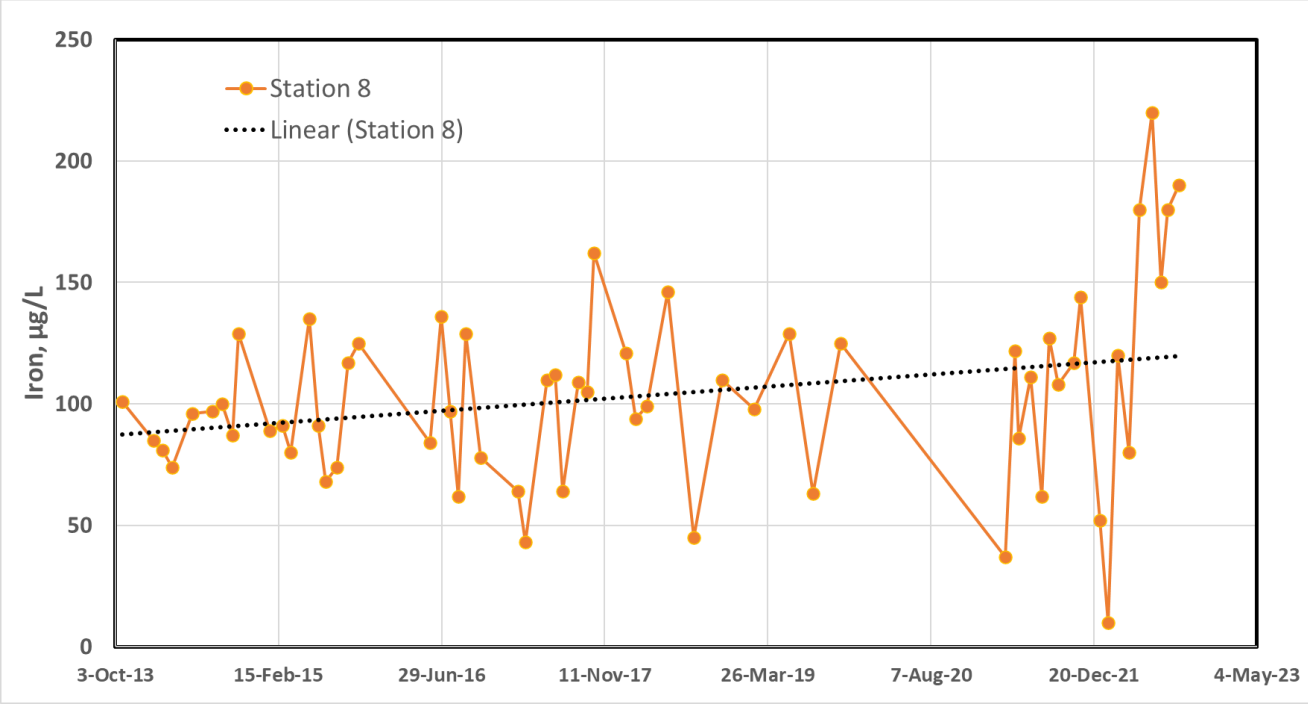


Figure 2: Iron Concentration at Station 8

The objective of the Trigger Threshold 2 action plan is to determine if the exceedance is related to mine activities or a result of continued natural trends or extended seasonal conditions such as a very dry or wet spring or summer period.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 8 for Reporting Period May through September 2022**

SURFACE WATER QUALITY TRIGGER THRESHOLD 2 ACTION PLAN RESULTS

The Trigger Threshold 2 Action Plan has four steps:

- Step 1 is to notify the Impact Assessment Agency of Canada (IAAC), MECP, and the Environmental Advisory Committees (EACs) of the Trigger Threshold 2 exceedance.
- Step 2 requires an investigation to assess whether the exceedance is mine related.
- Step 3 requires a quantitative risk evaluation.
- Step 4 is to identify exceedance source.

The following summarizes the results of the investigation, quantitative risk evaluation, and identification of exceedance sources for the Trigger Threshold 2 exceedance of iron at Station 8.

Iron concentrations at Station 8 for the last five months, when the baseline 95th percentile of iron concentration was exceeded, are presented in **Table 1**.

Table 1: Iron Concentrations at Station 8

Parameter	Spring		Summer		
	09-May-22	16-Jun-22	13-Jul-22	04-Aug-22	07-Sep-22
Total Iron, µg/L	180	220	150	180	190
Baseline 95th Percentile Seasonal, µg/L	141	141	127	127	127
99th Percentile Baseline Annual, µg/L	154	154	154	154	154
Dissolved Iron, µg/L	70	140	60	70	60
Ratio of Dissolved Form, %	39	64	40	39	32

No obvious changes in general water chemistry (turbidity, TSS, conductivity, hardness, etc.) were observed at Station 8 in 2022. In particular, TSS and turbidity at Station 8 are low (less than 8 NTU), indicating that erosion and sediment resuspension is not a factor in elevated iron concentrations. **Table 2** presents general water quality at Station 8.

Table 2: General Water Quality at Station 8

Parameter	5-Apr-22	09-May-22	16-Jun-22	13-Jul-22	04-Aug-22	07-Sep-22
Total Iron, µg/L	80	180	220	150	180	190
95th Percentile	141	141	141	127	127	127
Sulphate, mg/L	2.5	5.5	2.5	3.2	0.9	3.8
True Color, TCU	30.1	42.6	68.1	73.8	50.7	48.1
pH, field	7.39	7.01	8.78	8.04	8.04	8.04
Conductivity, uS/cm	242	204	99	153	163	141
DOC, mg/L	9.9	11.5	15.1	13.8	12.0	13.9

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 8 for Reporting Period May through September 2022**

Parameter	5-Apr-22	09-May-22	16-Jun-22	13-Jul-22	04-Aug-22	07-Sep-22
Hardness, mg/L	124	99.6	65.1	76.6	81.4	81.1
Turbidity, NTU	0.4	1.5	0.8	0.8	1.9	1.2
TDS, mg/L	90	130	125	140	90	155
TSS, mg/L	<0.67	<0.67	4	1.7	2.7	3.0

The SWAT realignment work is ongoing, the diversion channel is not yet operational. Concentrations of iron were elevated above the baseline seasonal 95th percentiles at surface water quality Station 39 located along the SWAT, which may suggest Mine influence on the concentration of iron. Review was completed of ESC measures for construction and confirmed that GGM is following the ESC plan for construction. Visual observation of the construction areas show ESC measures in place and operable. General water chemistry (Table 2), particularly, turbidity, TSS, color, do not show changes in water chemistry along the SWAT indicating that erosion and sediment disturbance is not a factor in trigger exceedances.

Background water quality was reviewed to understand potential influence of background water quality on station 8 water quality. Table 3 shows the iron concentrations at stations located upstream (1A, 2, 28), midstream (4, 24, 49) and downstream (8) of the project footprint. Upstream stations (1A, 2 and 28) show similar or higher concentrations of iron than downstream station (8).

Table 3: Iron Concentrations, µg/L

Station	Winter			Spring			Summer		
	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22
Station 1A	N/A	60	140	N/A	190	190	160	210	160
Station 2	380	230	250	140	160	330	290	340	290
Station 4	260	120	170	130	240	730	150	280	280
Station 8	52	<0.01	120	80	180	220	150	180	190
Station 24	280	70	170	120	140	210	170	200	200
Station 28	550	430	670	N/A	170	340	420	500	430
Station 49	260	100	120	110	160	200	230	190	190

Background Stations 1A (mouth of Kenagamisis River in SWA) and 28 (mouth of Magnet Creek into BBW) were investigated for trends and it was found that both stations show no upward trend under baseline conditions for iron. The trend analysis was then completed on the entire available data set for iron at Stations 1A and 28. A statistically significant increasing trend in the concentration of iron at Stations 1A and 28 was identified through the Mann-Kendall analysis. Therefore, as stations located upstream beyond the extent of potential mine influence also demonstrated an increasing iron trend at the same time that station 8 shows an increasing trend, natural variability is considered a potential source of increasing iron concentrations at Station 8.

Figures 3 and 4 show the concentration of iron over time at background Stations 1A and 28 with a linear trendline. Monthly sampling at both stations commenced in October 2013.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 8 for Reporting Period May through September 2022**

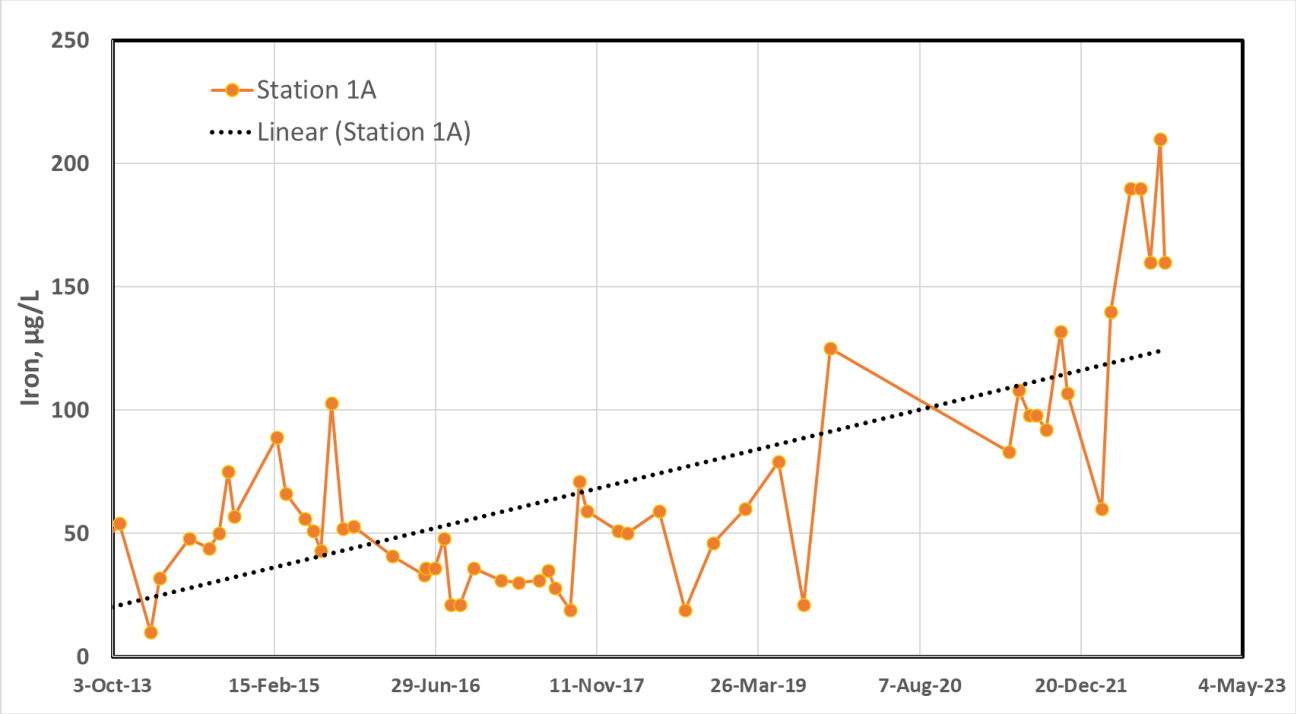


Figure 3: **Iron Concentration at Station 1A**

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 8 for Reporting Period May through September 2022**

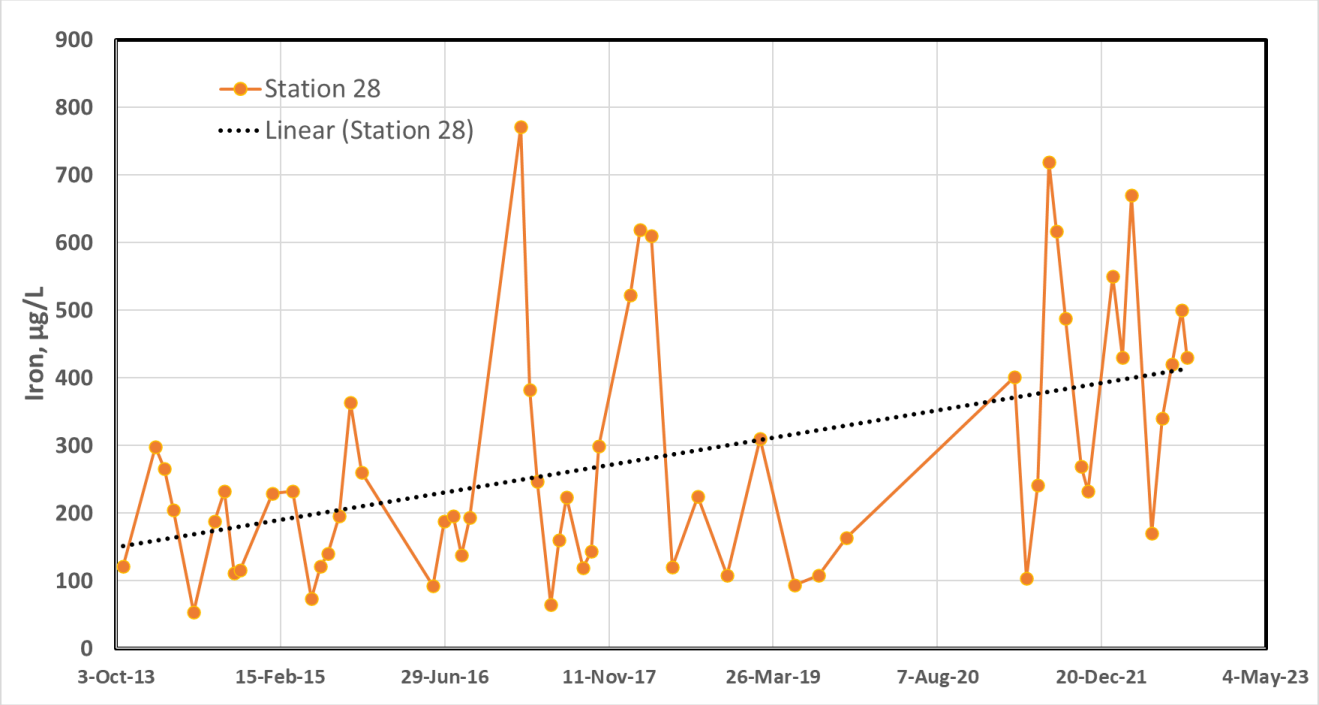


Figure 4: Iron Concentration at Station 28

The change in the trend in concentration of iron at Station 8 as well as background stations 1A and 28 correlates to January 2022. The timing of increased iron concentration observations may suggests other factors, other than natural variability, that may be resulting in increased concentrations of iron at Station 8. Other factors may be laboratory analyses. As part of Trigger Threshold 1 action plan the laboratory certificates of analyses, which includes the laboratory's QA/QC results, were reviewed with no exceptions to the analyses noted. Prior to January 2021, the baseline surface water quality samples were analyzed by ALS. In January 2021, GGM contracted Testmark Laboratories to complete the water analyses for the Mine. Given the number of elevated concentrations of parameters observed since January 2022 compared to baseline concentrations, GGM has commenced an investigation into the results of the laboratory analyses. The investigation involves collecting duplicate samples for analyses by ALS. Preliminary analytical results show a difference in concentrations between laboratories, particularly iron which is consistently elevated in the results from Testmark Laboratories versus ALS. The investigation is ongoing and is widening to include a third laboratory to understand the potential bias in the laboratory results.

Based on the investigation the following observations were made for iron at Station 8:

- The Station 8 May-September data presented in Table 1 exceed the 99th annual percentile of baseline iron concentration (154 µg/L) and the maximum observed baseline iron concentration (162 µg/L, October 10, 2017) in four out of five instances. Standard deviation of iron in baseline data is 27.5, while standard deviation of iron during construction is more than 2 times higher, i, e, 63.9. It indicates that variability of iron concentrations for the last 10 months is notably higher than from October 2013 to September 2021.

Reference: Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 8 for Reporting Period May through September 2022

- A ratio of dissolved forms of iron to suspended forms varies from 32 to 64% (**Table 1**). It indicates that both forms are unequally distributed. Without contribution of suspended forms all dissolved concentrations of iron are below the seasonal trigger thresholds.
- Concentrations of iron were elevated above the baseline seasonal 95th percentiles at surface water quality Station 39 located along the SWAT, which may suggest Mine influence on the concentration of iron. Review was completed of ESC measures for construction and confirmed that GGM is following the ESC plan for construction, and visual observation of the construction areas show ESC measures in place and operable. General water chemistry (**Table 2**), particularly, turbidity, TSS, color, do not show changes in water chemistry along the SWAT indicating that erosion and sediment disturbance is not a factor in trigger exceedances.
- Spatial extent of iron exceedance was assessed (Table 3). The iron concentrations in background stations (i.e. upstream of the mine footprint, stations 1A and 28) are generally higher than in stations located downstream of the Mine. In addition, the Mann-Kendall trend analyses of the concentration of iron at background stations also resulted in a statistically significant upward trend in iron compared to baseline where no statistically significant trend in the data was noted. The data suggests that natural variability may influence the concentration of iron downgradient of the Mine.
- Water quality analysis from 2013 to December 2021 was completed using ALS. Starting January 2022, water quality analyses has been completed by Testmark Laboratories. In August 2022, Stations 8 and 25 water quality samples were tested simultaneously in both labs and it appeared that Testmark iron concentrations are higher than ALS iron results by 51 to 63%. GGM is conducting further investigation using a third lab to determine if laboratory bias is a factor in the trigger exceedances.

Step 3 requires a quantitative risk evaluation which is a conceptual evaluation and comparison of concentrations or loads and conclusions drawn from such analysis. The May-September iron concentrations are above the predicted levels for construction and operation in the EIS/EA (Section 10). However, the concentration of iron at Station 8 was notably below PWQO (300 µg/L) and does not represent potential concern to the environment. Given the uncertainty in the laboratory data, the laboratory investigation needs to be completed so that the quantitative risk evaluation could be completed. As the concentration of iron at station 8 is less than the PWQO, environmental risk of the elevated iron in construction compared to baseline conditions is limited while the laboratory investigation is completed and the concentrations of iron can be confirmed.

Step 4 of the Trigger Threshold 2 action plan is to identify exceedance source. The source of iron is inconclusive and additional investigations are required. Based on existing evidence the potential sources of exceedances in iron at Station 8 are the following:

1. Laboratory bias (based on inconsistencies in analyses between ALS and Testmark)

2. Natural variability (based on change to increasing trend of iron concentration compared to baseline conditions at each background station, which may also be the result of changing laboratories)

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 8 for Reporting Period May through September 2022**

SUMMARY AND CLOSING

In summary, during the September 2022 reporting period Trigger Threshold 2 was exceeded for iron at Station 8. The Trigger Threshold 2 action plan was completed and was inconclusive as to the source of the increased iron concentrations relative to baseline conditions. Preliminary investigations suggest the elevated concentrations of iron at Station 8 may be related to either natural variability or laboratory analyses affecting the results for iron. Therefore, the investigation into the laboratory data needs to be completed prior to concluding the potential source of increased iron concentrations at Station 8.

As the concentration of iron at Station 8 is notably below the PWQO, the monitoring plan will continue with no modifications to the monitoring plan recommended at this time while the investigation into the laboratory analyses is completed. Once the investigation into the laboratory analyses is completed, a review of the trigger threshold exceedances to date will be completed to understand if the results of the laboratory investigation alter the previously noted trigger threshold exceedances and associated investigations.

Should you have any questions or comments, please contact the undersigned.

Stantec Consulting Ltd.

<original signed by>

Igor Iskra Ph.D., P. Eng.
Senior Water Resources Engineer

Phone: 289-923-7237
Fax: 905 474 9889
Igor.Iskra@stantec.com

Stantec

Memo

To:	Shane Hayes Greenstone Gold Mines	From:	Igor Iskra Stantec Consulting Ltd.
File:	160900981	Date:	November 30, 2022

Reference: Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Stations 24, 49 and 53 for Reporting Period May through October 2022

Greenstone Gold Mines (GGM) is constructing a new open pit gold mine that includes a processing plant and ancillary facilities, collectively known as the Greenstone Mine (the Mine). Construction and operation of the gold mine are governed by a series of permits issued by the Ministry of Environment, Conservation and Parks (MECP) each with various monitoring requirements. Monitoring requirements for the Mine are also detailed in the decision statement issued for the federal Environmental Impact Statement (EIS) and notice of approval for the provincial Environmental Assessment (EA).

A surface water quality adaptive management plan was implemented in October 2021 for the Mine. The adaptive management plan for the surface water quality monitoring program is a requirement of the following permits and/or monitoring plans for the Mine.

- Conditions 7.16 through 7.17 of the temporary effluent treatment plant (TETP) Environmental Compliance Approval (ECA) number 9561-CBFLCC.
- Conditions 8.17 through 8.18 of the full scale effluent treatment plant (ETP) Environmental Compliance Approval (ECA) number 0735-C9PMD6
- The Multi-Media Monitoring and Management Plan (GGM 2021)[1], developed in accordance with condition 13 of the provincial EA Notice of Approval.
- The Fish and Fish Habitat Follow-Up Monitoring Plan (GGM 2021)[2], developed in accordance with conditions 3.14, 3.15, 3.16, 3.17, 3.2, 5.4, and 5.5.1. of the federal EIS Decision Statement.

The adaptive management plan for surface water quality is consistent among the TETP ECA, Multi-Media Monitoring and Management Plan, and Fish and Fish Habitat Follow-Up Monitoring Plan. The adaptive management plan defines triggers for additional assessment of cause and associated action plans that will be carried out should exceedances to the triggers occur. There are two trigger thresholds for surface water quality indicator parameters with a corresponding action plan, should the threshold be exceeded. The action plan identifies notification, investigation, and mitigation measures and strategies that may be carried out when exceedances of the triggers occur and those exceedances are determined to be mine related. Trigger Threshold 1 and 2 were exceeded for iron at Stations 24, 49 and 53 and therefore, the respective action plans were initiated. The objective of the action plan is to assess whether the exceedance is mine related and, if it is mine related, to undertake a quantitative risk evaluation, identify exceedance source, and mitigate effects of the mine, as required.

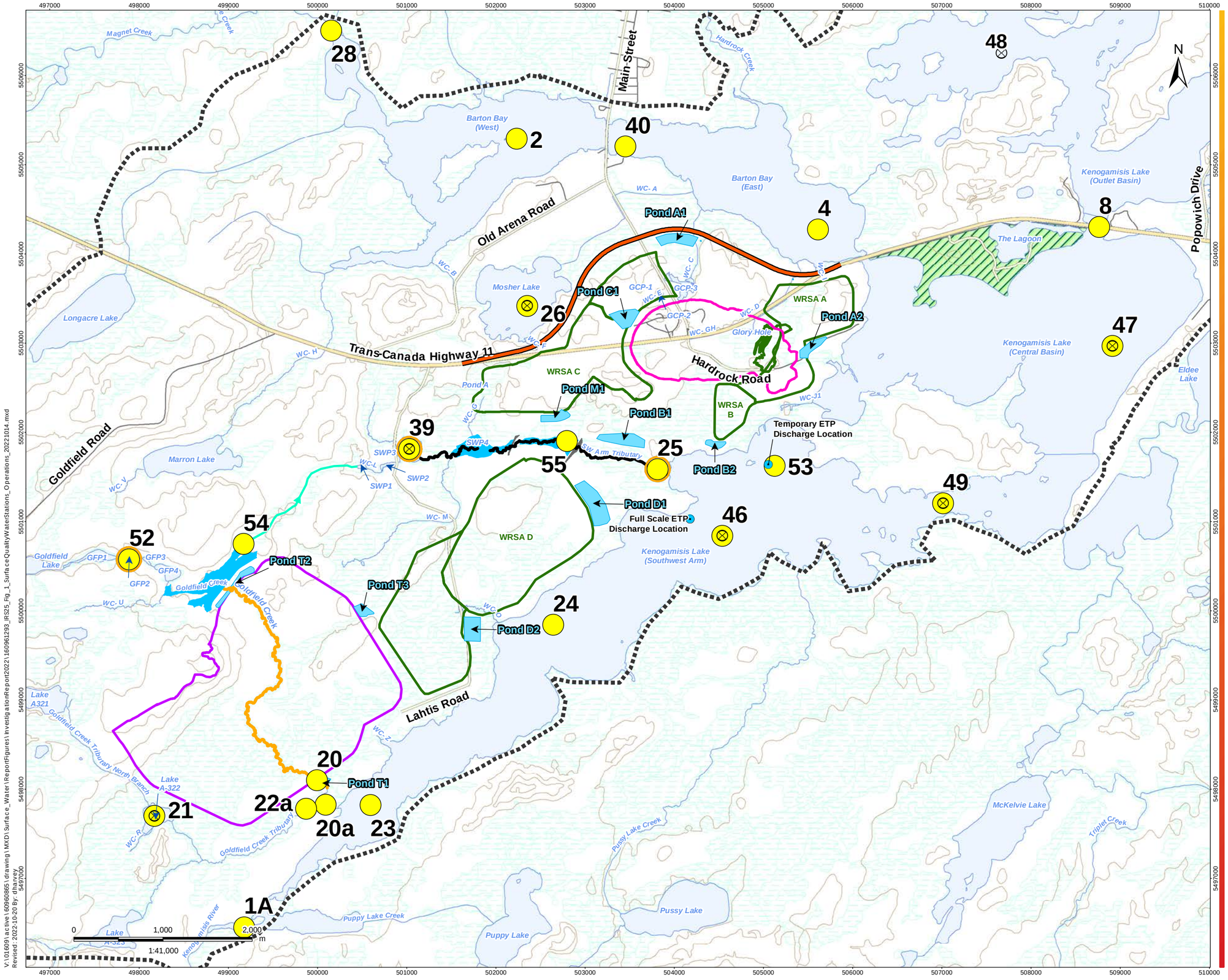
[1] Greenstone Gold Mines (GGM). 2021. Hardrock Project – Multi-Media Monitoring Plan – Order in Council 404/2019 Condition 13. Document control number: HP-MG003-EV-130-0004_3. March 25, 2021.

[2] Greenstone Gold Mines (GGM). 2021. Hardrock Project Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan. Document control number HP-MG003-EV-130-0008_0. February 16, 2021.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Stations 24, 49 and 53 for Reporting Period May through October 2022**

Please accept this letter as the investigation report for the Trigger Threshold 2 exceedance for iron at Stations 24, 49 and 53.

Station 24, 49 and 53 are all located in the Southwest Arm of Kenogamisis Lake. (**Figure 1**).



Stantec

Legend

- Local Assessment Area
- Regional Assessment Area
- Discharge Location
- Routine Water Quality Monitoring
- Temperature/ DO Profile
- Mercury and Methylmercury Monitoring

Site Plan Revised Post Final EA/EIS

- New Highway 11 Alignment
- Diversion Channel
- Collection Ponds
- Open Pit- Full Extent
- Tailings Management Facility
- Grade Control Structure
- Inundated Area ; Backwater effect
- Waste Rock Storage Area

Existing Features

- Highway
- Major Road
- Local Road
- Existing SW Arm Tributary Channel
- Existing Portion of Goldfield Creek (to be overprinted)
- Watercourse
- Provincial Park
- Wetland (Eco-Site Based)
- Waterbody

Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

October 2022
160961293

Client/Project

Greenstone Gold Mines GP Inc. (GGM)
Hardrock Project

Figure No.

1

Title

Surface Water
Quality Monitoring Locations

V:\01609\active\160960865\drawing\MXD\Surface_Water\ReportFigures\InvestigationReport2022\160961293_IR25_Fig_1_SurfaceQualityWaterStations_Operations_20221014.mxd
Revised: 2022-10-20 By: dhavey

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Stations 24, 49 and 53 for Reporting Period May through October 2022**

SURFACE WATER QUALITY TRIGGER THRESHOLD 1 EVALUATION

The trigger thresholds and associated action plans are described in conditions 7.16 through 7.17 of the TETP ECA, Section 4.2.4 of the Multi-Media Monitoring Plan, and Section 2.2.2.2 of the Fish and Fish Habitat Follow-Up Monitoring Plan.

Surface water quality Trigger Threshold 1 is defined as three consecutive monthly parameter concentration exceedances above the seasonal 95th percentile baseline concentration AND five times the detection limit. For those stations where the 95th percentile is less than the predicted surface water quality concentrations from the EIS/EA, Trigger Threshold 1 is defined as 10% above the predicted surface water quality concentration from the EIS/EA for the surface water feature at a given monitoring station, AND five times the detection limit.

The 95th percentile for each season for a given parameter is calculated based on data collected prior to September 15th, 2021.

The concentration of iron at Stations 24, 49 and 53 exceeded the spring seasonal 95th percentile baseline concentration in June of 2022, the summer seasonal 95th percentile baseline concentration in July, August and September 2022, and the fall seasonal 95th percentile baseline concentration in October 2022. Therefore, the surface water quality Trigger Threshold 1 was exceeded for iron at Stations 24, 49 and 53 in August 2022. The exceedance of the seasonal 95th percentile was confirmed by the September and October sampling events.

The Trigger Threshold 1 action plan was undertaken. Trigger Threshold 1 action plan is to confirm the result (QA/QC review and resampling) and, if the result is confirmed, to complete a trend analysis of the concentration over time.

As per the action plan, a QA/QC review of the sampling methods, laboratory report, and chain of custody was completed for the surface water quality samples collected at Stations 24, 49 and 53. No anomalies in the sampling methods, sample handling, or laboratory reporting were noted however given the number of exceedances of Trigger Threshold 1 for iron in 2022 (when GGM switched analytical laboratories from ALS to Testmark), duplicate sampling was completed in August for select stations (8 and 25) with one set of samples submitted to Testmark and the other set of samples submitted to ALS for laboratory analyses. Inconsistencies were noted between the laboratory analyses, particularly for iron. The duplicate analysis showed between 12% and 77% higher iron concentration in Testmark results than in ALS results. Additional quality control sampling was completed in October, in which triplicate samples were collected for analyses by Testmark, ALS, and Bureau Veritas (BV) laboratories for select stations. The inconsistency in the concentration of iron remained between Testmark and the remaining labs and is discussed further below. Given that the investigation into the laboratory results is ongoing, the investigation may conclude that no Trigger Threshold 1 exceedances present as Testmark iron results may prove to be erroneous. It was conservatively assumed for this report that the Trigger Threshold 1 was exceeded so we can conduct the action plan while we await the results of the lab investigation.

The Trigger Threshold 1 response plan was followed and resampling of Stations 24, 49 and 49 was completed in September and October 2022. The resampling completed in September and October 2022 also accounted for the scheduled September and October monthly surface water sampling event.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Stations 24, 49 and 53 for Reporting Period May through October 2022**

The results of the September sampling event showed that iron at Stations 24, 49 and 53 continued to exceed the associated summer seasonal 95th percentile. As the results of the laboratory investigation is ongoing, a conservative assessment of Trigger Threshold 1 was completed and as such, the Trigger Threshold 1 exceedance for iron at Stations 24, 49 and 53 was assumed. Where a Trigger Threshold 1 exceedance is confirmed, the previous concentration data is reviewed for trends and an assessment of Trigger Threshold 2 is completed.

SURFACE WATER QUALITY TRIGGER THRESHOLD 2 EVALUATION

Surface water quality Trigger Threshold 2 is defined as an exceedance of Trigger Threshold 1 and a statistically significant upward trend for a given indicator parameter, or for stations that have a statistically significant upward trend compared to baseline data, an increase in the magnitude of the trend compared to baseline.

The trend analysis for iron at Stations 24, 49 and 53 was completed using the Mann-Kendall test. The Mann-Kendall test is a non-parametric test used to determine whether a time series has a monotonic upward or downward trend, the trend may or may not be linear. The test does not require that the data be normally distributed or linear. However, the test does require that there is no autocorrelation. The trend analysis was initially completed on baseline data to confirm if an upward trend in concentration of the indicator parameter is observed under baseline conditions. Surface water quality data collected prior to September 15, 2021 was considered baseline data. No upward trend was observed in the baseline concentration of iron at Stations 24, 49 and 53.

The trend analysis was then completed on the entire available data set, up to and including October 2022 data, for iron at Stations 24, 49 and 53. A statistically significant increasing trend in the concentration of iron at Stations 24, 49 and 53 was identified through the Mann-Kendall analysis. Therefore, Trigger Threshold 2 is exceeded for iron at Stations 24, 49 and 53 and Trigger Threshold 2 action plan was undertaken for this parameter and station.

Figures 2, 3 and **4** show the concentration of iron over time at Stations 24, 49 and 53 with a linear trendline. Monthly sampling of Station 24 commenced in October 2013. Monthly sampling of Station 53 commenced in May 2016. Monthly sampling of Station 49 commenced in September 2016.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Stations 24, 49 and 53 for Reporting Period May through October 2022**

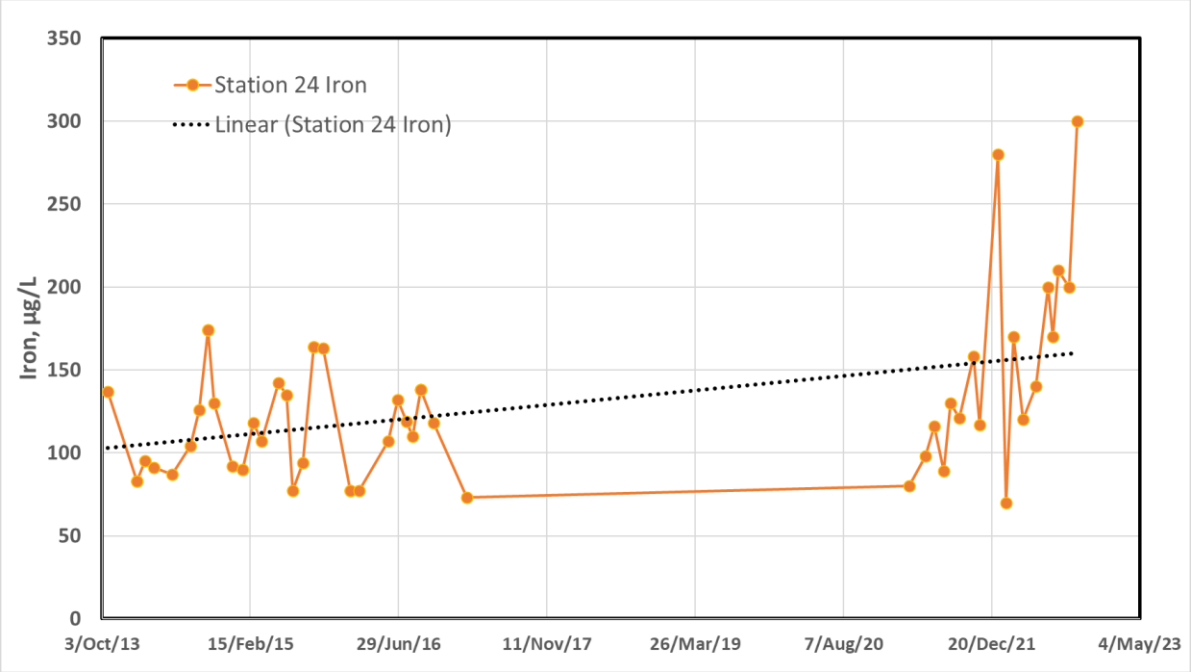


Figure 2: Iron Concentration at Station 24

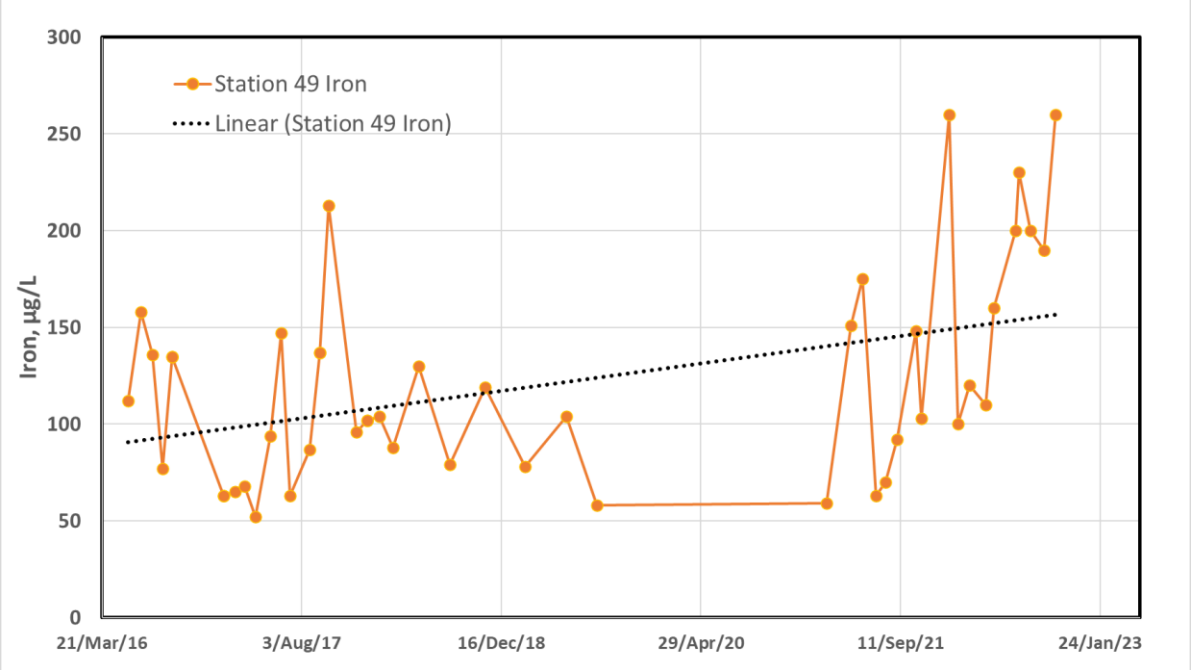


Figure 3: Iron Concentration at Station 49

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Stations 24, 49 and 53 for Reporting Period May through October 2022**

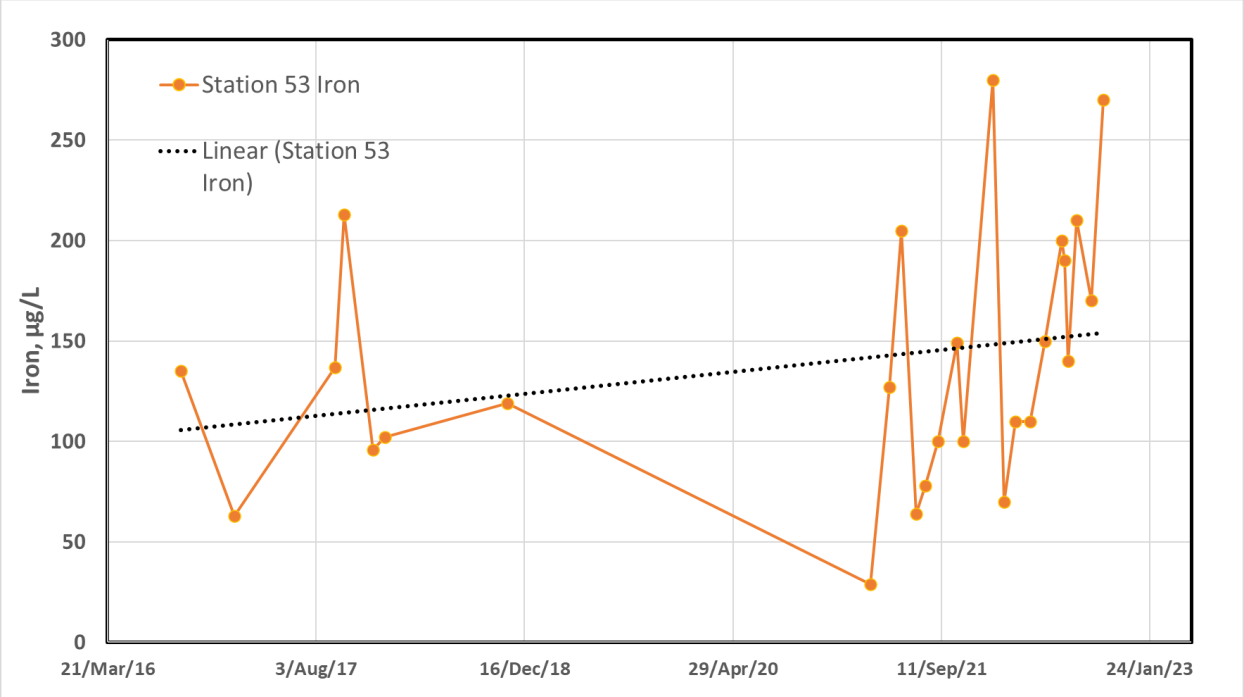


Figure 4: Iron Concentration at Station 53

The objective of the Trigger Threshold 2 action plan is to determine if the exceedance is related to mine activities or a result of continued natural trends or extended seasonal conditions such as a very dry or wet spring or summer period.

SURFACE WATER QUALITY TRIGGER THRESHOLD 2 ACTION PLAN RESULTS

The Trigger Threshold 2 Action Plan has four steps:

- Step 1 is to notify the Impact Assessment Agency of Canada (IAAC), MECP, and the Environmental Advisory Committees (EACs) of the Trigger Threshold 2 exceedance.
- Step 2 requires an investigation to assess whether the exceedance is mine related.
- Step 3 requires a quantitative risk evaluation.
- Step 4 is to identify exceedance source.

The following summarizes the results of the investigation, quantitative risk evaluation, and identification of exceedance sources for the Trigger Threshold 2 exceedance of iron at Stations 24, 49 and 53.

Iron concentrations at Stations 24, 49 and 53 for the last five months, when the baseline 95th percentile of iron concentration was exceeded, are presented in **Tables 1, 2** and **3**.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Stations 24, 49 and 53 for Reporting Period May through October 2022**

Table 1: Iron Concentrations at Station 24

Parameter	Spring	Summer			Fall
	27-Jun-22	13-Jul-22	2-Aug-22	6-Sep-22	5-Oct-22
Total Iron, µg/L	200	170	210	200	300
Baseline 95th Percentile Seasonal, µg/L	140	169	169	169	190
99th Percentile Baseline Annual, µg/L	174	174	174	174	174
Dissolved Iron, µg/L	30	60	40	60	60
Ratio of Dissolved Form, %	15	35	19	30	22

Table 2: Iron Concentrations at Station 49

Parameter	Spring	Summer			Fall
	27-Jun-22	4-Jul-22	2-Aug-22	6-Sep-22	5-Oct-22
Total Iron, µg/L	200	230	200	190	260
Baseline 95th Percentile Seasonal, µg/L	141	127	127	127	190
99th Percentile Baseline Annual, µg/L	200	200	200	200	212
Dissolved Iron, µg/L	60	100	40	90	50
Ratio of Dissolved Form, %	30	43	20	47	19

Table 3: Iron Concentrations at Station 53

Parameter	Spring	Summer			Fall
	27-Jun-22	12-Jul-22	2-Aug-22	6-Sep-22	5-Oct-22
Total Iron, µg/L	200	140	210	170	270
Baseline 95th Percentile Seasonal, µg/L	190	136	136	136	190
99th Percentile Baseline Annual, µg/L	212	212	212	212	212
Dissolved Iron, µg/L	50	90	40	50	50
Ratio of Dissolved Form, %	25	64	19	29	19

No obvious changes in general water chemistry (turbidity, TSS, conductivity, hardness, etc.) were observed at Stations 24, 49 and 53 in 2022. In particular, TSS and turbidity at Stations 24, 49 and 53 are low (less than 8 NTU), indicating that erosion and sediment resuspension is not a factor in elevated iron concentrations. **Tables 4, 5 and 6** present general water quality at Stations 24, 49 and 53.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Stations 24, 49 and 53 for Reporting Period May through October 2022**

Table 4: General Water Quality at Station 24

Parameter	17-May-22	27-Jun-22	13-Jul-22	2-Aug-22	6-Sep-22	5-Oct-22
Total Iron, µg/L	140	200	170	210	200	300
95th Percentile	140	140	169	169	169	158
Sulphate, mg/L	1.3	1.1	1.5	1.5	1.7	1.3
True Color, TCU	92.7	49.8	55.4	41.3	64.2	42.2
pH, field	7.08	7.91	8.04	7.72	8.16	7.87
Conductivity, uS/cm	103	153	160	135	174	188
DOC, mg/L	14.1	10.2	11.8	11	11.6	10.2
Hardness, mg/L	53.7	83.2	82.6	92	87.4	100
Turbidity, NTU	1	1	1.2	2	3.1	1.7
TDS, mg/L	120	105	115	140	180	145
TSS, mg/L	1	2.5	1	2.7	3	2.7

Table 5: General Water Quality at Station 49

Parameter	3-May-22	27-Jun-22	4-Jul-22	2-Aug-22	6-Sep-22	5-Oct-22
Total Iron, µg/L	160	200	230	200	190	260
95th Percentile	141	141	127	127	127	190
Sulphate, mg/L	3.5	1.3	1.3	1	3.9	2.6
True Color, TCU	42.8	78.9	55.8	44.7	32.1	31.3
pH, field	6.4	7.85	7.69	7.74	8.07	7.81
Conductivity, uS/cm	135	149	153	166	181	178
DOC, mg/L	10	10.6	11.5	11.5	11.6	10.9
Hardness, mg/L	69.6	77.4	81.6	86.5	82.2	93.2
Turbidity, NTU	0.9	0.8	1.4	2.1	2.1	1.6
TDS, mg/L	145	125	135	145	130	170
TSS, mg/L	<1.3	3.5	2	2.3	2.3	2.3

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Stations 24, 49 and 53 for Reporting Period May through October 2022**

Table 6: General Water Quality at Station 53

Parameter	17-May-22	27-Jun-22	12-Jul-22	2-Aug-22	6-Sep-22	5-Oct-22
Total Iron, µg/L	150	200	140	210	170	270
95th Percentile	190	190	136	136	136	190
Sulphate, mg/L	1.7	1.9	1.7	2.6	2.1	2
True Color, TCU	83.2	66.7	49.8	42.6	46.8	36.6
pH, field	7.19	7.82	7.79	7.78	8.15	7.82
Conductivity, uS/cm	104	151	154	176	172	183
DOC, mg/L	14.8	10.8	12.4	11.2	12.4	10.5
Hardness, mg/L	49.2	78.3	84	91.8	81.4	98
Turbidity, NTU	0.9	0.8	1.1	3.4	1.4	1.7
TDS, mg/L	130	130	175	120	130	175
TSS, mg/L	<0.67	4.5	<1	2.3	3	3

The SWAT realignment work is ongoing, the diversion channel is not completed yet. Concentrations of iron were elevated above the baseline seasonal 95th percentiles at surface water quality Station 39 located along the SWAT, which may suggest Mine influence on the concentration of iron. Review was completed of ESC measures for construction and confirmed that GGM is following the ESC plan for construction. Visual observation of the construction areas shows that ESC measures in place and operable. General water chemistry (**Tables 4, 5, and 6**), particularly, turbidity, TSS, color, do not show changes in water chemistry along SWAT indicating that erosion and sediment disturbance is not a factor in trigger exceedances. Additionally, Station 24 is located upstream of the SWAT diversion and it also shows elevated iron.

Background water quality was reviewed to understand potential influence of background water quality on Stations 24, 49 and 53 water quality. **Table 7** shows the iron concentrations at stations located upstream (Station 1A) and downstream (Station 8) of the project footprint along the SWA. Upstream Station 1A shows similar or higher concentrations of iron than downstream Station 8.

Table 7: Iron Concentrations, µg/L

Station	Winter			Spring			Summer			Fall
	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
Station 1A	N/A	60	140	N/A	190	190	160	210	160	160
Station 8	52	<0.01	120	80	180	220	150	180	190	150
Station 24	280	70	170	120	140	210	170	200	200	300
Station 49	260	100	120	110	160	200	230	190	190	260
Station 53	280	70	110	110	150	200	190	210	170	270

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Stations 24, 49 and 53 for Reporting Period May through October 2022**

Background Station 1A (mouth of the Southwest Arm of Kenogamisis River) was investigated for trends and it was found that this station showed no upward trend under baseline conditions for iron. The trend analysis was then completed on the entire available data set for iron at Station 1A. A statistically significant increasing trend in the concentration of iron at Station 1A was identified through the Mann-Kendall analysis. Since Station 1A is located upstream and beyond the extent of potential mine influence and demonstrated an increasing iron trend while Stations 24, 49 and 53 also showed an increasing trend, natural variability is considered a potential source of increasing iron concentrations at Stations 24, 49 and 53.

Figure 5 shows the concentration of iron over time at background Station 1A with a linear trendline. Monthly sampling commenced in October 2013 at Station 1A.

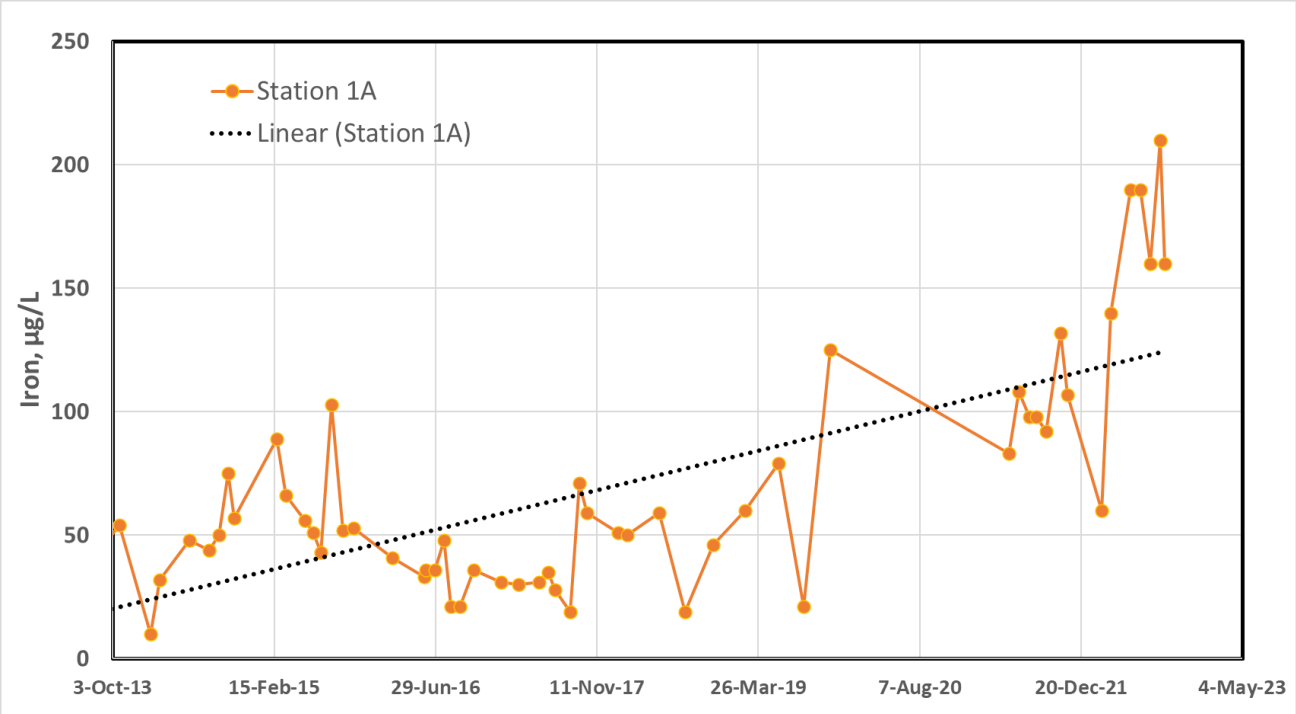


Figure 5: Iron Concentration at Station 1A

The change in the trend in concentration of iron at Stations 24, 49 and 53 as well as background Station 1A and downstream Station 8 correlates to January 2022 when a new laboratory (Testmark Laboratories) was contracted by GGM to do water quality analysis. As part of Trigger Threshold 1 action plan the laboratory results were reviewed and inconsistencies in iron analysis were observed. GGM has commenced an investigation into the results of the laboratory analyses.

The lab assessment investigation involved collection of duplicate samples at select locations with analysis by Testmark and ALS Labs in August 2022. Preliminary analytical results showed a difference in concentrations between laboratories, particularly iron which is consistently elevated in the results from Testmark Laboratories versus ALS Labs. The investigation was expanded in October 2022 when triplicate samples from 5 different monitoring locations (Station 8, 25, 20A, 39, and 55) were collected with each sample sent to a different

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Stations 24, 49 and 53 for Reporting Period May through October 2022**

laboratory to analyze. Results are presented in **Table 8**. Data from the selected stations reported by Testmark Laboratories continued to show elevated iron concentrations when compared to the data reported by Bureau Veritas and ALS. The investigation of the potential for laboratory bias is ongoing.

Table 8: Iron Concentrations Reported by Different labs in October Samples, µg/L

Station 8			Station 25			Station 20A			Station 39			Station 55		
Testmark	BV	ALS	Testmark	BV	ALS	Testmark	BV	ALS	Testmark	BV	ALS	Testmark	BV	ALS
160	110	114	130	<100	79	220	190	176	200	140	131	120	<100	42

Based on the investigation conducted the following observations were made for iron at Stations 24, 49 and 53:

- Iron concentrations at Stations 24, 49 and 53 exceed the 95th percentile and in most cases, they exceed the 99th annual percentile of baseline iron concentration in the reported period (**Tables 1, 2,** and **3**).
- A ratio of dissolved forms of iron to suspended forms varies from 15% to 35% for Station 24, from 19% to 64% for Station 53 and from 19% to 47% for Station 49 (**Tables 1, 2** and **3**). It indicates that particulate forms generally dominate in total iron concentration. Without contribution of suspended forms all dissolved concentrations of iron are below the seasonal trigger thresholds.
- Concentrations of iron were elevated above the baseline seasonal 95th percentiles at surface water quality Station 39 located along the SWAT, which may suggest Mine influence on the concentration of iron. However, exceedances of iron were also observed in stations upstream of SWAT and upstream of the mine.
- General water chemistry (**Tables 4, 5** and **6**), particularly, turbidity, TSS, color, do not show changes in water chemistry in Stations 24, 49 and 53 indicating that erosion and sediment disturbance is not a factor in trigger exceedances.
- Spatial extent of iron exceedance was assessed (**Table 7**). The iron concentrations in background station (i.e. upstream of the mine footprint) Station 1A is generally higher than in stations located downstream of the Mine (Station 8). In addition, the Mann-Kendall trend analyses of the concentration of iron at background Station 1A also resulted in a statistically significant upward trend in iron compared to baseline where no statistically significant trend in the data was noted. The data suggests that natural variability may influence the concentration of iron downgradient of the Mine.
- Water quality analysis from 2013 to December 2021 was completed using ALS. Starting January 2022, water quality analyses have been completed by Testmark Laboratories. In August 2022, Stations 8 and 25 water quality samples were tested simultaneously in both laboratories and it appeared that Testmark iron concentrations are higher than ALS iron results by 51-63%. In October 2022, Stations 8, 25, 20A, 39 and 55 water quality samples were tested simultaneously by Testmark, ALS and Bureau Veritas (**Table 8).** Iron concentrations reported by Testmark exceed values reported by ALS and Bureau Veritas by 20-280%. GGM is conducting further investigation to confirm if laboratory bias is a potential factor in the trigger threshold exceedances.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Stations 24, 49 and 53 for Reporting Period May through October 2022**

Step 3 requires a quantitative risk evaluation which is a conceptual evaluation and comparison of concentrations or loads and conclusions drawn from such analysis. The June-October iron concentrations are above the predicted levels for construction and operation in the EIS/EA (Section 10). However, the concentrations of iron at Stations 24, 49 and 53 do not exceed the PWQO (300 µg/L) and do not represent potential concern to the environment. Given the uncertainty in the laboratory data, the laboratory investigation needs to be completed before the quantitative risk evaluation could be completed. As the concentrations of iron at stations 24, 49 and 53 do not exceed the PWQO, environmental risk of the elevated iron in construction compared to baseline conditions is limited while the laboratory investigation is completed and the concentrations of iron can be confirmed.

Step 4 of the Trigger Threshold 2 action plan is to identify exceedance source. The source of iron is inconclusive and additional investigations are required. Based on existing evidence the potential sources of exceedances in iron at Stations 24, 49 and 53 are the following:

1. Laboratory bias (based on higher iron values reported by Testmark in comparison with ALS and Bureau Veritas).

2. Natural variability (based on an increasing trend of iron concentration compared to baseline conditions at each background station).

SUMMARY AND CLOSING

In summary, during the September 2022 reporting period Trigger Threshold 2 was exceeded for iron at Stations 24, 49 and 53. Iron concentrations continued to exceed Trigger Thresholds 1 and 2 in October 2022 for all three stations. The Trigger Threshold 2 action plan was completed and was inconclusive as to the source of the increased iron concentrations relative to baseline conditions. Preliminary investigations suggest the elevated concentrations of iron at Stations 24, 49 and 53 may be related to either natural variability or laboratory analyses affecting the results for iron. Therefore, the investigation into the laboratory data needs to be completed prior to concluding the potential source of increased iron concentrations at Stations 24, 49 and 53.

As the concentration of iron at Stations 24, 49 and 53 do not exceed the PWQO, the monitoring plan will continue with no modifications to the monitoring plan recommended at this time while the investigation into the laboratory analyses is completed. Once the investigation into the laboratory analyses is completed, a review of the trigger threshold exceedances to date will be completed to understand if the results of the laboratory investigation alter the previously noted trigger threshold exceedances and associated investigations.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Stations 24, 49 and 53 for Reporting Period May through October 2022**

Should you have any questions or comments, please contact the undersigned.

Stantec Consulting Ltd.

<original signed by>

Igor Iskra Ph.D., P. Eng.
Senior Water Resources Engineer

Phone: 289-923-7237
Fax: 905 474 9889
Igor.Iskra@stantec.com

Stantec

Memo

To:	Shane Hayes	From:	Igor Iskra
	Greenstone Gold Mines		Stantec Consulting Ltd.
File:	160900981	Date:	November 30, 2022

Reference: Greenstone Mine Adaptive Management Plan, Investigation of Arsenic Exceedance of Trigger Threshold at Station 25 for Reporting Period May through October 2022

Greenstone Gold Mines (GGM) is constructing a new open pit gold mine that includes a processing plant and ancillary facilities, collectively known as the Greenstone Mine (the Mine). Construction and operation of the gold mine are governed by a series of permits issued by the Ministry of Environment, Conservation and Parks (MECP) each with various monitoring requirements. Monitoring requirements for the Mine are also detailed in the decision statement issued for the federal Environmental Impact Statement (EIS) and notice of approval for the provincial Environmental Assessment (EA).

A surface water quality adaptive management plan was implemented in October 2021 for the Mine. The adaptive management plan for the surface water quality monitoring program is a requirement of the following permits and/or monitoring plans for the Mine.

- Conditions 7.16 through 7.17 of the temporary effluent treatment plant (TETP) Environmental Compliance Approval (ECA) number 9561-CBFLCC.
- Conditions 8.17 through 8.18 of the full scale effluent treatment plant (ETP) Environmental Compliance Approval (ECA) number 0735-C9PMD6
- The Multi-Media Monitoring and Management Plan (GGM 2021)[1], developed in accordance with condition 13 of the provincial EA Notice of Approval.
- The Fish and Fish Habitat Follow-Up Monitoring Plan (GGM 2021)[2], developed in accordance with conditions 3.14, 3.15, 3.16, 3.17, 3.2, 5.4, and 5.5.1. of the federal EIS Decision Statement.

The adaptive management plan for surface water quality is consistent among the TETP ECA, Multi-Media Monitoring and Management Plan, and Fish and Fish Habitat Follow-Up Monitoring Plan. The adaptive management plan defines triggers for additional assessment of cause and associated action plans that will be carried out should exceedances to the triggers occur. There are two trigger thresholds for surface water quality indicator parameters with a corresponding action plan, should the threshold be exceeded. The action plan identifies notification, investigation, and mitigation measures and strategies that may be carried out when exceedances of the triggers occur and those exceedances are determined to be mine related. Trigger Threshold 1 and 2 were exceeded for arsenic at Station 25 and therefore the respective action plans were initiated. The objective of the action plan is to assess whether the exceedance is mine related and, if it is mine related, to undertake a quantitative risk evaluation, identify exceedance source, and mitigate effects of the mine, as required.

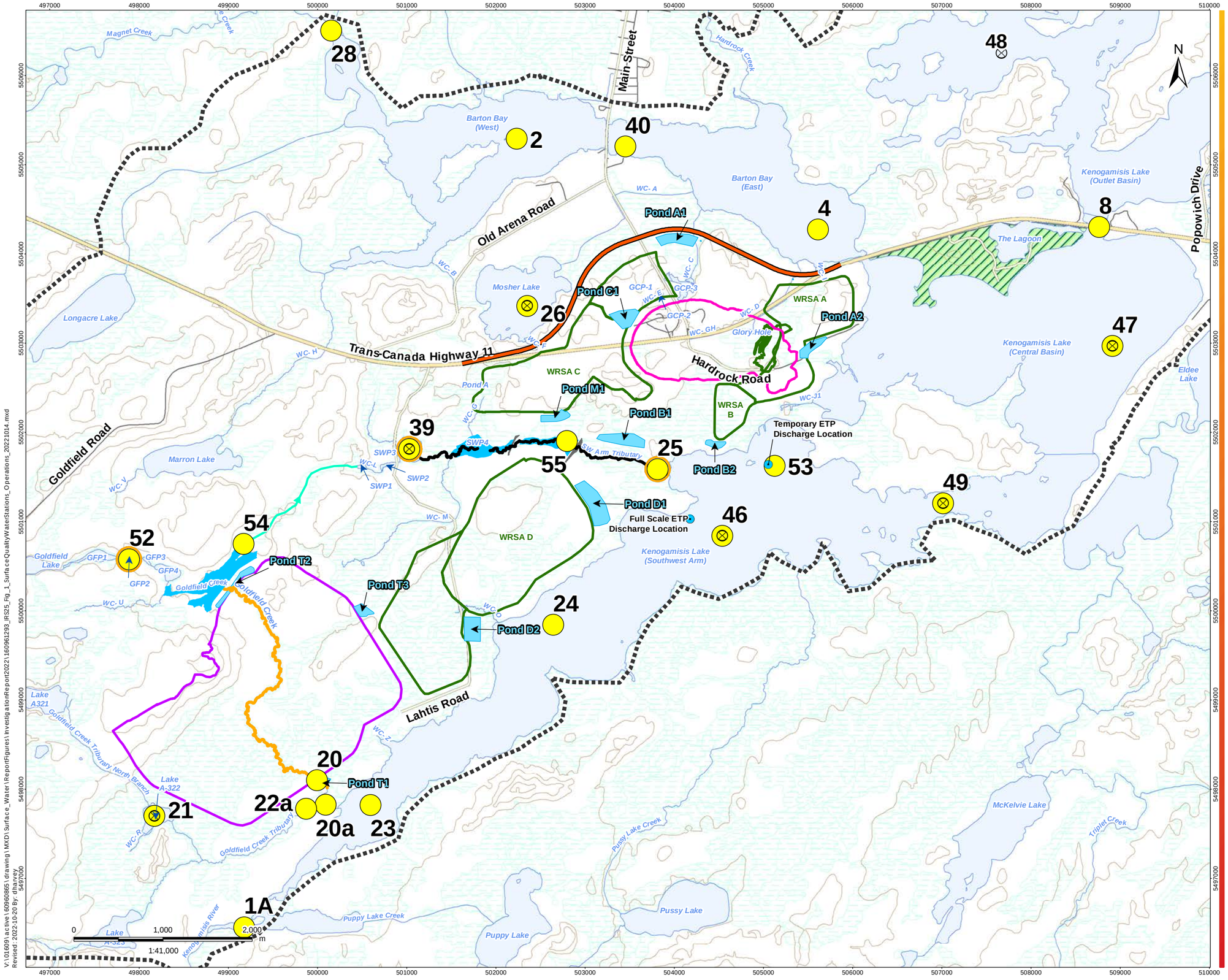
[1] Greenstone Gold Mines (GGM). 2021. Hardrock Project – Multi-Media Monitoring Plan – Order in Council 404/2019 Condition 13. Document control number: HP-MG003-EV-130-0004_3. March 25, 2021.

[2] Greenstone Gold Mines (GGM). 2021. Hardrock Project Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan. Document control number HP-MG003-EV-130-0008_0. February 16, 2021.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Arsenic Exceedance of Trigger Threshold at Station 25 for Reporting Period May through October 2022**

Please accept this letter as the investigation report for the Trigger Threshold 2 exceedance for arsenic at Station 25.

Station 25 is located in the Southwest Arm Tributary (SWAT) downstream of channel realignment activities. (**Figure 1**).



Stantec

Legend

- Local Assessment Area
- Regional Assessment Area
- Discharge Location
- Routine Water Quality Monitoring
- Temperature/ DO Profile
- Mercury and Methylmercury Monitoring

Site Plan Revised Post Final EA/EIS

- New Highway 11 Alignment
- Diversion Channel
- Collection Ponds
- Open Pit- Full Extent
- Tailings Management Facility
- Grade Control Structure
- Inundated Area ; Backwater effect
- Waste Rock Storage Area

Existing Features

- Highway
- Major Road
- Local Road
- Existing SW Arm Tributary Channel
- Existing Portion of Goldfield Creek (to be overprinted)
- Watercourse
- Provincial Park
- Wetland (Eco-Site Based)
- Waterbody

Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

October 2022
160961293

Client/Project

Greenstone Gold Mines GP Inc. (GGM)
Hardrock Project

Figure No.

1

Title

Surface Water
Quality Monitoring Locations

V:\01609\active\160960865\drawing\MXD\Surface_Water\ReportFigures\InvestigationReport2022\160961293_IR25_Fig_1_SurfaceQualityWaterStations_Operations_20221014.mxd
Revised: 2022-10-20 By: dhavey

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Arsenic Exceedance of Trigger Threshold at Station 25 for Reporting Period May through October 2022**

SURFACE WATER QUALITY TRIGGER THRESHOLD 1 EVALUATION

The trigger thresholds and associated action plans are described in conditions 7.16 through 7.17 of the TETP ECA, Section 4.2.4 of the Multi-Media Monitoring Plan, and Section 2.2.2.2 of the Fish and Fish Habitat Follow-Up Monitoring Plan.

Surface water quality Trigger Threshold 1 is defined as three consecutive monthly parameter concentration exceedances above the seasonal 95th percentile baseline concentration AND five times the detection limit. For those stations where the 95th percentile is less than the predicted surface water quality concentrations from the EIS/EA, Trigger Threshold 1 is defined as 10% above the predicted surface water quality concentration from the EIS/EA for the surface water feature at a given monitoring station, AND five times the detection limit.

The 95th percentile for each season for a given parameter is calculated based on data collected prior to September 15th 2021.

The concentration of arsenic at Station 25 exceeded the spring seasonal 95th percentile baseline concentration in June of 2022 and the summer seasonal 95th percentile baseline concentration in July, August and September of 2022. Therefore, the surface water quality Trigger Threshold 1 was exceeded for arsenic at Station 25 in August. The exceedance of the summer seasonal 95th percentile was confirmed in September.

The Trigger Threshold 1 action plan was undertaken. Trigger Threshold 1 action plan is to confirm the result (QA/QC review and resampling) and, if the result is confirmed, to complete a trend analysis of the concentration over time.

As per the action plan, a QA/QC review of the sampling methods, laboratory report, and chain of custody was completed for the surface water quality samples collected at Station 25. No anomalies in the sampling methods and sample handling were noted. Resampling of Station 25 was completed in September and October 2022, which also accounted for the scheduled September and October monthly surface water sampling event. A laboratory discrepancy for arsenic was observed in the September sample when dissolved arsenic concentration (64.6 µg/L) was reported above the total concentration (52.3 µg/L), a 20% error.

The results of the September sampling event showed that arsenic at Station 25 continued to exceed the associated summer seasonal 95th percentile. As such, the Trigger Threshold 1 exceedance for arsenic at Station 25 was confirmed. Where a Trigger Threshold 1 exceedance is confirmed, the previous concentration data is reviewed for trends and an assessment of Trigger Threshold 2 is completed.

SURFACE WATER QUALITY TRIGGER THRESHOLD 2 EVALUATION

Surface water quality Trigger Threshold 2 is defined as an exceedance of Trigger Threshold 1 and a statistically significant upward trend for a given indicator parameter, or for stations that have a statistically significant upward trend compared to baseline data, an increase in the magnitude of the trend compared to baseline.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Arsenic Exceedance of Trigger Threshold at Station 25 for Reporting Period May through October 2022**

The trend analysis for arsenic at Station 25 was completed using the Mann-Kendall test. The Mann-Kendall test is a non-parametric test used to determine whether a time series has a monotonic upward or downward trend, the trend may or may not be linear. The test does not require that the data be normally distributed or linear. However, the test does require that there is no autocorrelation. The trend analysis was initially completed on baseline data to confirm if an upward trend in concentration of the indicator parameter is observed under baseline conditions. Surface water quality data collected prior to September 15, 2021 was considered baseline data. An upward trend was observed in the baseline concentration of arsenic at Station 25.

The trend analysis was then completed on the entire available data set for arsenic at Station 25, up to and including October 2022 data. A statistically significant increasing trend in the concentration of arsenic at Station 25 and an increase in the magnitude of the trend compared to baseline was identified. Therefore, Trigger Threshold 2 is exceeded for arsenic at Station 25 and the Trigger Threshold 2 action plan was undertaken for this parameter and station.

Figure 2 shows the concentration of arsenic over time at Station 25 with a linear trendline. Monthly sampling of Station 25 commenced in October 2013.

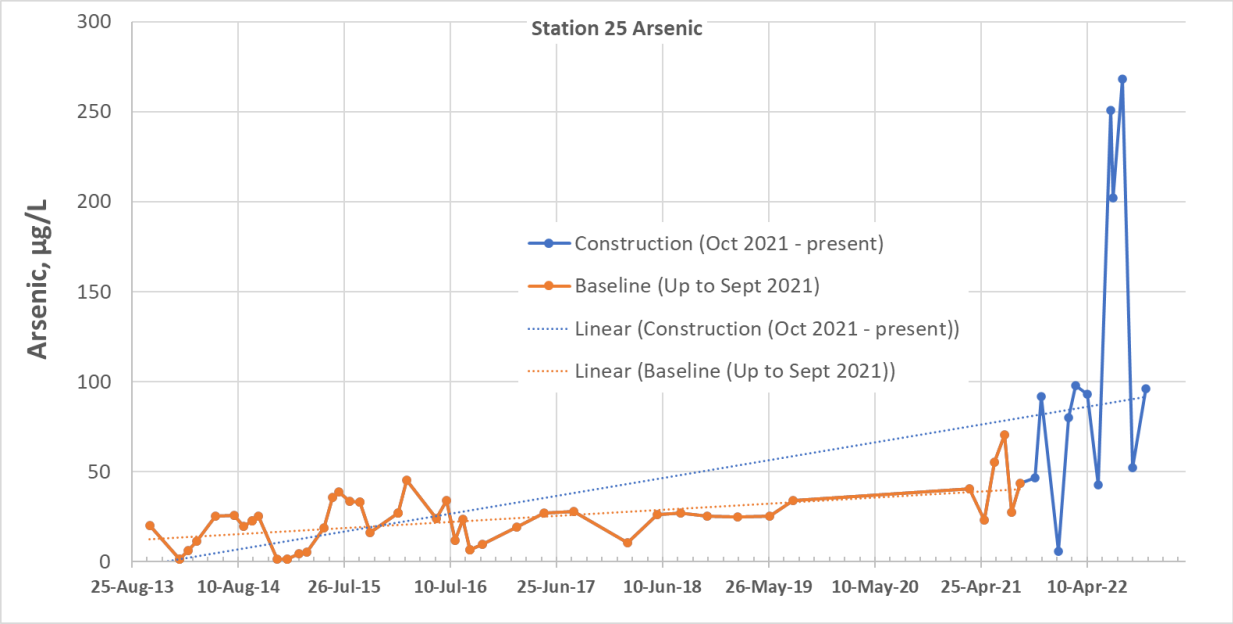


Figure 2: Arsenic Concentration at Station 25

The objective of the Trigger Threshold 2 action plan is to determine if the exceedance is related to mine activities or a result of continued natural trends or extended seasonal conditions such as a very dry or wet spring or summer period.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Arsenic Exceedance of Trigger Threshold at Station 25 for Reporting Period May through October 2022**

SURFACE WATER QUALITY TRIGGER THRESHOLD 2 ACTION PLAN RESULTS

The Trigger Threshold 2 Action Plan has four steps:

- Step 1 is to notify the Impact Assessment Agency of Canada (IAAC), MECP, and the Environmental Advisory Committees (EACs) of the Trigger Threshold 2 exceedance.
- Step 2 requires an investigation to assess whether the exceedance is mine related.
- Step 3 requires a quantitative risk evaluation.
- Step 4 is to identify exceedance source.

The following summarizes the results of the investigation, quantitative risk evaluation, and identification of exceedance sources for the Trigger Threshold 2 exceedance of arsenic at Station 25.

Arsenic concentrations at Station 25 for the last four months, when the seasonal baseline 95th percentile of arsenic concentration was exceeded, are presented in **Table 1**.

Table 1: Arsenic Concentrations at Station 25

Parameter	Spring	Summer			Fall
	27-Jun-22	4-Jul-22	04-Aug-22	07-Sep-22	19-Oct-22
Total Arsenic, µg/L	251	202	268	52.3	96
Baseline 95th Percentile Seasonal, µg/L	46.4	46.4	51.4	51.4	25.16
99th Percentile Baseline Annual, µg/L	62.9	62.9	62.9	62.9	62.9
Dissolved Arsenic, µg/L	237	197	260	64.6*	107*
Ratio of Dissolved Form, %	94	98	97	n/a	n/a

* Lab error, dissolved arsenic concentration reported higher than total

Table 2 presents general water quality at Station 25. No obvious changes in TSS, turbidity, conductivity, pH, sulphate, DOC, TDS were observed at Station 25 in 2022. In particular, TSS and turbidity at Station 25 are low (less than 8 NTU), indicating that erosion control measures implemented along SWAT for channel diversion are effective. The highest concentrations of arsenic were observed in June, July and August.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Arsenic Exceedance of Trigger Threshold at Station 25 for Reporting Period May through October 2022**

Table 2: General Water Quality at Station 25

Parameter	11-Apr-22	17-May-22	27-Jun-22	4-Jul-22	4-Aug-22	07-Sep-22	19-Oct-22
Total Arsenic, µg/L	93.1	42.6	251	202	268	52.3	96
95th Percentile, µg/L	46.4	46.4	46.4	51.4	51.4	51.4	25.16
Sulphate, mg/L	0.8	2.5	0.9	0.6	<0.3	1.5	1.2
True Color, TCU	106	106	186	161	98.5	49.3	87.5
pH, field	6.72	6.85	6.87	6.79	7.44	7.68	7.35
Conductivity, uS/cm	392	208	235	273	350	102	384
DOC, mg/L	22.3	19.0	4.8	22.5	24.1	14	19.2
Hardness, mg/L	186	79.9	115	121	155	91.2	164
Turbidity, NTU	2.7	0.7	0.8	0.7	0.7	0.6	1.1
TDS, mg/L	277	195	225	260	255	130	300
TSS, mg/L	4	1	2	<1	<0.67	2.7	2.70

The SWAT realignment work is ongoing, the GFC diversion channel was not operational in October and remained offline. However, the grade control structures crossing the lower reach of SWAT were installed during the summer of 2022. Concentrations of arsenic were elevated above the baseline seasonal 95th percentiles at Stations 25 for the last four months, which may suggest Mine influence on the concentration of arsenic. Review was completed of ESC measures for construction and confirmed that GGM is following the ESC plan for construction. Visual observation of the construction areas show ESC measures in place and operable. The ESC review aligns with the fact that more than 94% of arsenic at Station 25 present in dissolved form. A potential source of dissolved arsenic during the SWAT realignment in spring-summer of 2022 is dewatering from a work area containing historically contaminated sediments. Filter bags and sedimentation basins are not effective in removing dissolved arsenic. As expected, after completing in-water construction arsenic concentrations substantially reduced in September and October. It is anticipated that arsenic concentration at Station 25 will further decrease after the SWAT diversion channel becomes operational.

Groundwater quality along SWAT was investigated and no elevated arsenic concentrations were found in monitoring wells. The arsenic concentrations in 2022 (three sampling events) ranged from 0.2 to 16 µg/L with an average of 7 µg/L for the July event which is substantially lower in magnitude than what was observed in surface water.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Arsenic Exceedance of Trigger Threshold at Station 25 for Reporting Period May through October 2022**

Background water quality was reviewed to understand the potential influence of background water quality on Station 25 water quality. **Table 3** shows the arsenic concentrations at background Station 52 (GFP2 on Goldfield Lake), Station 39 (SWP3) and Station 25 (mouth of SWAT). Arsenic concentrations notably increase between Stations 52, 39 and 25.

Table 3: Arsenic Concentrations, µg/L

Station	Winter			Spring			Summer			Fall
	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
Station 52	3.0	3.2	2.9	2.7	2.1	2.3	3.3	4.2	4.0	3.8
Station 39	4.1	3.6	3.8	3.2	4.7	8.7	8.5	11.6	8.8	7.5
Station 25	5.5	79.9	97.9	93.1	42.6	251	202	268	52.3	96

Background Station 52 (GFP2 on Goldfield Lake) and upstream Station 39 (SWP3) were investigated for trends and it was found that both stations show no upward trend under baseline conditions for arsenic. The trend analysis was then completed on the entire available data set for arsenic at Stations 39 and 52, and no statistically significant increasing trend was found.

Figures 3 and **4** show the concentration of arsenic over time at upstream SWAT Station 39 (SWP3) and background Station 52 (GFP2 on Goldfield Lake) with a linear trendline. Monthly sampling at Station 39 commenced in January 2016 and in Station 52 commenced in May 2018.

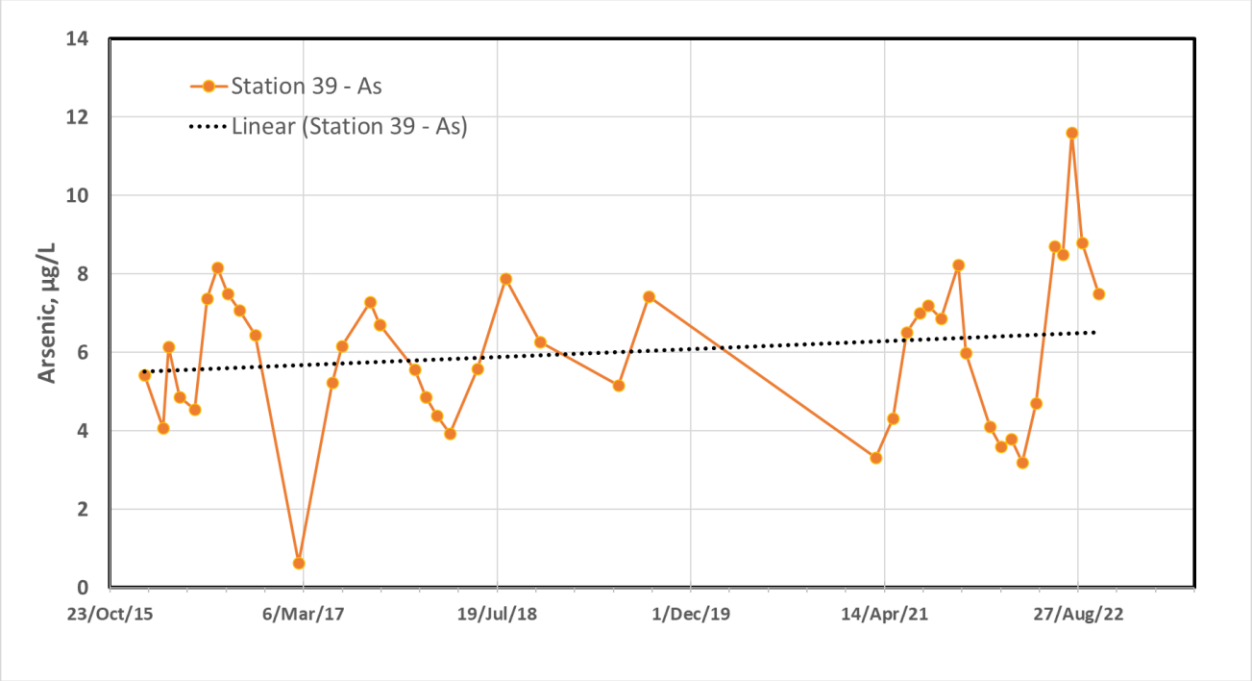


Figure 3: Arsenic Concentration at Station 39

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Arsenic Exceedance of Trigger Threshold at Station 25 for Reporting Period May through October 2022**

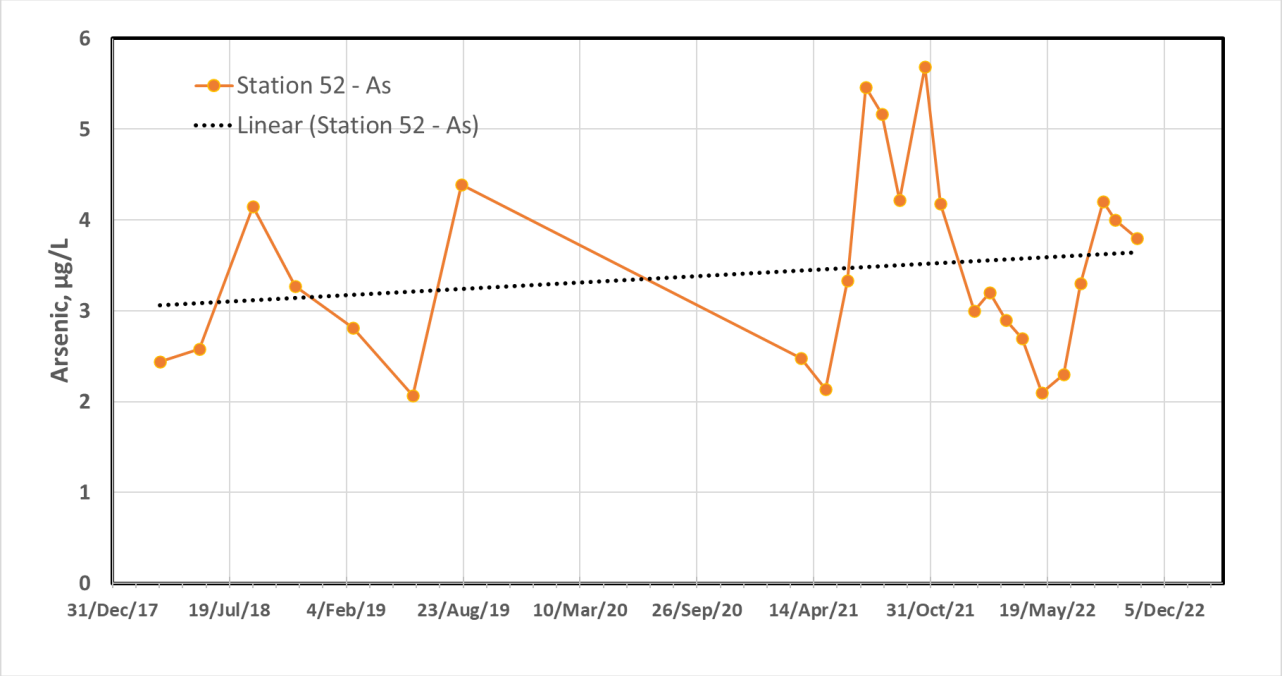


Figure 4: Arsenic Concentration at Station 52

As part of Trigger Threshold 1 action plan the laboratory certificates of analyses, which includes the laboratory's QA/QC results, were reviewed. The August 2022 water samples from Station 25 were sent to two different laboratories to analyze duplicate samples. Total arsenic analyzed by Testmark Laboratories was 311 µg/L and sample analyzed by ALS was 268 µg/L, indicating a 15% difference which generally acceptable for these concentrations. Dissolved arsenic in August 2022 analyzed by Testmark Laboratories was 304 ug/L and analyzed by ALS was 260 µg/L. In both total and dissolved cases the result from both labs exceed the seasonal 95th percentile concentration.

The October 2022 samples were sent to 3 different laboratories to analyze triplicate samples. Total arsenic between the 3 labs vary by a maximum of 4%, which is within the acceptable range of error for these concentrations.

Based on the investigation the following observations were made for arsenic at Station 25:

- The Station 25 June-August data presented in **Table 1** exceed the 99th annual percentile of baseline arsenic (62.6 µg/L) by more than 3 times. Arsenic concentration decreased substantially in September 2022 but still remained slightly above the summer trigger concentration. Arsenic concentration in October was higher than in September 2022.
- A ratio of dissolved form of arsenic to suspended form varies from 94 to 98% (**Table 1**). It indicates that dissolved forms of arsenic are the main contributor to the trigger exceedance.
- The Mann-Kendall trend analyses demonstrated that concentrations of arsenic in the upstream Station 39 and baseline Station 52 show no upward trend in arsenic concentrations. Station 25 shows a statistically significant upward trend for baseline data and total dataset.

- Concentrations of arsenic at Station 39 and 52 are almost two orders of magnitude lower than concentrations at Station 25.
- General water chemistry (**Table 2**) shows TSS and turbidity values are low along SWAT indicating that erosion and sediment disturbance is not a factor in trigger exceedances.
- Spatial extent of arsenic exceedance was assessed (**Table 3**). The arsenic concentrations in background station 52 and upstream Station 39 are substantially lower than in Station 25 which may be indicative of impact of mine activities.
- A potential source of elevated arsenic at Station 25

Step 3 requires a quantitative risk evaluation which is a conceptual evaluation and comparison of concentrations or loads and conclusions drawn from such analysis. The June -September arsenic concentrations are above the predicted concentrations for construction and operation in the EIS/EA (Section 10). However, the EIS/EA does not specifically differentiate construction and operation.

Arsenic concentrations at Station 25 are below the lowest estimates of toxicity for freshwater life. The CCME (2001) indicates that the lowest estimates of toxicity for fish ranges from a 7-day lowest observed effects concentration (LOEC) of 500 µg/L for perch to 0.97 µg/L for catfish. The lowest estimates of toxicity for invertebrates ranges from a 14-d EC20 (sublethal concentration causing 20% reduction in growth) of 320 µg/L for the copepod to a 7-d LOEC (immobilization) of 1,000 µg/L for *Ceriodaphnia dubia*. The lowest estimates of arsenic toxicity for aquatic plants ranges from a 14 day EC50 (growth) of 50 µg/L for *Scenedesmus obliquus* to a 20 day VSUE (very severe unfavourable effect) of 960 µg/L for *S. quadricus*. The water quality guideline for arsenic for the protection of freshwater life is 5 µg/L. It was derived by multiplying the 14-d EC50 (growth) of 50 µg/L for the most sensitive organism to arsenic, the alga *Scenedesmus obliquus*, by a safety factor of 0.1.

Based on conducted toxicity assessment it was concluded that the observed elevated arsenic concentrations at Station 25 present a low risk to fish, invertebrates and aquatic plants in SWAT.

Step 4 of the Trigger Threshold 2 action plan is to identify exceedance source. As the result of this action plan it was suggested that the source of the increased arsenic concentrations may be related to temporary mine construction activities around SWAT in spring-summer of 2022. Elevated total arsenic is likely related to dewatering from a work area containing historically contaminated sediments. Data shows that ESC effective for particulate arsenic but that would not mitigate dissolved arsenic. The majority of arsenic is observed in dissolved form. m. It was confirmed that groundwater is not a source of arsenic as its concentration in the SWAT monitoring wells is substantively lower than what was observed in surface water.

Sediment data from the 2016-2017 Pre-construction Aquatic Monitoring Report (2018) was reviewed and it was found that sediments in SWAT (sampling site DIVR-02) have elevated concentrations of arsenic, which are above the Lowest Effect Level (LEL = 6 mg/kg) and the Sever Effect Level (SEL = 33 mg/kg). However, TSS and turbidity observed in SWAT in 2022 remain very low (**Table 2**), which suggests that sediments were not disturbed.

Reference: Greenstone Mine Adaptive Management Plan, Investigation of Arsenic Exceedance of Trigger Threshold at Station 25 for Reporting Period May through October 2022

The SWAT realignment work was completed using cofferdams in the in-water zone. Filter bags and sedimentation basins were used to remove suspended particles. The ESC measures are effective to remove suspended particles but have no impact of dissolved arsenic. Therefore, dissolved arsenic can be originated from dewatering. However, in-water works are temporary, and it is expected that concentrations of dissolved arsenic will decrease after in-water construction completed. Significant decline in arsenic concentration was already observed in September.

SUMMARY AND CLOSING

In summary, during the September 2022 reporting period Trigger Threshold 2 was exceeded for arsenic at Station 25. The Trigger Threshold 2 action plan was completed, and it was suggested that the source of the increased arsenic concentrations may be related to temporary mine construction activities around SWAT. Elevated total arsenic is likely related to SWAT in-water works that may have resulted in increased dissolved arsenic as particulate arsenic and sediments were mitigated with the ESC measures (e.g. filter bags and sedimentation basins) that were implemented.

No modifications to the monitoring plan recommended at this time. It is anticipated that arsenic concentrations will decrease after in-water construction on the SWAT is completed. A significant decline in arsenic concentration was already observed in September and October in comparison with summer months when the in-water construction was occurring.

Should you have any questions or comments, please contact the undersigned.

Stantec Consulting Ltd.

<original signed by>

Igor Iskra Ph.D., P. Eng.
Senior Water Resources Engineer

Phone: 289-923-7237
Fax: 905 474 9889
Igor.Iskra@stantec.com

Reference:

Canadian Council of Ministers of the Environment (CCME). 2001. Canadian water quality guidelines for the protection of aquatic life: Arsenic. Updated. In: Canadian environmental quality guidelines, 1999, Canadian Council of Ministers of the Environment, Winnipeg.

Stantec

Memo

To:	Eric Lamontagne Greenstone Gold Mines	From:	Igor Iskra Stantec Consulting Ltd.
File:	160901057	Date:	September 29, 2023

Reference: Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 25 for Reporting Period April 2023 through July 2023

Greenstone Gold Mines (GGM) is constructing a new open pit gold mine that includes a processing plant and ancillary facilities, collectively known as the Greenstone Mine (the Mine). Construction and operation of the gold mine are governed by a series of permits issued by the Ministry of Environment, Conservation and Parks (MECP) each with various monitoring requirements. Monitoring requirements for the Mine are also detailed in the conditions of approval for the federal Environmental Impact Statement (EIS) and provincial Environmental Assessment (EA).

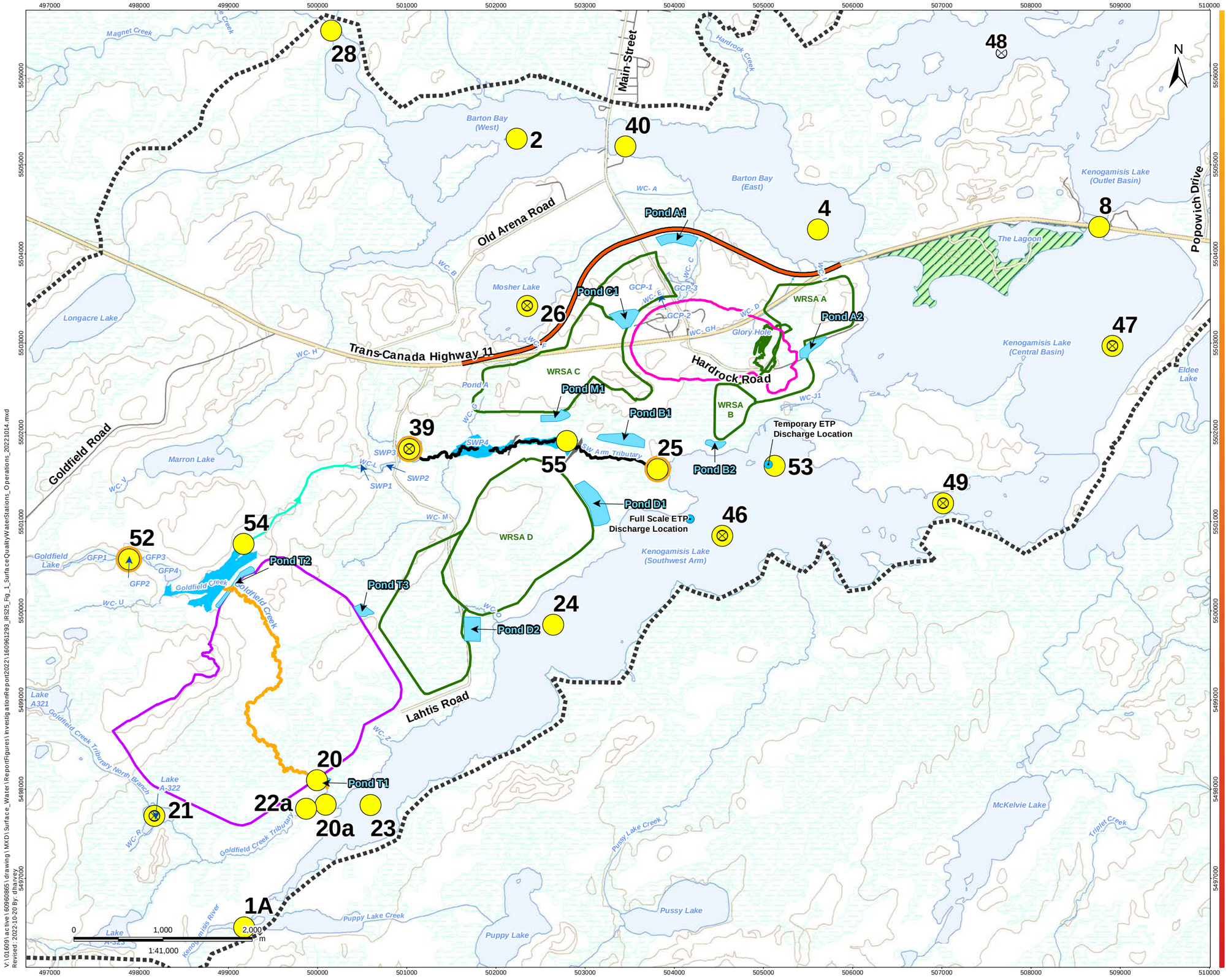
The Multi-Media Monitoring and Management Plan (MMMP) (GGM 2021)[1], developed in accordance with condition 13 of the provincial EA Notice of Approval, identifies the adoptive management approach and the surface water quality adaptive management plan.

A surface water quality adaptive management plan for the surface water quality monitoring program is required by Conditions 8.16 through 8.17 of the full-scale effluent treatment plant (ETP) Environmental Compliance Approval (ECA) number 0735-C9PMD6.

The adaptive management plan for surface water quality is consistent among the full-scale ETP ECA, Multi-Media Monitoring and Management Plan, and Fish and Fish Habitat Follow-Up Monitoring Plan. The adaptive management plan defines triggers for additional assessment of causes and associated action plans that will be carried out should exceedances of the triggers occur. There are two trigger thresholds for surface water quality indicator parameters with a corresponding action plan should the threshold be exceeded. The action plan identifies notification, investigation, and mitigation measures and strategies that may be carried out when exceedances of the triggers occur, and those exceedances are deemed mine-related. Trigger threshold 1 and 2 were exceeded for iron at Station 25 and therefore the respective action plan was initiated. The objective of the action plan is to assess whether the exceedance is mine-related and, if it is mine-related, to undertake a quantitative risk evaluation, identify the exceedance source, and mitigate the effects of the mine, as required.

Please accept this letter as the investigation report for the trigger threshold 2 exceedance for iron at Station 25. Station 25 is located where the Southwest Arm Tributary flows into Kenogamisis Lake Southwest Arm.

[1] Greenstone Gold Mines (GGM). 2021. Hardrock Project – Multi-Media Monitoring Plan – Order in Council 404/2019 Condition 13. Document control number: HP-MG003-EV-130-0004_3. March 25, 2021.



Stantec

Legend

- Local Assessment Area
- Regional Assessment Area
- Discharge Location
- Routine Water Quality Monitoring
- Temperature/ DO Profile
- Mercury and Methylmercury Monitoring

Site Plan Revised Post Final EA/EIS

- New Highway 11 Alignment
- Diversion Channel
- Collection Ponds
- Open Pit- Full Extent
- Tailings Management Facility
- Grade Control Structure
- Inundated Area ; Backwater effect
- Waste Rock Storage Area

Existing Features

- Highway
- Major Road
- Local Road
- Existing SW Arm Tributary Channel
- Existing Portion of Goldfield Creek (to be overprinted)
- Watercourse
- Provincial Park
- Wetland (Eco-Site Based)
- Waterbody

Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

October 2022
160961293

Client/Project

Greenstone Gold Mines GP Inc. (GGM)
Hardrock Project

Figure No.

1

Title

Surface Water
Quality Monitoring Locations

V:\01609\active\160960865\drawing\MXD\Surface_Water\ReportFigures\InvestigationReport2022\160961293_IR25_Fig_1_SurfaceQualityWaterStations_Operations_20221014.mxd
Revised: 2022-10-20 By: dhavey

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 25 for Reporting Period April 2023 through July 2023**

SURFACE WATER QUALITY TRIGGER THRESHOLD 1 EVALUATION

The trigger thresholds and associated action plans are described in conditions 8.16 through 8.17 of the full scale ETP ECA, Section 4.2.4 of the Multi-Media Monitoring Plan, and Section 2.2.2.2 of the Fish and Fish Habitat Follow-Up Monitoring Plan.

Surface water quality trigger threshold 1 is defined as three consecutive monthly parameter concentration exceedances above the seasonal 95th percentile baseline concentration AND five times the detection limit. For those stations where the 95th percentile is less than the predicted surface water quality concentrations from the EIS/EA, trigger threshold 1 is defined as 10% above the predicted surface water quality concentration from the EIS/EA for the surface water feature at a given monitoring station, AND five times the detection limit.

The 95th percentile for a given parameter is calculated based on data collected prior to September 15th, 2021. The concentration of iron at Station 25 exceeded the seasonal 95th percentile baseline concentration and was five times the detection limit in April 2023 through July 2023. In June 2023, iron at Station 25 exceeded the surface water quality trigger threshold 1.

Trigger threshold 1 action plan was undertaken. The trigger threshold 1 action plan is to confirm the result (QA/QC review and resampling) and, if the result is confirmed, to complete a trend analysis of the concentration over time.

As per the response plan, a QA/QC review of the sampling methods, laboratory report, and chain of custody was completed for the surface water quality samples collected at Station 25. No anomalies in the sampling methods, sample handling, or laboratory reporting were noted. Therefore, resampling of Station 25 was completed in July 2023, which also accounted for the scheduled July monthly surface water sampling event. Iron at Station 25 continued to exceed the associated seasonal 95th percentile in July 2023, as such, the trigger threshold 1 exceedance for iron at Station 25 was confirmed. Where a trigger threshold 1 exceedance is confirmed, the previous concentration data is reviewed for trends, and an assessment of trigger threshold 2 is completed.

SURFACE WATER QUALITY TRIGGER THRESHOLD 2 EVALUATION

Surface water quality trigger threshold 2 is defined as an exceedance of trigger threshold 1 and a statistically significant upward trend for a given indicator parameter, or for stations that have a statistically significant upward trend compared to baseline data, an increase in the magnitude of the trend compared to baseline.

Figure 2 shows the concentration of iron over time at Station 25. Monthly sampling of Station 25 commenced in October 2013.

The trend analysis for iron at Station 25 was completed using the Mann-Kendall test. The trend analysis was initially completed on baseline data to confirm if an upward trend in concentration of the indicator parameter was observed under baseline conditions. Surface water quality data collected prior to September 15, 2021 was considered baseline data. There was no upward trend observed in the baseline concentration of iron at Station 25.

The trend analysis was then completed on the entire available data set for iron at Station 25. A statistically significant increasing trend in the concentration of iron at Station 25 was identified through the Mann-Kendall

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 25 for Reporting Period April 2023 through July 2023**

analysis. Therefore, trigger threshold 2 is exceeded for iron at Station 25, and the trigger threshold 2 action plan was undertaken for this parameter and station.

The objective of the trigger threshold 2 action plan is to determine if the exceedance is related to mine activities or a result of a natural trend, sample variation, a single anomalous event, such as a meteorological event, or seasonal variation.

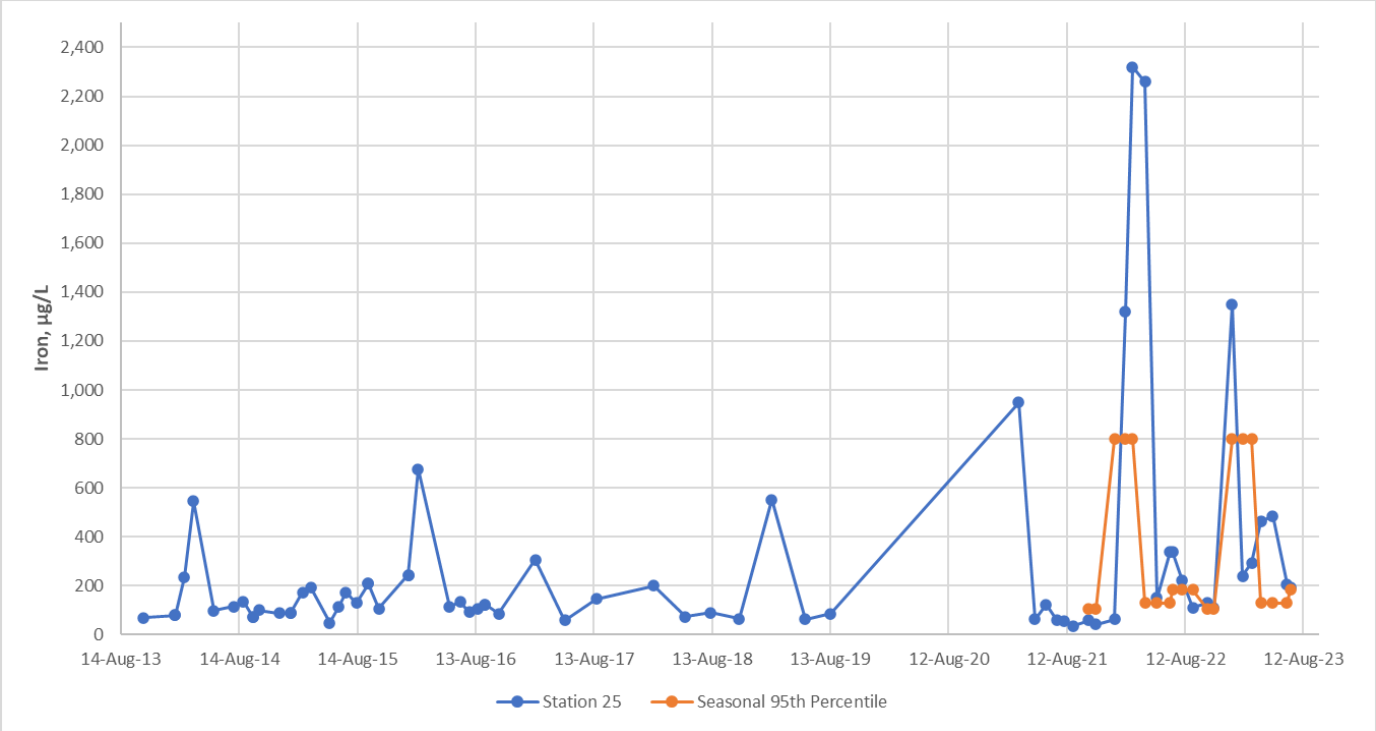


Figure 2: Iron Concentration at Station 25

SURFACE WATER QUALITY TRIGGER THRESHOLD 2 ACTION PLAN RESULTS

The trigger threshold 2 action plan has 4 steps:

- Step 1 is to notify the Impact Assessment Agency of Canada (IAAC), MECP, and the Environmental Advisory Committees (EACs) of the trigger threshold 2 exceedance.
- Step 2 requires an investigation to assess whether the exceedance is mine-related.
- Step 3 requires a quantitative risk evaluation.
- Step 4 is to identify exceedance source.

The following summarizes the results of the investigation as to whether the trigger exceedance is mine-related, quantitative risk evaluation and identification of exceedance sources for the trigger threshold 2 exceedance of iron at Station 25.

Iron concentrations at Station 25 for the months January 2023 to August 2023 are presented in Table 1.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 25 for Reporting Period April 2023 through July 2023**

Table 1: Iron Concentrations at Station 25

Parameter	Winter			Spring			Summer	
	4-Jan-23	6-Feb-23	7-Mar-23	4-Apr-23	9-May-23	23-Jun-23	4-Jul-23	8-Aug-23
Total Iron Concentration, µg/L	1,350	240	293	462	485	206	192	100
95th Percentile Seasonal, µg/L	799	799	799	129	129	129	183	183
PWQO, µg/L	300	300	300	300	300	300	300	300

General water chemistry (turbidity, TSS, conductivity, hardness, etc.) during the regular monthly sampling events was reviewed at Station 25 in 2023. Table 2 presents water quality at Station 25.

Table 2: General Water Quality at Station 25

Parameter	4-Jan-23	6-Feb-23	7-Mar-23	4-Apr-23	9-May-23	23-Jun-23	4-Jul-23	8-Aug-23
Total Iron, µg/L	1350	240	293	462	485	206	192	100
Iron 95th Percentile, µg/L	799	799	799	129	129	129	183	183
Iron PWQO, µg/L	300	300	300	300	300	300	300	300
Dissolved Iron, µg/L	1300	140	276	425	92	129	130	51
Sulphate, mg/L	1	2.7	2.9	4.5	6.2	2.6	2.8	2.1
True Color, PCU	93.1	31.1	34	38	59	65	71	52
pH, field	6.74	6.94	6.9	6.63	7.26	7.09	7.15	7.15
Conductivity, uS/cm	412	253	264	287	234	279	305	303
DOC, mg/L	22.2	12.4	12	13	13	16	18	18
Hardness, mg/L	184	123	140	150	100	150	170	170
Turbidity, NTU	1.4	1.7	0.5	0.5	9.9	0.5	0.8	0.6
TDS, mg/L	255	190	185	165	175	195	185	220
TSS, mg/L	3	2.3	<1	5	18	3	2	2

The following observations were made based on the analysis conducted:

- Figure 2 shows the natural seasonal cyclical trends of iron at Station 25 with high concentrations in winter and spring. It was reasonable to expect that the concentration of iron in the spring of 2023 would also be high. The concentration of iron at station 25 was 100 µg/L during the August 2023 reporting period, which is below the 95th percentile and it is expected to continue to drop in the summer.
- Spatial extent of iron exceedance was assessed, and it was concluded that the exceedance event at Station 25 is isolated to this monitoring station. No trigger thresholds were exceeded at neighboring stations.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 25 for Reporting Period April 2023 through July 2023**

- Flow from the GFC was diverted in November 2023 with full flow through the diversion achieved in January 2023. Spring 2023 represents the first freshet with inundation of portions of the SWAT from increased flow from the GFC Diversion and presence of the grade control structures on the SWAT. The GFC Diversion channel failed during the spring freshet, resulting in the release of sediment downstream through the SWAT, which may have contributed to the increase in iron concentration. Trigger threshold 1 exceedances were observed for iron, total phosphorous, mercury, and uranium at Station 25 in June 2023 which corresponded with the timing of the GFC Diversion failure.
- The concentration of iron in June, July, and August was below the PWQO A spike in the iron concentration above the PWQO was of short duration and observed only in April and May.

Based on the above evaluation, the potential source of exceedance of iron at Station 25 is likely to be related to the GFC diversion and grade control structures, resulting in inundation along the SWAT. The failure of the GFC diversion and the release of sediment through the SWAT are also expected to have contributed to increased iron concentrations at Station 25. It is expected that iron concentrations will reduce as the flow and turbidity through the GFC diversion stabilizes. It was already observed that the concentration of iron in August was below the 95th percentile and substantially lower in comparison with previous months which is consistent with stabilization of turbidity at less than 8 NTU in the SWAT and GFC diversion as of the end of July 2023.

SUMMARY AND CLOSING

In summary, during the July 2023 reporting period, trigger threshold 2 was exceeded for iron at Station 25. The trigger threshold 2 action plan was completed and concluded that iron exceedances at Station 25 are likely related to the diversion of flow from the GFC, the presence of grade control structures and the release of sediments. The inundation of land along the SWAT is also a possible source of elevated iron.

It is expected that iron concentrations will decrease as flow and turbidity through the GFC diversion stabilize. It was already observed that the concentration of iron in August was below the 95th percentile and substantially lower in comparison with previous months. No modifications to the monitoring plan are recommended at this time.

Should you have any questions or comments, please contact the undersigned.

Stantec Consulting Ltd.

<original signed by>

Igor Iskra Ph.D., P.Eng.
Senior Water Resources Engineer
Phone: 905 415 6371
Fax: 905 474 9889
Igor.Iskra@stantec.com

Stantec

Memo

To:	Eric Lamontagne Greenstone Gold Mines	From:	Igor Iskra Stantec Consulting Ltd.
File:	160901057	Date:	August 29, 2023

Reference: Greenstone Mine Adaptive Management Plan, Investigation of Total Mercury Exceedance of Trigger Threshold at Station 25 for Reporting Period March 2023 through June 2023

Greenstone Gold Mines (GGM) is constructing a new open pit gold mine that includes a processing plant and ancillary facilities, collectively known as the Greenstone Mine (the Mine). Construction and operation of the gold mine are governed by a series of permits issued by the Ministry of Environment, Conservation and Parks (MECP) each with various monitoring requirements. Monitoring requirements for the Mine are also detailed in conditions of approval for the federal Environmental Impact Statement (EIS) and provincial Environmental Assessment (EA).

The Multi-Media Monitoring and Management Plan (MMMP) (GGM 2021)[1], developed in accordance with condition 13 of the provincial EA Notice of Approval, identifies the adoptive management approach and the surface water quality adaptive management plan.

A surface water quality adaptive management plan for the surface water quality monitoring program is required by Conditions 8.16 through 8.17 of the full scale effluent treatment plant (ETP) Environmental Compliance Approval (ECA) number 0735-C9PMD6.

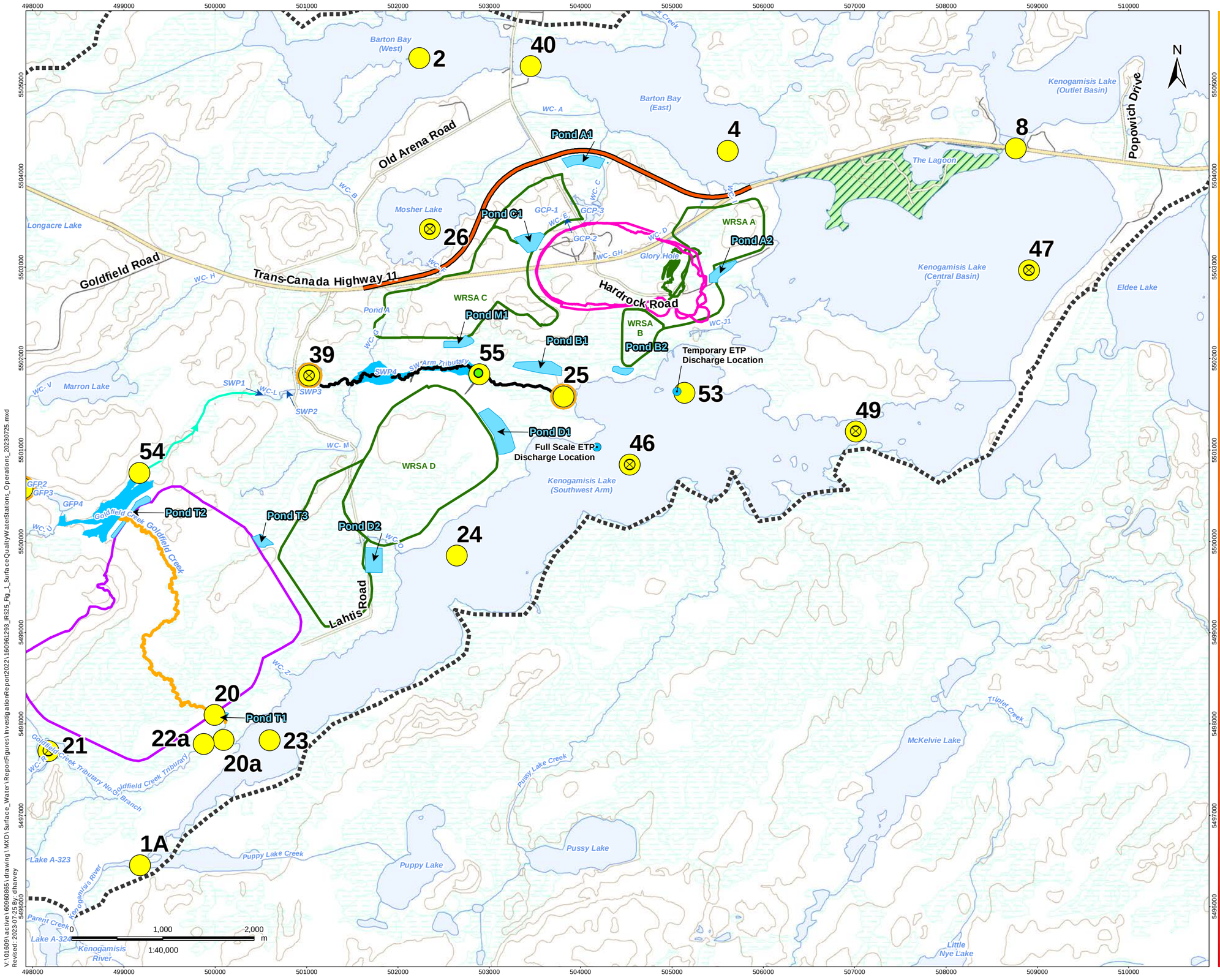
The adaptive management approach identified in the MMMP is consistent with the monitoring requirements identified in the Fish and Fish Habitat Follow-Up Monitoring Plan (GGM 2021)[2], developed in accordance with conditions 3.14, 3.15, 3.16, 3.17, 3.2, 5.4, and 5.5.1. of the federal EIS Decision Statement.

The adaptive management plan for surface water quality is consistent among the full scale ETP ECA, Multi-Media Monitoring and Management Plan, and Fish and Fish Habitat Follow-Up Monitoring Plan. The adaptive management plan defines triggers for additional assessment of cause and associated action plans that will be carried out should exceedances to the triggers occur. There are two trigger thresholds for surface water quality indicator parameters with a corresponding action plan should the threshold be exceeded. The action plan identifies notification, investigation, and mitigation measures that may be carried out when exceedances of the triggers occur, and those exceedances are deemed mine related. Trigger threshold 1 and 2 were exceeded for total mercury at Station 25 and therefore the respective action plan was initiated. The objective of the action plan is to assess whether the exceedance is mine related and, if it is mine related, to undertake a quantitative risk evaluation, identify exceedance source, and mitigate effects of the mine, as required.

Please accept this letter as the investigation report for the trigger threshold 2 exceedance for mercury at Station 25. Station 25 is located where the Southwest Arm Tributary flows into Kenogamisis Lake in the Southwest Arm (Figure 1).

[1] Greenstone Gold Mines (GGM). 2021. Hardrock Project – Multi-Media Monitoring Plan – Order in Council 404/2019 Condition 13. Document control number: HP-MG003-EV-130-0004_3. March 25, 2021.

[2] Greenstone Gold Mines (GGM). 2021. Hardrock Project Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan. Document control number HP-MG003-EV-130-0008_0. February 16, 2021.



Stantec

Legend

- Local Assessment Area
- Regional Assessment Area
- Discharge Location
- Routine Water Quality Monitoring
- Temperature/ DO Profile
- Mercury and Methylmercury Monitoring

Site Plan Revised Post Final EA/EIS

- New Highway 11 Alignment
- Diversion Channel
- Collection Ponds
- Open Pit- Full Extent
- Tailings Management Facility
- Grade Control Structure
- Inundated Area ; Backwater effect
- Waste Rock Storage Area

Existing Features

- Highway
- Major Road
- Local Road
- Existing SW Arm Tributary Channel
- Existing Portion of Goldfield Creek (to be overprinted)
- Watercourse
- Provincial Park
- Wetland (Eco-Site Based)
- Waterbody

Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

July 2023
160961293

Client/Project

Greenstone Gold Mines GP Inc. (GGM)
Hardrock Project

Figure No.
1

Title

Surface Water Quality Monitoring Locations

V:\01609\active\60960865\drawing\MXD\Surface_Water\ReportFigures\InvestigationReport2022\160961293_IRS25_Fig_1_SurfaceQualityWaterStations_Operations_20230725.mxd
Revised: 2023-07-25 By: dharvey

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Total Mercury Exceedance of Trigger Threshold at Station 25 for Reporting Period March 2023 through June 2023**

SURFACE WATER QUALITY TRIGGER THRESHOLD 1 EVALUATION

The trigger thresholds and associated action plans are described in conditions 8.16 through 8.17 of the full scale ETP ECA, Section 4.2.4 of the Multi-Media Monitoring Plan, and Section 2.2.2.2 of the Fish and Fish Habitat Follow-Up Monitoring Plan.

Surface water quality trigger threshold 1 is defined as three consecutive monthly parameter concentration exceedances above the seasonal or annual (for some parameters) 95th percentile baseline concentration AND five times the detection limit. For those stations where the 95th percentile is less than the predicted surface water quality concentrations from the EIS/EA, trigger threshold 1 is defined as 10% above the predicted surface water quality concentration from the EIS/EA for the surface water feature at a given monitoring station, AND five times the detection limit.

The 95th percentile for a given parameter is calculated based on data collected prior to September 15th, 2021. The concentration of total mercury at Station 25 exceeded the 95th percentile baseline concentration and was five times the detection limit in monthly samples from March 2023 to June 2023.

Trigger threshold 1 action plan was undertaken. The trigger threshold 1 action plan is to confirm the result (QA/QC review and resampling) and, if the result is confirmed, to complete a trend analysis of the concentration over time.

As per the response plan, a QA/QC review of the sampling methods, laboratory report, and chain of custody was completed for the surface water quality samples collected at Station 25. No anomalies in the sampling methods, sample handling, or laboratory reporting were noted. Therefore, resampling of Station 25 was completed in June 2023, which also accounted for the scheduled June monthly surface water sampling event. Mercury at Station 25 continued to exceed the associated 95th percentile in June 2023, as such, the trigger threshold 1 exceedance for total mercury at Station 25 was confirmed. Where a trigger threshold 1 exceedance is confirmed, the previous concentration data is reviewed for trends, and an assessment of trigger threshold 2 is completed. Subsequent sampling of Station 25 in July 2023 indicated no exceedances of trigger thresholds 1 or 2 for mercury.

SURFACE WATER QUALITY TRIGGER THRESHOLD 2 EVALUATION

Surface water quality trigger threshold 2 is defined as an exceedance of trigger threshold 1 and a statistically significant upward trend for a given indicator parameter, or for stations that have a statistically significant upward trend compared to baseline data, an increase in the magnitude of the trend compared to baseline.

Figure 2 shows the concentration of mercury over time at Station 25. Monthly sampling of Station 25 commenced in February 2018. The annual baseline 95th percentile of mercury concentration is 0.00253 µg/L. A reporting detection limit (RDL) for total mercury is 0.0001 µg/L.

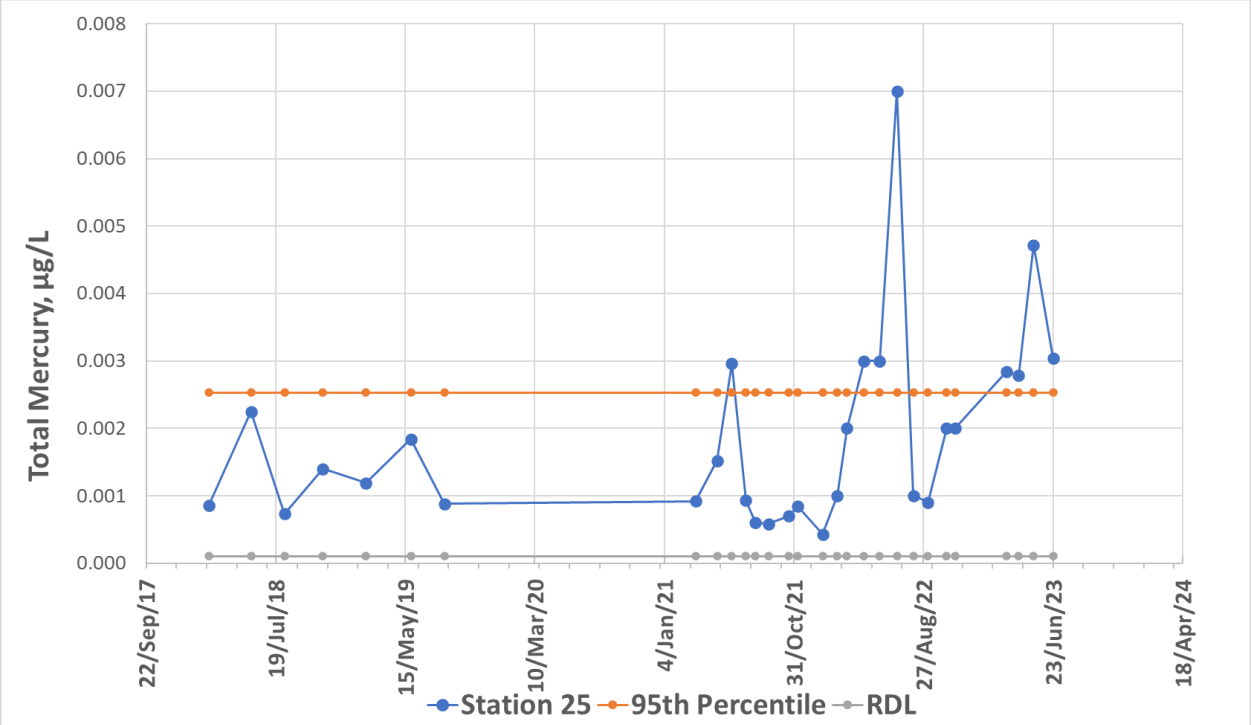
The trend analysis for mercury at Station 25 was completed using the Mann-Kendall test. The trend analysis was initially completed on baseline data to confirm if an upward trend in concentration of the indicator parameter is observed under baseline conditions. Surface water quality data collected prior to September 15, 2021, was considered baseline data. There was no upward trend observed in the baseline concentration of mercury at Station 25.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Total Mercury Exceedance of Trigger Threshold at Station 25 for Reporting Period March 2023 through June 2023**

The trend analysis was then completed on the entire available data set for mercury at Station 25. A statistically significant increasing trend in the concentration of mercury at Station 25 was identified through the Mann-Kendall analysis. Therefore, trigger threshold 2 is exceeded for mercury at Station 25 and the trigger threshold 2 action plan was undertaken for this parameter and station.

The objective of the trigger threshold 2 action plan is to determine if the exceedance is related to mine activities or a result of a natural trend, sample variation, a single anomalous event, such as a meteorological event, or seasonal variation.

Figure 2: Mercury Concentration at Station 25



SURFACE WATER QUALITY TRIGGER THRESHOLD 2 ACTION PLAN RESULTS

The trigger threshold 2 action plan has 4 steps:

- Step 1 is to notify the Impact Assessment Agency of Canada (IAAC), MECP, and the Environmental Advisory Committees (EACs) of the trigger threshold 2 exceedance.
- Step 2 requires an investigation to assess whether the exceedance is mine related.
- Step 3 requires a quantitative risk evaluation, if mine related.
- Step 4 is to identify exceedance source.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Total Mercury Exceedance of Trigger Threshold at Station 25 for Reporting Period March 2023 through June 2023**

The following summarizes the results of the investigation as to whether the trigger exceedance is mine-related, quantitative risk evaluation and identification of exceedance sources for the trigger threshold 2 exceedance of mercury at Station 25.

Mercury was identified as a parameter of potential concern in Order in Council 404/2019 EA approval Condition 15, issued by the MECP. Condition 15 of the EIS/EA Approval stated that the project has the potential to alter, disturb or affect concentrations of mercury and methylmercury in soil, sediment, groundwater, surface water, or aquatic organisms. The Mercury Monitoring Program and Management Plan was prepared and submitted to the MECP in May 2021 specifically to address potential changes in mercury and methylmercury concentrations that may occur as a result of the Goldfield Creek realignment. The EIS/EA identified that the potential for changes in mercury and methylmercury from the Project is associated with inundation and the creation of permanently inundated areas (about 15 ha) along the Goldfield Creek realignment and SWAT.

Mercury concentrations at Station 25 for the months March 2023 to June 2023, when the baseline 95th percentile of mercury concentration was exceeded, are presented in Table 1.

Table 1: Mercury Concentrations at Station 25

Parameter	Winter		Spring			Summer
	6-Feb-23	7-Mar-23	4-Apr-23	9-May-23	23-Jun-23	4-Jul-23
Total Mercury Concentration, µg/L	<0.0001	0.00284	0.00279	0.00472	0.00304	0.00251
95th Percentile, µg/L	0.00253	0.00253	0.00253	0.00253	0.00253	0.00253
PWQO, µg/L	0.2	0.2	0.2	0.2	0.2	0.2
CCME CWQG-FAL, µg/L	0.026	0.026	0.026	0.026	0.026	0.026

General water chemistry (turbidity, TSS, conductivity, hardness, etc.) during the regular monthly sampling events was reviewed at Station 25 in 2023 and results are presented in Table 2. The highest mercury concentration was observed in May 2023. The peak concentrations of sulphate, turbidity, and TSS were also observed in May. These elevated concentrations of turbidity and TSS are likely related to the failure of the GFC diversion during spring freshet.

Table 2: General Water Quality at Station 25

Parameter	6-Feb-23	7-Mar-23	4-Apr-23	9-May-23	23-Jun-23	4-Jul-23
Mercury, µg/L	<0.0001	0.00284	0.00279	0.00472	0.00304	0.00251
Mercury 95th Percentile, µg/L	0.00253	0.00253	0.00253	0.00253	0.00253	0.00253
Mercury PWQO, µg/L	0.2	0.2	0.2	0.2	0.2	0.2
Mercury CCME CWQ, µg/L	0.026	0.026	0.026	0.026	0.026	0.026
Sulphate, mg/L	2.7	2.9	4.5	6.2	2.6	2.8
True Color, PCU	31.1	34	38	59	65	71
pH, field	7.43	6.9	6.63	7.26	7.09	7.15
Conductivity, uS/cm	253	264	287	234	279	305

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Total Mercury Exceedance of Trigger Threshold at Station 25 for Reporting Period March 2023 through June 2023**

Parameter	6-Feb-23	7-Mar-23	4-Apr-23	9-May-23	23-Jun-23	4-Jul-23
DOC, mg/L	12.4	12	13	13	16	18
Hardness, mg/L	123	140	150	100	150	170
Turbidity, NTU	1.7	0.5	0.5	9.9	0.5	0.8
TDS, mg/L	190	185	165	175	195	185
TSS, mg/L	2.3	<1	5	18	3	2

The following observations were made based on the analysis conducted:

- Over 900 surface water samples for mercury were collected through baseline studies for the Mine. However, 98% of the samples had concentrations of mercury below the reportable detection limit. The detection limits for mercury have been successively lowered over the course of the baseline monitoring period from 0.1 µg/L (45 samples) to 0.01 µg/L (297 samples) and then to a detection limit of 0.005 µg/L (569 samples), compared to the CWQG-FAL of 0.026 µg/L, however, even at a detection limit of 0.005 µg/L only a very limited number (<5%) of sample returns were above the DL. The mercury detection limit has been lowered to 0.0001 µg/L in 2018. The annual 95th percentile of mercury for Station 25 was derived based on an ultra-low detection limit of 0.0001 µg/L yielding limited data, especially during the winter and spring shoulder seasons where trigger exceedances were observed. In total, 13 mercury samples were collected between February 2018 and September 2021 to characterize baseline conditions at Station 25.
- In the EIS/EA Amendment, concentrations of mercury were predicted to increase from 0.0054 µg/L in baseline conditions to 0.0377 µg/L at the end of operation due to the increased flow from the Goldfield Creek diversion and resulting permanent inundation of approximately 15 ha where the potential exists for subsequent mercury methylation. Note that the conservative baseline assessment of mercury concentration of 0.0054 µg/L within the SWAT in the EIS/EA Amendment was based on elevated detection limits resulting in a higher estimate of baseline mercury concentrations in the EIS/EA Amendment than measured during construction (Table 2) where the detection limit of mercury was lowered to 0.0001 µg/L.
- As the GFC Diversion was completed in December 2022 and full flow through the diversion was achieved in January 2023, spring 2023 represents the first freshet with inundation from increased flow from the GFC Diversion and presence of the grade control structures on the SWAT. The increased concentrations of mercury in the SWAT after the diversion of the GFC in spring 2023 are consistent with the predictions in the EIS/EA Amendment.
- The GFC Diversion channel failed during the spring freshet, resulting in the release of sediment downstream through the SWAT, which would have contributed to the increase in mercury concentration in the released sediments containing mercury. Trigger threshold 1 exceedances were observed for total phosphorous, iron, and uranium at Station 25 in June 2023 which corresponded with the timing of the GFC Diversion failure.
- Figure 2 shows the natural seasonal trends of mercury at Station 25 with high concentrations in late winter and spring. It was reasonable to expect that the concentration of mercury in the late winter and spring of 2023 would also be high. It is expected that the concentration of mercury will become lower in the summer. The concentration of mercury in July has already dropped below the 95th percentile.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Total Mercury Exceedance of Trigger Threshold at Station 25 for Reporting Period March 2023 through June 2023**

- The spatial extent of mercury exceedance was assessed, and it was concluded that the exceedance event at Station 25 is isolated to this monitoring station. No trigger thresholds were exceeded at neighboring stations.
- The concentrations of mercury observed at Station 25 are approximately an order of magnitude less than the CWQG-FAL for mercury.

Based on the investigation conducted, it was concluded that the increased mercury concentrations at Station 25 are likely related to the GFC diversion and grade control structures resulting in inundation along the SWAT. The failure of the GFC diversion and the release of sediment through the SWAT also expected to have contributed to increased mercury concentrations at Station 25. The concentration of mercury in surface water at Station 25 is consistent with the predicted mercury concentrations. As indicated in the EIS/EA Amendment, the concentration of mercury is predicted to decrease over time and after spring flooding has abated. It is expected that mercury concentrations will reduce as the GFC diversion channel stabilizes after remediation of the diversion has been completed. It was already observed that the concentration of mercury in July was below the 95th percentile and is approximately an order of magnitude below the CCME CWQG-FAL for mercury. No modifications to the monitoring plan are recommended at this time.

SUMMARY AND CLOSING

In summary, during the June 2023 reporting period, trigger threshold 2 was exceeded for mercury at Station 25. The trigger threshold 2 action plan was completed and concluded that mercury exceedances at Station 25 may be related to the presence of grade control structures and the diversion of flow from the GFC through the SWAT, resulting in the inundation of land along the SWAT. The concentrations of mercury at Station 25 are consistent with those predicted for the SWAT in the EIS/EA Amendment after the diversion of the GFC.

Consistent with the EIS/EA Amendment predictions for the SWAT, it is expected that mercury concentrations will decrease as flow through the GFC diversion stabilizes and is remediated and after spring flooding has abated. No modifications to the monitoring plan are recommended at this time.

Should you have any questions or comments, please contact the undersigned.

Stantec Consulting Ltd.

<original signed by>

Igor Iskra Ph.D., P.Eng.
Senior Water Resources Engineer
Phone: 905 415 6371
Fax: 905 474 9889
Igor.Iskra@stantec.com

Stantec

Memo

To:	Shane Hayes	From:	Igor Iskra
	Greenstone Gold Mines		Stantec Consulting Ltd.
File:	160900981	Date:	October 31, 2022

Reference: Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 26 for Reporting Period May through September 2022

Greenstone Gold Mines (GGM) is constructing a new open pit gold mine that includes a processes plant and ancillary facilities, collectively known as the Greenstone Mine (the Mine). Construction and operation of the gold mine are governed by a series of permits issued by the Ministry of Environment, Conservation and Parks (MECP) each with various monitoring requirements. Monitoring requirements for the Mine are also detailed in the decision statement issued for the federal Environmental Impact Statement (EIS) and notice of approval for the provincial Environmental Assessment (EA).

A surface water quality adaptive management plan was implemented in October 2021 for the Mine. The adaptive management plan for the surface water quality monitoring program is a requirement of the following permits and/or monitoring plans for the Mine.

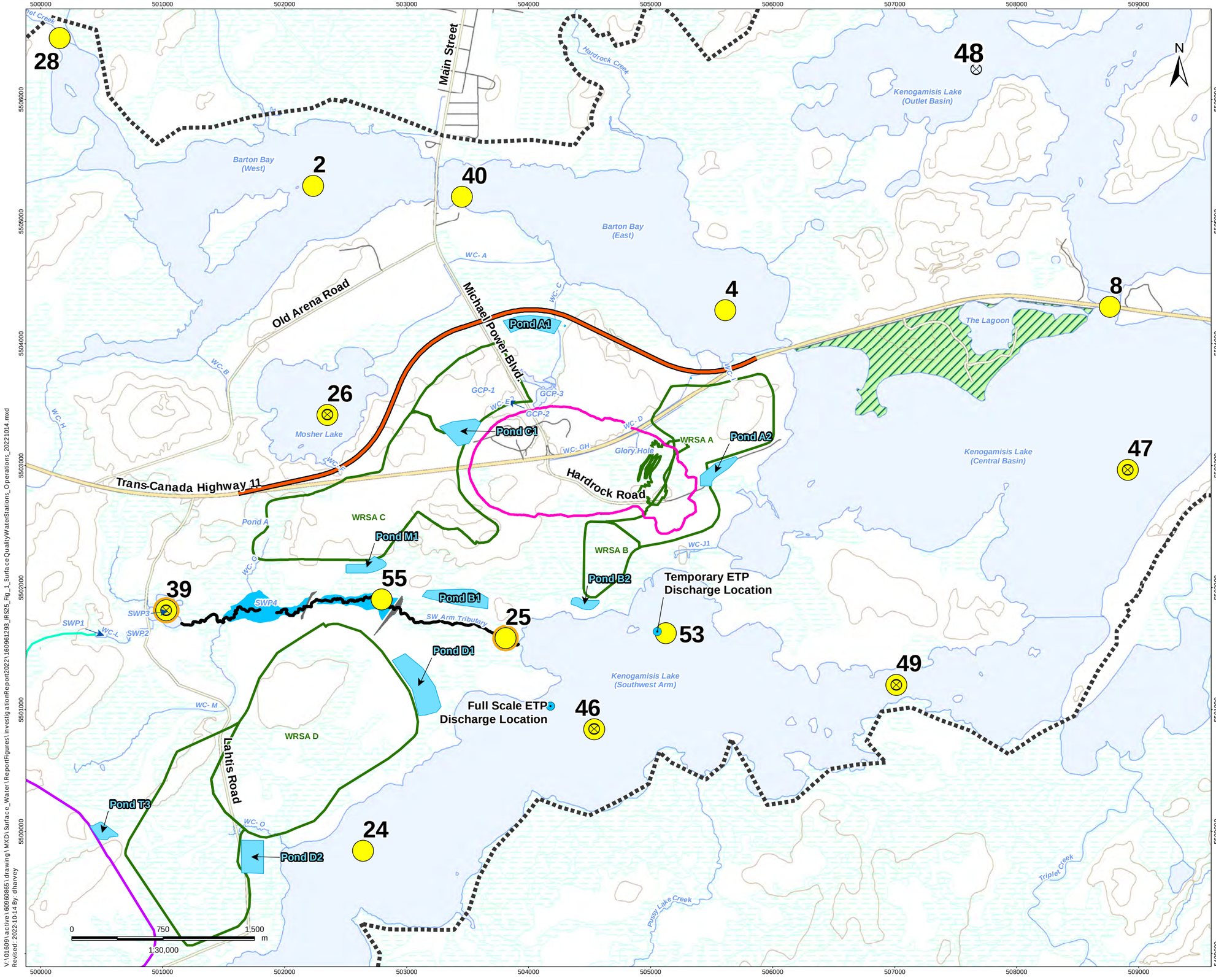
- Conditions 7.16 through 7.17 of the temporary effluent treatment plant (TETP) Environmental Compliance Approval (ECA) number 9561-CBFLCC.
- The Multi-Media Monitoring and Management Plan (GGM 2021)[1], developed in accordance with condition 13 of the provincial EA Notice of Approval.
- The Fish and Fish Habitat Follow-Up Monitoring Plan (GGM 2021)[2], developed in accordance with conditions 3.14, 3.15, 3.16, 3.17, 3.2, 5.4, and 5.5.1. of the federal EIS Decision Statement.

The adaptive management plan for surface water quality is consistent among the TETP ECA, Multi-Media Monitoring and Management Plan, and Fish and Fish Habitat Follow-Up Monitoring Plan. The adaptive management plan defines triggers for additional assessment of cause and associated action plans that will be carried out should exceedances to the triggers occur. There are two trigger thresholds for surface water quality indicator parameters with a corresponding action plan, should the threshold be exceeded. The action plan identifies notification, investigation, and mitigation measures and strategies that may be carried out when exceedances of the triggers occur and those exceedances are deemed mine related. Trigger Threshold 1 and 2 were exceeded for iron at Station 26 and therefore the respective action plans were initiated. The objective of the action plan is to assess whether the exceedance is mine related and, if it is mine related, to undertake a quantitative risk evaluation, identify exceedance source, and mitigate effects of the mine, as required.

Please accept this letter as the investigation report for the Trigger Threshold 2 exceedance for iron at Station 26 in Mosher Lake. Station 26 is located in Mosher Lake, west and north of realigned HWY 11 (**Figure 1**). Mosher Lake outflows to Barton Bay via watercourse A. No project activities are occurring around Mosher Lake. The highway realignment adjacent to Mosher Lake was completed in spring of 2022.

[1] Greenstone Gold Mines (GGM). 2021. Hardrock Project – Multi-Media Monitoring Plan – Order in Council 404/2019 Condition 13. Document control number: HP-MG003-EV-130-0004_3. March 25, 2021.

[2] Greenstone Gold Mines (GGM). 2021. Hardrock Project Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan. Document control number HP-MG003-EV-130-0008_0. February 16, 2021.



Legend

- Local Assessment Area
- Regional Assessment Area
- Discharge Location
- Routine Water Quality Monitoring
- Temperature/ DO Profile
- Mercury and Methylmercury Monitoring

Site Plan Revised Post Final

- New Highway 11 Alignment
- Diversion Channel
- Collection Ponds
- Open Pit- Full Extent
- Tailings Management Facility
- Grade Control Structure
- Inundated Area ; Backwater effect
- Waste Rock Storage Area

Existing

- Highway
- Major Road
- Local Road
- Existing SW Arm Tributary Channel
- Watercourse
- Provincial Park
- Wetland (Eco-Site Based)
- Waterbody

Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

October 2022
160961293

Client/Project

Greenstone Gold Mines GP Inc. (GGM)
Hardrock Project

Figure No.

1

Title

Surface Water
Quality Monitoring Locations

V:\01609\active\160960865\drawing\MXD\Surface_Water\ReportFigures\InvestigationReport2022\160961293_IR25_Fig_1_SurfaceQualityWaterStations_Operations_20221014.mxd
Revised: 2022-10-14 By: dharvey

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 26 for Reporting Period May through September 2022**

SURFACE WATER QUALITY TRIGGER THRESHOLD 1 EVALUATION

The trigger thresholds and associated action plans are described in conditions 7.16 through 7.17 of the TETP ECA, Section 4.2.4 of the Multi-Media Monitoring Plan, and Section 2.2.2.2 of the Fish and Fish Habitat Follow-Up Monitoring Plan.

Surface water quality Trigger Threshold 1 is defined as three consecutive monthly parameter concentration exceedances above the seasonal 95th percentile baseline concentration AND five times the detection limit. For those stations where the 95th percentile is less than the predicted surface water quality concentrations from the EIS/EA, Trigger Threshold 1 is defined as 10% above the predicted surface water quality concentration from the EIS/EA for the surface water feature at a given monitoring station, AND five times the detection limit.

The 95th percentile for each season for a given parameter is calculated based on data collected prior to September 15th 2021.

The concentration of iron at Station 26 exceeded the spring seasonal 95th percentile baseline concentration in May and June of 2022 and the summer seasonal 95th percentile baseline concentration in July. Therefore, the surface water quality Trigger Threshold 1 was exceeded for iron at Station 26 in July. The exceedance of the summer seasonal 95th percentile was confirmed in August and September.

The Trigger Threshold 1 action plan was undertaken. Trigger Threshold 1 action plan is to confirm the result (QA/QC review and resampling) and, if the result is confirmed, to complete a trend analysis of the concentration over time.

As per the action plan, a QA/QC review of the sampling methods, laboratory report, and chain of custody was completed for the surface water quality samples collected at Station 26. No anomalies in the sampling methods, sample handling, or laboratory reporting were noted. Therefore, resampling of Station 26 was completed in August 2022, which also accounted for the scheduled August monthly surface water sampling event.

The results of the August and September sampling event showed that iron at Station 26 continued to exceed the associated seasonal 95th percentile. As such, the Trigger Threshold 1 exceedance for iron at Station 26 was confirmed. Where a Trigger Threshold 1 exceedance is confirmed, the previous concentration data is reviewed for trends and an assessment of Trigger Threshold 2 is completed.

SURFACE WATER QUALITY TRIGGER THRESHOLD 2 EVALUATION

Surface water quality Trigger Threshold 2 is defined as an exceedance of Trigger Threshold 1 and a statistically significant upward trend for a given indicator parameter, or for stations that have a statistically significant upward trend compared to baseline data, an increase in the magnitude of the trend compared to baseline.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 26 for Reporting Period May through September 2022**

The trend analysis for iron at Station 26 was completed using the Mann-Kendall test. The Mann-Kendall test is a non-parametric test used to determine whether a time series has a monotonic upward or downward trend, the trend may or may not be linear. The test does not require that the data be normally distributed or linear. However, the test does require that there is no autocorrelation. The trend analysis was initially completed on baseline data to confirm if an upward trend in concentration of the indicator parameter is observed under baseline conditions. Surface water quality data collected prior to September 15, 2022 was considered baseline data. An upward trend through the Mann-Kendall analysis was observed in the baseline concentration of iron at Station 26.

The trend analysis was then completed on the entire available data set for iron at Station 26. A statistically significant increasing trend in the concentration of iron at Station 26 and an increase in the magnitude of the trend compared to baseline was identified. Therefore, Trigger Threshold 2 is exceeded for iron at Station 26 and Trigger Threshold 2 action plan was undertaken for this parameter and station.

Figure 2 shows the concentration of iron over time at Station 26 with a linear trendline. Monthly sampling of Station 26 commenced in October 2013.

The objective of the Trigger Threshold 2 action plan is to determine if the exceedance is related to mine activities or a result of continued natural trends, or extended seasonal conditions such as a very dry or wet spring or summer period.

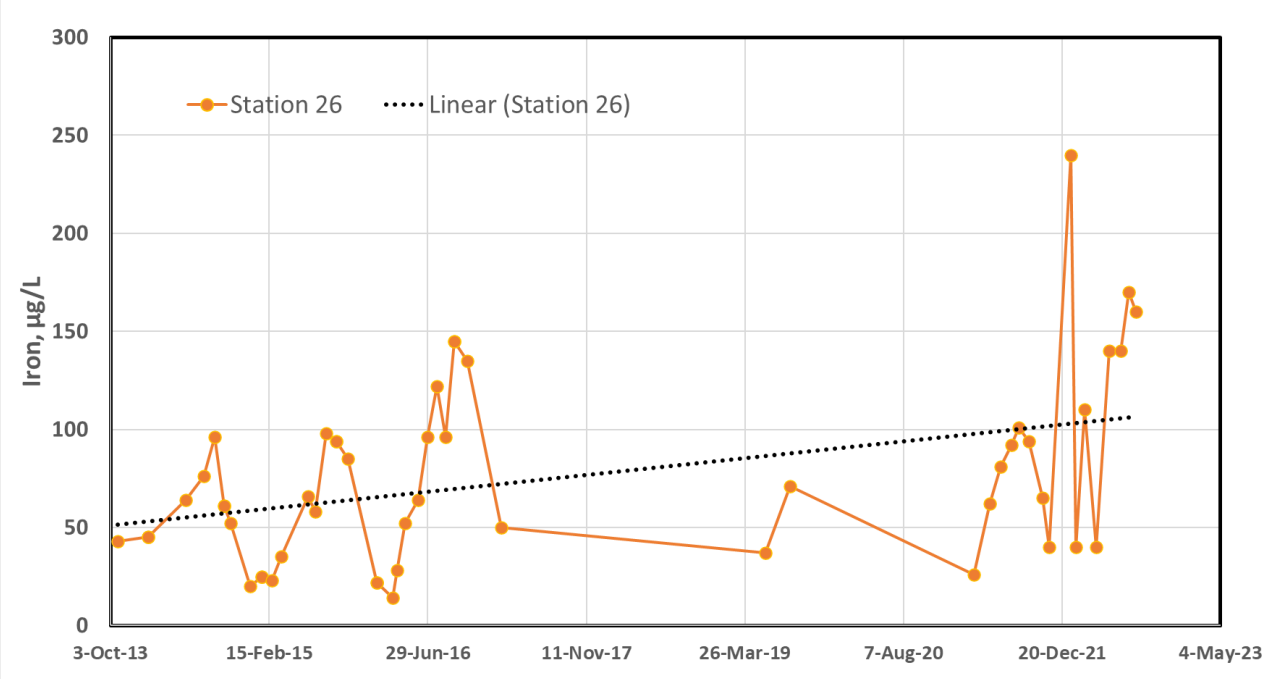


Figure 2: Iron Concentration at Station 26

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 26 for Reporting Period May through September 2022**

SURFACE WATER QUALITY TRIGGER THRESHOLD 2 ACTION PLAN RESULTS

The Trigger Threshold 2 Action Plan has 4 steps:

- Step 1 is to notify the Impact Assessment Agency of Canada (IAAC), MECP, and the Environmental Advisory Committees (EACs) of the Trigger Threshold 2 exceedance.
- Step 2 requires an investigation to assess whether the exceedance is mine related.
- Step 3 requires a quantitative risk evaluation.
- Step 4 is to identify exceedance source.

The following summarizes the results of the investigation, quantitative risk evaluation and identification of exceedance sources for the Trigger Threshold 2 exceedance of iron at Station 26

Iron concentrations at Station 26 for the last four months, when the baseline 95th percentile of iron concentration was exceeded, are presented in **Table 1**.

Table 1: Iron Concentrations (µg/L) at Station 26

Parameter	Spring		Summer		
	18-May-22	23-Jun-22	18-Jul-22	11-Aug-22	07-Sep-22
Total Iron Concentration, µg/L	140	140	170	160	180
95th Percentile Seasonal, µg/L	91	91	131	131	131
99th Percentile Baseline Annual, µg/L	145	145	145	145	145
Dissolved Iron, µg/L	50	120	50	90	50
Ratio of Dissolved Forms, %	36	86	29	56	28

No obvious changes in general water chemistry (turbidity, TSS, conductivity, hardness, etc.) were observed at Station 26 in 2022. **Table 2** presents water quality at Station 26. In particular, TSS and turbidity values in Mosher Lake in spring and summer time are low (less than 8 NTU) and indicate that erosion control measures during construction activities of the highway realignment were effective.

No obvious link was established between elevated iron concentrations and mining activities.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 26 for Reporting Period May through September 2022**

Table 2: General Water Quality at Station 26

Parameter	9-Apr-22	18-May-22	23-Jun-22	18-Jul-22	11-Aug-22	07-Sep-22
Total Iron, µg/L	40	140	140	170	160	180
95th Percentile	91	91	91	131	131	131
Sulphate, mg/L	3.6	3.0	2.9	<0.3	2.9	3.4
True Color, TCU	8.0	5.8	12.0	29.3	11.0	5.5
pH, field	7.03	7.6	8.01	8.23	8.53	8.34
Conductivity, uS/cm	434	285	305	301	309	258
DOC, mg/L	6.2	4.7	5.3	4	4.9	6.8
Hardness, mg/L	129	96.7	98.9	98.0	95.1	91.7
Turbidity, NTU	0.8	0.9	2.2	1.5	1.4	1.7
TDS, mg/L	245	185	195	195	185	225
TSS, mg/L	3.0	2.3	4	2.7	5	6.3

Table 3 shows the iron concentrations at stations located upstream (2, 28) and downstream (4) of WC-A which connects Mosher Lake with Barton Bay. Station 26 has the lowest concentration of iron including background station. It suggests that source of iron at Station 26 is not mine related but a result of natural occurrences in surrounding catchments.

Table 3: Iron Concentrations, µg/L

Station	Winter			Spring			Summer		
	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22
Station 2	380	230	250	140	160	330	290	340	290
Station 4	260	120	170	130	240	730	150	280	280
Station 26	240	40	110	40	140	140	170	160	180
Station 28	550	430	670	N/A	170	340	420	500	430

Background Station 28 (mouth of Magnet Creek into Barton bay West) was investigated for trends and it was found that it shows no upward trend under baseline conditions for iron. The trend analysis was then completed on the entire available data set for iron at Station 28. A statistically significant increasing trend in the concentration of iron at Station 28 was identified through the Mann-Kendall analysis. Therefore, natural variability is a factor in increasing iron concentrations.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 26 for Reporting Period May through September 2022**

Figures 3 shows the concentration of iron over time at background Station 28 with a trendline. Monthly sampling at both stations commenced in October 2013.

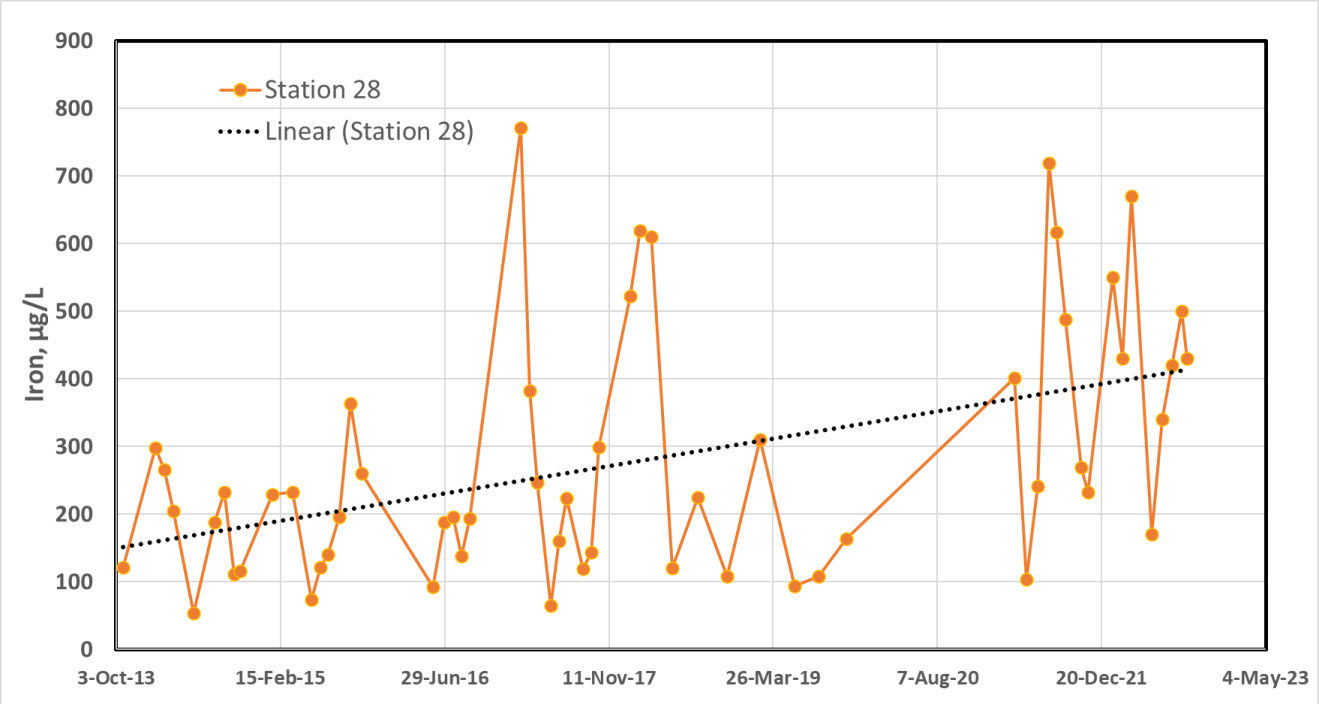


Figure 3: Iron Concentration at Station 28

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 26 for Reporting Period May through September 2022**

Figures 4 show the concentration of iron over time at background Stations 1A with a linear trendline. Station 1A is located in the mouth of Kenogamisis River and beyond the extent of potential mine influence also demonstrated an increasing iron trend at the same time that station 26 shows an increasing trend, therefore, natural variability is considered a potential source of increasing iron concentrations at Station 26.

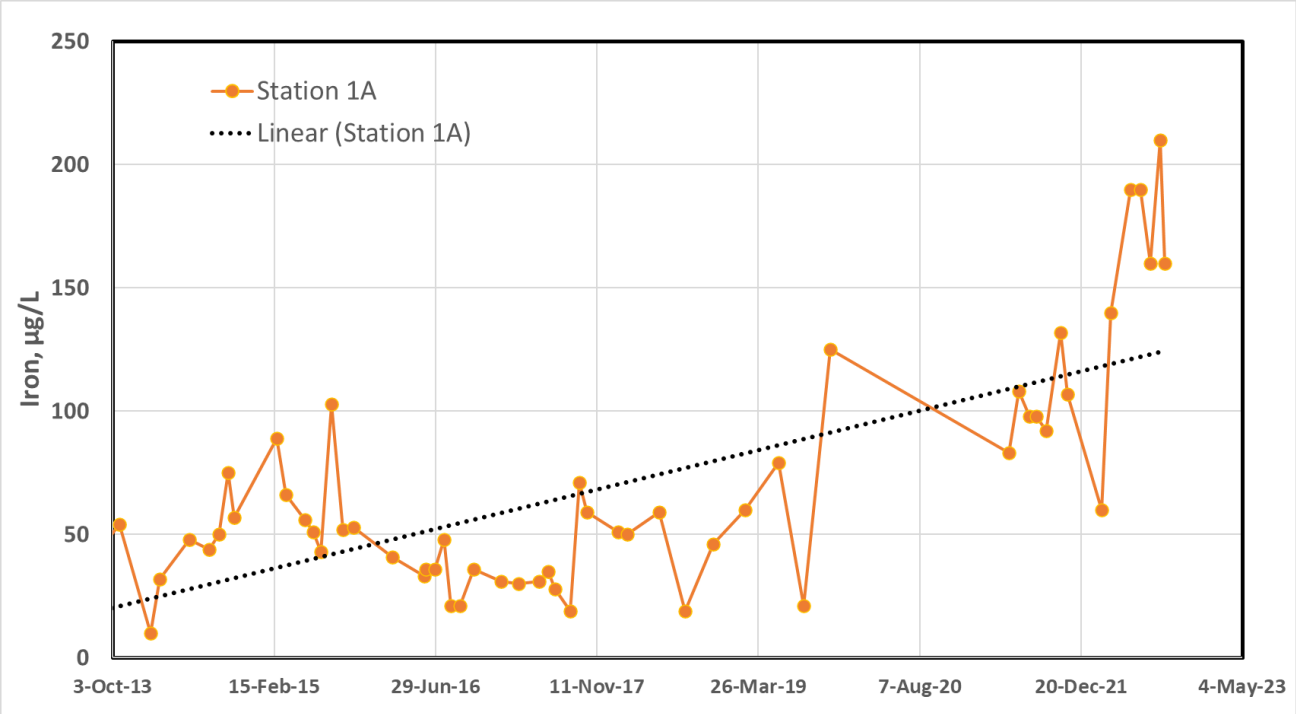


Figure 4: Iron Concentration at Station 1A

The following observations were made:

- For the last five months, the iron concentration ranged in a reasonably narrow interval between 140 µg/L (in May and June) and 180 µg/L (in September). The magnitude of the exceedance above the seasonal 95th percentile is up to 1.5 times and represents a modest deviation from the seasonal 95th percentile which is used in Trigger Threshold 1.
- Figure 2 shows natural cyclical variability of iron from 30 to 150 µg/L. The exceedances in the last five months are only marginally above the natural variability range. It is reasonable to expect that the concentration of iron will reduce in fall and winter.
- Spatial extent of iron exceedance was assessed, and it was concluded that iron exceedances were not observed in downstream station in Barton Bay (Station 4) during the same time period.
- Potential sources of iron were investigated, and no obvious sources of iron were found around Mosher Lake. General water chemistry (**Table 2**), particularly, turbidity, TSS, color, do not show changes in water chemistry.

Reference: Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 26 for Reporting Period May through September 2022

- The extremely wet spring was experienced in Northwestern Ontario in 2022 that resulted in excessive surface flooding and high water for periods extending into July. There is an established link between flooding and increase in various forms of iron. The process is widespread in boreal forests with high concentration of humic and fulvic acids which act as a chelation agent for iron. Therefore, excessive flooding in 2022 could contribute to elevated concentrations of iron in the catchments surrounding the site including Mosher Lake.
- The highway realignment was occurring immediately along the eastern side of Mosher Lake. TSS was low during construction (Table 2) and suspended forms of iron contribute consistently around 50% of total iron. Therefore, a conclusion can be made that highway realignment is not a factor in elevated iron concentrations.
- Spatial extent of iron exceedance was assessed (Table 3), and it was concluded that the iron concentrations in background station (i.e. upstream of the mine footprint) are higher than in Station 26. It suggests that the source of elevated iron in the neighboring catchments is natural variability.
- As part of Trigger Threshold 1 action plan the laboratory certificates of analyses, which includes the laboratory's QA/QC results, were reviewed with no exceptions to the analyses noted. Prior to January 2021, the baseline surface water quality samples were analyzed by ALS. In January 2021, GGM contracted Testmark Laboratories to complete the water analyses for the Mine. Given the number of elevated concentrations of parameters observed since January 2022 compared to baseline concentrations, GGM has commenced an investigation into the results of the laboratory analyses. The investigation involves collecting duplicate samples for analyses by ALS. Preliminary analytical results show a difference in concentrations between laboratories, particularly iron which is consistently elevated in the results from Testmark Laboratories versus ALS. The investigation is ongoing and is widening to include a third laboratory to understand the potential bias in the laboratory results.

Step 3 requires a quantitative risk evaluation which is a conceptual evaluation and comparison of concentrations or loads and conclusions drawn from such analysis. The May-September iron concentrations are above the predicted levels for construction and operation in the EIS/EA (Section 10). However, the concentration of iron at Station 26 was notably below PWQO (300 µg/L) and does not represent potential concern to the environment.

Step 4 of the Trigger Threshold 2 action plan is to identify exceedance source. Based on the above evaluation, the source of exceedance or iron at Station 26 is natural variability. No direct link to mine activities can be validated.

SUMMARY AND CLOSING

In summary, during the September 2022 reporting period Trigger Threshold 2 was exceeded for iron at Station 26. The Trigger Threshold 2 action plan was completed and concluded that no direct link of iron exceedances at Station 26 and mine related activities can be established but can be attributed to natural variability.

As the Trigger Threshold 2 exceedance of iron at Station 26 is not mine related, the monitoring plan will continue with no modifications to the monitoring plan recommended at this time.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 26 for Reporting Period May through September 2022**

Should you have any questions or comments, please contact the undersigned.

Stantec Consulting Ltd.

<original signed by>

Igor Iskra Ph.D., P. Eng.
Senior Water Resources Engineer

Phone: 289-923-7237
Fax: 905 474 9889
Igor.Iskra@stantec.com

Stantec

Memo

To:	Cailey Anderson Greenstone Gold Mines	From:	Igor Iskra Stantec Consulting Ltd.
File:	160901057	Date:	May 30, 2023

Reference: Greenstone Mine Adaptive Management Plan, Investigation of Uranium Exceedance of Trigger Threshold at Station 39 for Reporting Period November 2022 through April 2023

Greenstone Gold Mines (GGM) is constructing a new open pit gold mine that includes a processing plant and ancillary facilities, collectively known as the Greenstone Mine (the Mine). Construction and operation of the gold mine are governed by a series of permits issued by the Ministry of Environment, Conservation and Parks (MECP) each with various monitoring requirements. Monitoring requirements for the Mine are also detailed in conditions of approval for the federal Environmental Impact Statement (EIS) and provincial Environmental Assessment (EA).

A surface water quality adaptive management plan was implemented in October 2021 for the Mine. The adaptive management plan for the surface water quality monitoring program is a requirement of the following permits and/or monitoring plans for the Mine.

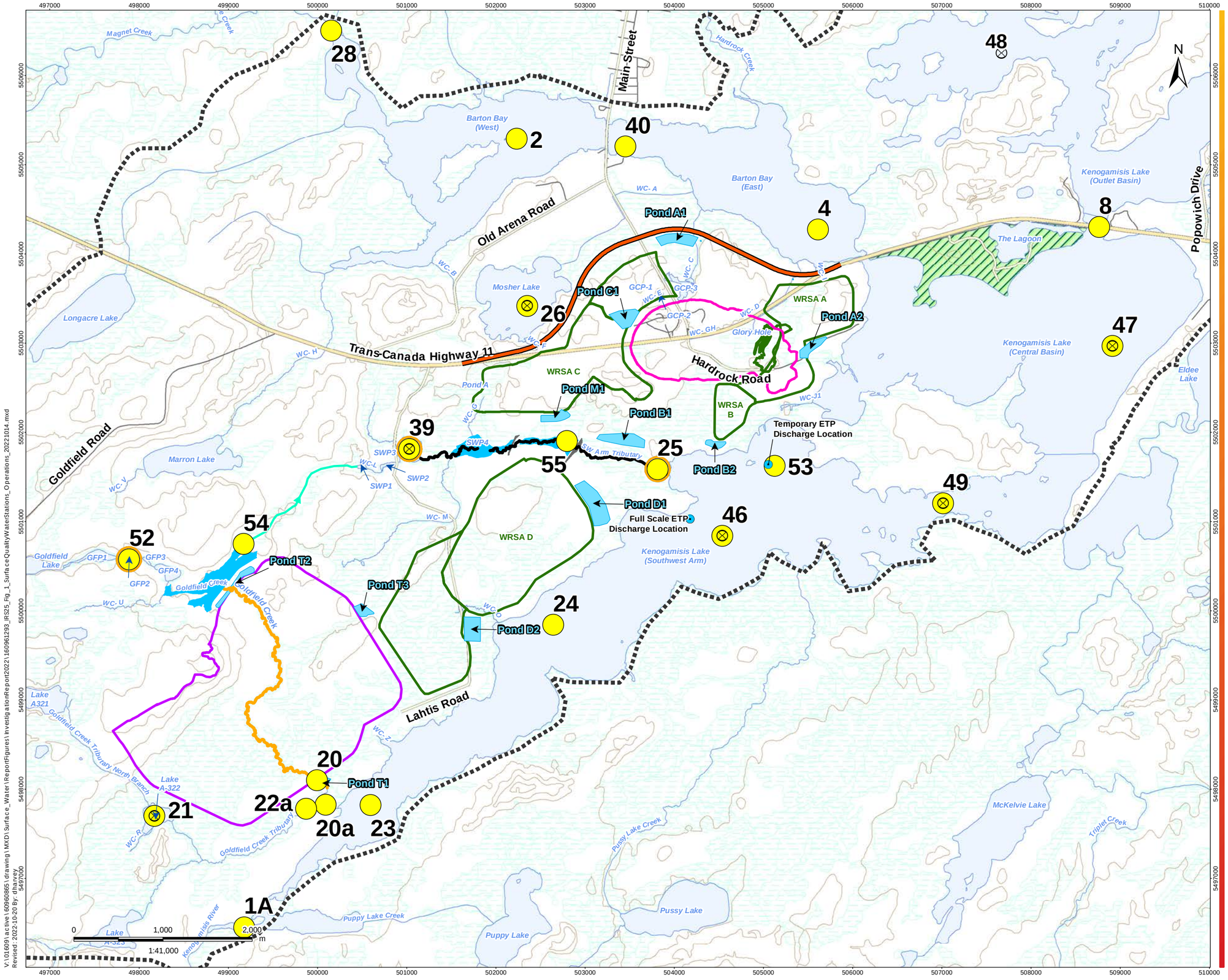
- Conditions 8.16 through 8.17 of the full scale effluent treatment plant (ETP) Environmental Compliance Approval (ECA) number 0735-C9PMD6.
- The Multi-Media Monitoring and Management Plan (GGM 2021)[1], developed in accordance with condition 13 of the provincial EA Notice of Approval.
- The Fish and Fish Habitat Follow-Up Monitoring Plan (GGM 2021)[2], developed in accordance with conditions 3.14, 3.15, 3.16, 3.17, 3.2, 5.4, and 5.5.1. of the federal EIS Decision Statement.

The adaptive management plan for surface water quality is consistent among the full scale ETP ECA, Multi-Media Monitoring and Management Plan, and Fish and Fish Habitat Follow-Up Monitoring Plan. The adaptive management plan defines triggers for additional assessment of cause and associated action plans that will be carried out should exceedances to the triggers occur. There are two trigger thresholds for surface water quality indicator parameters with a corresponding action plan should the threshold be exceeded. The action plan identifies notification, investigation, and mitigation measures and strategies that may be carried out when exceedances of the triggers occur, and those exceedances are deemed mine related. Trigger threshold 1 and 2 were exceeded for uranium at Station 39 and therefore the respective action plan was initiated. The objective of the action plan is to assess whether the exceedance is mine related and, if it is mine related, to undertake a quantitative risk evaluation, identify exceedance source, and mitigate effects of the mine, as required.

Please accept this letter as the investigation report for the trigger threshold 2 exceedance for uranium at Station 39. Station 39 is located in the Southwest Pond 3 (SWP3) on the Southwest Arm Tributary (SWAT).

[1] Greenstone Gold Mines (GGM). 2021. Hardrock Project – Multi-Media Monitoring Plan – Order in Council 404/2019 Condition 13. Document control number: HP-MG003-EV-130-0004_3. March 25, 2021.

[2] Greenstone Gold Mines (GGM). 2021. Hardrock Project Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan. Document control number HP-MG003-EV-130-0008_0. February 16, 2021.



Stantec

Legend

- Local Assessment Area
- Regional Assessment Area
- Discharge Location
- Routine Water Quality Monitoring
- Temperature/ DO Profile
- Mercury and Methylmercury Monitoring

Site Plan Revised Post Final EA/EIS

- New Highway 11 Alignment
- Diversion Channel
- Collection Ponds
- Open Pit- Full Extent
- Tailings Management Facility
- Grade Control Structure
- Inundated Area ; Backwater effect
- Waste Rock Storage Area

Existing Features

- Highway
- Major Road
- Local Road
- Existing SW Arm Tributary Channel
- Existing Portion of Goldfield Creek (to be overprinted)
- Watercourse
- Provincial Park
- Wetland (Eco-Site Based)
- Waterbody

Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

October 2022
160961293

Client/Project

Greenstone Gold Mines GP Inc. (GGM)
Hardrock Project

Figure No.

1

Title

Surface Water
Quality Monitoring Locations

V:\01609\active\160960865\drawing\MXD\Surface_Water\ReportFigures\InvestigationReport2022\160961293_IR25_Fig_1_SurfaceQualityWaterStations_Operations_20221014.mxd
Revised: 2022-10-20 By: dhavey

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Uranium Exceedance of Trigger Threshold at Station 39 for Reporting Period November 2022 through April 2023**

SURFACE WATER QUALITY TRIGGER THRESHOLD 1 EVALUATION

The trigger thresholds and associated action plans are described in conditions 8.16 through 8.17 of the full scale ETP ECA, Section 4.2.4 of the Multi-Media Monitoring Plan, and Section 2.2.2.2 of the Fish and Fish Habitat Follow-Up Monitoring Plan.

Surface water quality trigger threshold 1 is defined as three consecutive monthly parameter concentration exceedances above the seasonal 95th percentile baseline concentration AND five times the detection limit. For those stations where the 95th percentile is less than the predicted surface water quality concentrations from the EIS/EA, trigger threshold 1 is defined as 10% above the predicted surface water quality concentration from the EIS/EA for the surface water feature at a given monitoring station, AND five times the detection limit.

The 95th percentile for a given parameter is calculated based on data collected prior to September 15th 2021. The concentration of uranium at Station 39 exceeded the seasonal 95th percentile baseline concentration and was five times the detection limit in November 2022 and January through April 2023. There was no sampling completed at Station 39 in December 2022 due to unsafe ice conditions. Therefore, in February 2023, uranium at Station 39 exceeded the surface water quality trigger threshold 1.

Trigger threshold 1 action plan was undertaken. The trigger threshold 1 action plan is to confirm the result (QA/QC review and resampling) and, if the result is confirmed, to complete a trend analysis of the concentration over time.

As per the response plan, a QA/QC review of the sampling methods, laboratory report, and chain of custody was completed for the surface water quality samples collected at Station 39. No anomalies in the sampling methods, sample handling, or laboratory reporting were noted. Therefore, resampling of Station 39 was completed in March 2023, which also accounted for the scheduled March monthly surface water sampling event. Uranium at Station 39 continued to exceed the associated seasonal 95th percentile in March 2023, as such, the trigger threshold 1 exceedance for uranium at Station 39 was confirmed. Where a trigger threshold 1 exceedance is confirmed, the previous concentration data is reviewed for trends and an assessment of trigger threshold 2 is completed. On-going sampling of Station 39 in April 2023, as the trigger threshold 2 assessment was being completed, indicate ongoing exceedance of trigger threshold 1 for uranium.

SURFACE WATER QUALITY TRIGGER THRESHOLD 2 EVALUATION

Surface water quality trigger threshold 2 is defined as an exceedance of trigger threshold 1 and a statistically significant upward trend for a given indicator parameter, or for stations that have a statistically significant upward trend compared to baseline data, an increase in the magnitude of the trend compared to baseline.

Figure 2 shows the concentration of uranium over time at Station 39. Monthly sampling of Station 39 commenced in January 2016.

The trend analysis for uranium at Station 39 was completed using the Mann-Kendall test. The trend analysis was initially completed on baseline data to confirm if an upward trend in concentration of the indicator parameter is observed under baseline conditions. Surface water quality data collected prior to September 15, 2021 was considered baseline data. There was no upward trend observed in the baseline concentration of uranium at Station 39.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Uranium Exceedance of Trigger Threshold at Station 39 for Reporting Period November 2022 through April 2023**

The trend analysis was then completed on the entire available data set for uranium at Station 39. A statistically significant increasing trend in the concentration of uranium at Station 39 was identified through the Mann-Kendall analysis. Therefore, trigger threshold 2 is exceeded for uranium at Station 39 and the trigger threshold 2 action plan was undertaken for this parameter and station.

The objective of the trigger threshold 2 action plan is to determine if the exceedance is related to mine activities or a result of a natural trend, sample variation, a single anomalous event, such as a meteorological event, or seasonal variation.

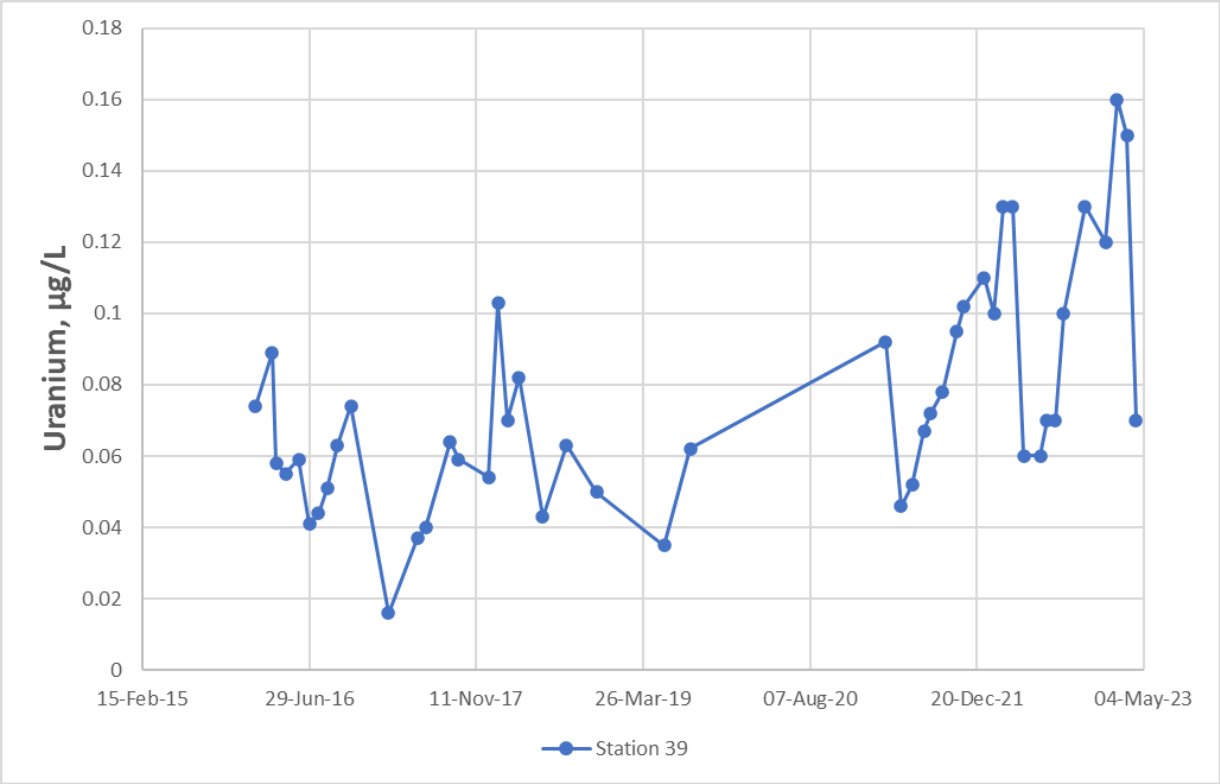


Figure 2: **Uranium Concentration at Station 39**

SURFACE WATER QUALITY TRIGGER THRESHOLD 2 ACTION PLAN RESULTS

The trigger threshold 2 action plan has 4 steps:

- Step 1 is to notify the Impact Assessment Agency of Canada (IAAC), MECP, and the Environmental Advisory Committees (EACs) of the trigger threshold 2 exceedance.
- Step 2 requires an investigation to assess whether the exceedance is mine related.
- Step 3 requires a quantitative risk evaluation.
- Step 4 is to identify exceedance source.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Uranium Exceedance of Trigger Threshold at Station 39 for Reporting Period November 2022 through April 2023**

The following summarizes the results of the investigation, quantitative risk evaluation and identification of exceedance sources for the trigger threshold 2 exceedance of uranium at Station 39.

Uranium concentrations at Station 39 for the months November, 2022 to April, 2023, when the seasonal baseline 95th percentile of uranium concentration was exceeded, are presented in Table 1.

Table 1: Uranium Concentrations at Station 39

Parameter	Fall		Winter			Spring
	8-Nov-22	13-Dec-22	9-Jan-23	13-Feb-23	8-Mar-23	11-Apr-23
Total Uranium Concentration, µg/L	0.13	-	0.12	0.16	0.15	0.07
95th Percentile Seasonal, µg/L	0.096	0.096	0.099	0.099	0.099	0.057
Interim PWQO, µg/L	5	5	5	5	5	5

General water chemistry (turbidity, TSS, conductivity, hardness, etc.) during the regular monthly sampling events were reviewed at Station 39 in 2022 and 2023 with no parameters indicating increases at station 39 during those monthly monitoring events. Table 2 presents water quality at Station 39.

Table 2: General Water Quality at Station 39

Parameter	8-Nov-22	9-Jan-23	13-Feb-23	8-Mar-23	11-Apr-23
Uranium, µg/L	0.13	0.12	0.16	0.15	0.07
Uranium 95th Percentile, µg/L	0.096	0.099	0.099	0.099	0.057
Uranium Interim PWQO, µg/L	5	5	5	5	5
Sulphate, mg/L	2.6	2.5	2.2	n/a	2.6
True Color, PCU	24.5	20.7	22	22	10
pH, field	7.87	6.59	7.38	6.96	7.35
Conductivity, uS/cm	440	449	223	248	130
DOC, mg/L	8.6	8	11.1	11	4.3
Hardness, mg/L	177	193	129	130	82
Turbidity, NTU	1.3	1.1	1.9	0.9	1.4
TDS, mg/L	270	245	110	125	50
TSS, mg/L	<1	<0.67	1.3	2	5

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Uranium Exceedance of Trigger Threshold at Station 39 for Reporting Period November 2022 through April 2023**

Turbidity data collected from a data logger near Lahtis Road (i.e., inflow to SWP3) showed a period of elevated turbidity in the roughly 48 hours prior to the April 11 surface water sample collection at Station 39 (April 9 at 14:00 to April 11 at 14:00). During this time the mean turbidity was 3.0 NTU and a maximum value of 13.6 NTU was observed. Prior to that 48 hour period, turbidity was consistently low (< 1.4 NTU, for the period of April 1 to April 9). Figure 3 provides turbidity data recorded where Goldfield Creek flows into SWP3 for the period of April 2023.

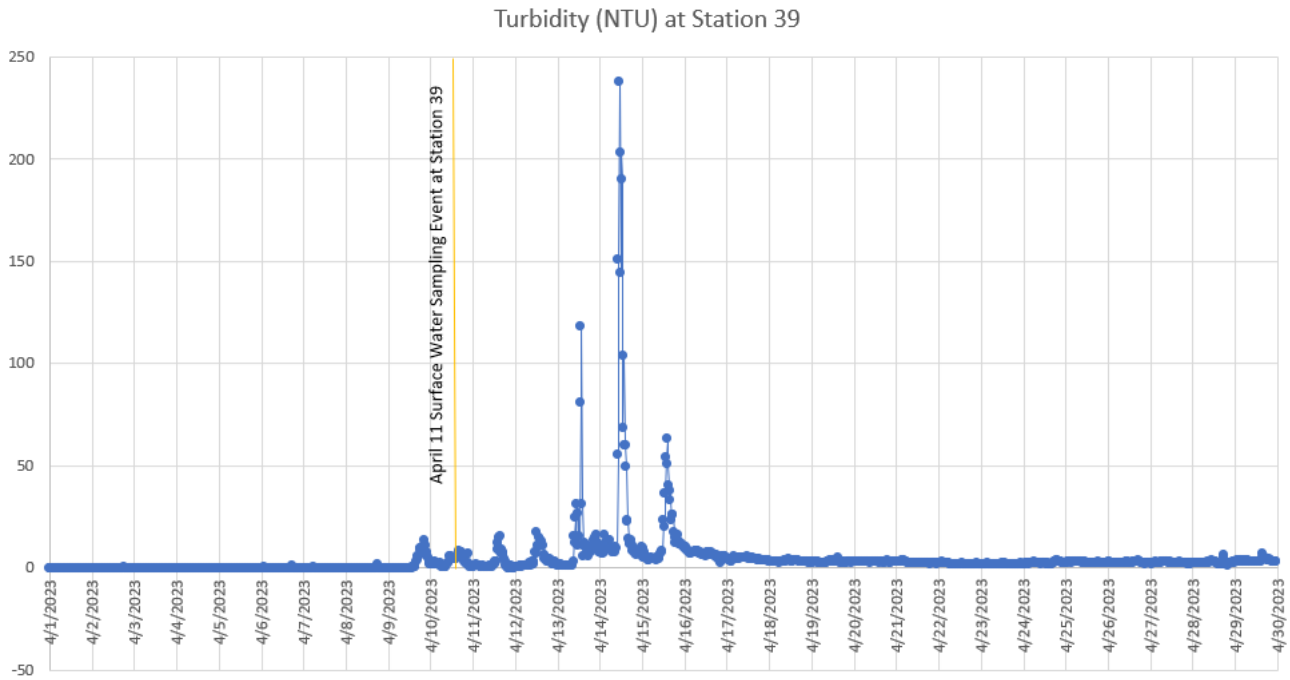


Figure 3: Turbidity (NTU) during the month of April at inflow to SWP3 (near Lahtis Road)

Based on conducted analysis it was concluded that the seasonal 95th percentile exceedances of uranium can be project related based on following observations:

- The 95th percentile of uranium for Station 39 was derived based on limited data, especially during the fall and spring shoulder seasons where trigger exceedances were observed. The paucity of baseline data makes the derived uranium triggers relatively uncertain.
- Uranium concentration is changing in a very narrow range between 0.13 µg/L and 0.16 µg/L between November 2022 and March 2023 and decreasing in April 2023 in post baseline conditions. The magnitude of the exceedance above the seasonal 95th percentile is small, the uranium exceedance represents a minor deviation from the seasonal 95th percentile which is used in trigger threshold 1.
- Figure 2 shows natural seasonal cyclical trends of uranium at Station 39 with high concentrations in winter and early spring. It was reasonable to expect that the concentration of uranium in winter of 2023 would also be high. It is expected that the concentration of uranium will become lower in summer. The concentration of uranium became already much lower in April.

Reference: Greenstone Mine Adaptive Management Plan, Investigation of Uranium Exceedance of Trigger Threshold at Station 39 for Reporting Period November 2022 through April 2023

- Spatial extent of uranium exceedance was assessed, and it was concluded that the exceedance event at Station 39 is isolated to this monitoring station. No trigger thresholds were exceeded in downstream stations 25 and 53.
- Potential sources of contamination were investigated. The alignment of the GFC diversion was sampled prior to construction in accordance with the Soil Management Plan (SMP) (SLR 2022)[3] with the summary report provided to MECP in November 2021 (Stantec 2021)[4]. Type B soil was classified in the northeastern reach of the alignment at the connection with the SWAT at SWP1. The Type B soil classification was due to elevated concentrations of arsenic, molybdenum, and uranium in soil less than 0.8 m below ground surface and elevated concentrations of arsenic, selenium, and uranium in soil below 0.8 m below ground surface. The concentration of uranium was elevated above the Table 8.1 soil quality standards (SQS) in three test pits at concentrations ranging from 2.6 µg/g to 10 µg/g compared to Table 8.1 SQS of 2.5 µg/g. While Type B soil due to uranium concentrations was defined along the GFC alignment, Type C soil was not defined. Type C soil is defined as having concentrations of metals and inorganics in leachate above the applicable leachate screening levels and aquatic protection values as noted in the SMP. Construction of the diversion and associated large amounts of disturbed soils could trigger mobilization of some uranium from the soils.
- Station 39 located upstream of the first grade control structure and water quality in SWP3 can be affected by backwater from the Southwest Arm of Kenogamisis Lake and be a source of uranium disturbance.
- General water chemistry on the regular sampling events does not show changes in water chemistry.
- Potential changing trends associated with other parameters at Station 39 were not observed, no other parameters were triggered at this station.
- The concentration of uranium is more than 30 times below PWQO and does not represent potential concern to the environment.
- Drone footage showed that area upstream of Station 39 covered with snow with no indication of failed ESC measures.

Based on the above evaluation, the potential source of exceedance of uranium at Station 39 may be related to construction of the diversion and associated soil disturbance. It is expected that uranium concentrations will reduce as the flow and turbidity through the GFC diversion stabilizes as construction of the diversion has been completed. It was already observed that the concentration of uranium in April was substantially lower in comparison with previous months.

SUMMARY AND CLOSING

In summary, during the March and April 2023 reporting periods trigger threshold 2 was exceeded for uranium at Station 39. The trigger threshold 2 action plan was completed and concluded that uranium exceedances at Station 39 may be related to construction of the diversion and associated with soil disturbance.

---

[3] SLR Consulting (SLR). 2020. Hardrock Project Soil Management Plan. Document control number: HP-MG007-EV-130-00001_0. Prepared for Greenstone Gold Mines GP Inc. August 2018.

[4] Stantec Consulting Ltd. (Stantec). 2021. GGM Greenstone Mine – In Situ Soil Sampling Report – Goldfield Creek Diversion Channel (GFCDC) Sampling Results. Document control number: HP-MG003-EV-119-0040_0. Prepared for Greenstone Gold Mines. November 21, 2021.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Uranium Exceedance of Trigger Threshold at Station 39 for Reporting Period November 2022 through April 2023**

It is expected that uranium concentrations will reduce as flow and turbidity through the GFC diversion stabilizes as construction of the diversion has been completed. No modifications to the monitoring plan are recommended at this time.

Should you have any questions or comments, please contact the undersigned.

Stantec Consulting Ltd.

<original signed by>

-04'00'

Igor Iskra Ph.D., P.Eng.
Senior Water Resources Engineer
Phone: 905 415 6371
Fax: 905 474 9889
Igor.Iskra@stantec.com

Stantec

Memo

To:	Shane Hayes Greenstone Gold Mines	From:	Igor Iskra Stantec Consulting Ltd.
File:	160900981	Date:	August 31, 2022

Reference: Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 39 for Reporting Period April through July 2022

Greenstone Gold Mines (GGM) is constructing a new open pit gold mine that includes a processes plant and ancillary facilities, collectively known as the Greenstone Mine (the Mine). Construction and operation of the gold mine are governed by a series of permits issued by the Ministry of Environment, Conservation and Parks (MECP) each with various monitoring requirements. Monitoring requirements for the Mine are also detailed in the decision statement issued for the federal Environmental Impact Statement (EIS) and notice of approval for the provincial Environmental Assessment (EA).

A surface water quality adaptive management plan was implemented in October 2021 for the Mine. The adaptive management plan for the surface water quality monitoring program is a requirement of the following permits and/or monitoring plans for the Mine.

- Conditions 7.16 through 7.17 of the temporary effluent treatment plant (TETP) Environmental Compliance Approval (ECA) number 9561-CBFLCC.
- The Multi-Media Monitoring and Management Plan (GGM 2021)[1], developed in accordance with condition 13 of the provincial EA Notice of Approval.
- The Fish and Fish Habitat Follow-Up Monitoring Plan (GGM 2021)[2], developed in accordance with conditions 3.14, 3.15, 3.16, 3.17, 3.2, 5.4, and 5.5.1. of the federal EIS Decision Statement.

The adaptive management plan for surface water quality is consistent among the TETP ECA, Multi-Media Monitoring and Management Plan, and Fish and Fish Habitat Follow-Up Monitoring Plan. The adaptive management plan defines triggers for additional assessment of cause and associated action plans that will be carried out should exceedances to the triggers occur. There are two trigger thresholds for surface water quality indicator parameters with a corresponding action plan, should the threshold be exceeded. The action plan identifies notification, investigation, and mitigation measures and strategies that may be carried out when exceedances of the triggers occur and those exceedances are deemed mine related. Trigger Threshold 1 and 2 were exceeded for iron at Station 39 and therefore the respective action plans were initiated. Station 39 is located in the upstream section the Southwest Arm Tributary (SWAT) in SWP3. The objective of the action plan is to assess whether the exceedance is mine related and, if it is mine related, to undertake a quantitative risk evaluation, identify exceedance source, and mitigate effects of the mine, as required.

Please accept this letter as the investigation report for the Trigger Threshold 2 exceedance for iron at Station 39.

[1] Greenstone Gold Mines (GGM). 2021. Hardrock Project – Multi-Media Monitoring Plan – Order in Council 404/2019 Condition 13. Document control number: HP-MG003-EV-130-0004_3. March 25, 2021.

[2] Greenstone Gold Mines (GGM). 2021. Hardrock Project Fish and Fish Habitat Federal EIS Follow-Up Monitoring Plan. Document control number HP-MG003-EV-130-0008_0. February 16, 2021.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 39 for Reporting Period April through July 2022**

SURFACE WATER QUALITY TRIGGER THRESHOLD 1 EVALUATION

The trigger thresholds and associated action plans are described in conditions 7.16 through 7.17 of the TETP ECA, Section 4.2.4 of the Multi-Media Monitoring Plan, and Section 2.2.2.2 of the Fish and Fish Habitat Follow-Up Monitoring Plan.

Surface water quality Trigger Threshold 1 is defined as three consecutive monthly parameter concentration exceedances above the seasonal 95th percentile baseline concentration AND five times the detection limit. For those stations where the 95th percentile is less than the predicted surface water quality concentrations from the EIS/EA, Trigger Threshold 1 is defined as 10% above the predicted surface water quality concentration from the EIS/EA for the surface water feature at a given monitoring station, AND five times the detection limit.

The 95th percentile for a given parameter is calculated based on data collected prior to September 15th 2021. The concentration of iron at Station 39 exceeded the seasonal 95th percentile baseline concentration and was more than five times the detection limit in April through July 2022. Therefore, in June 2022, iron at Station 39 exceeded the surface water quality Trigger Threshold 1.

Trigger Threshold 1 action plan was undertaken. Trigger Threshold 1 action plan is to confirm the result (QA/QC review and resampling) and, if the result is confirmed, to complete a trend analysis of the concentration over time.

As per the response plan, a QA/QC review of the sampling methods, laboratory report, and chain of custody was completed for the surface water quality samples collected at Station 39. No anomalies in the sampling methods, sample handling, or laboratory reporting were noted. Therefore, resampling of Station 39 was completed in July 2022, which also accounted for the scheduled July monthly surface water sampling event.

The results of the July sampling event showed that iron at Station 39 continued to exceed the associated seasonal 95th percentile. As such, the Trigger Threshold 1 exceedance for iron at Station 39 was confirmed. Where a Trigger Threshold 1 exceedance is confirmed, the previous concentration data is reviewed for trends and an assessment of Trigger Threshold 2 is completed.

SURFACE WATER QUALITY TRIGGER THRESHOLD 2 EVALUATION

Surface water quality Trigger Threshold 2 is defined as an exceedance of Trigger Threshold 1 and a statistically significant upward trend for a given indicator parameter, or for stations that have a statistically significant upward trend compared to baseline data, an increase in the magnitude of the trend compared to baseline.

The trend analysis for iron at Station 39 was completed using the Mann-Kendall test. The trend analysis was initially completed on baseline data to confirm if an upward trend in concentration of the indicator parameter is observed under baseline conditions. Surface water quality data collected prior to September 15, 2022 was considered baseline data. No upward trend was observed in the baseline concentration of iron at Station 39.

The trend analysis was then completed on the entire available data set for iron at Station 39. A statistically significant increasing trend in the concentration of iron at station 39 was identified through the Mann-Kendall analysis. Therefore, Trigger Threshold 2 is exceeded for iron at Station 39 and Trigger Threshold 2 action plan was undertaken for this parameter and station.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 39 for Reporting Period April through July 2022**

The objective of the Trigger Threshold 2 action plan is to determine if the exceedance is related to mine activities or a result of sample variation, a single anomalous event, such as a meteorological event, or seasonal variation.

SURFACE WATER QUALITY TRIGGER THRESHOLD 2 ACTION PLAN RESULTS

The Trigger Threshold 2 Action Plan has 4 steps:

- Step 1 is to notify the Impact Assessment Agency of Canada (IAAC), MECP, and the Environmental Advisory Committees (EACs) of the Trigger Threshold 2 exceedance.
- Step 2 requires an investigation to assess whether the exceedance is mine related.
- Step 3 requires a quantitative risk evaluation.
- Step 4 is to identify exceedance source.

The following summarizes the results of the investigation, quantitative risk evaluation and identification of exceedance sources for the Trigger Threshold 2 exceedance of iron at Station 39.

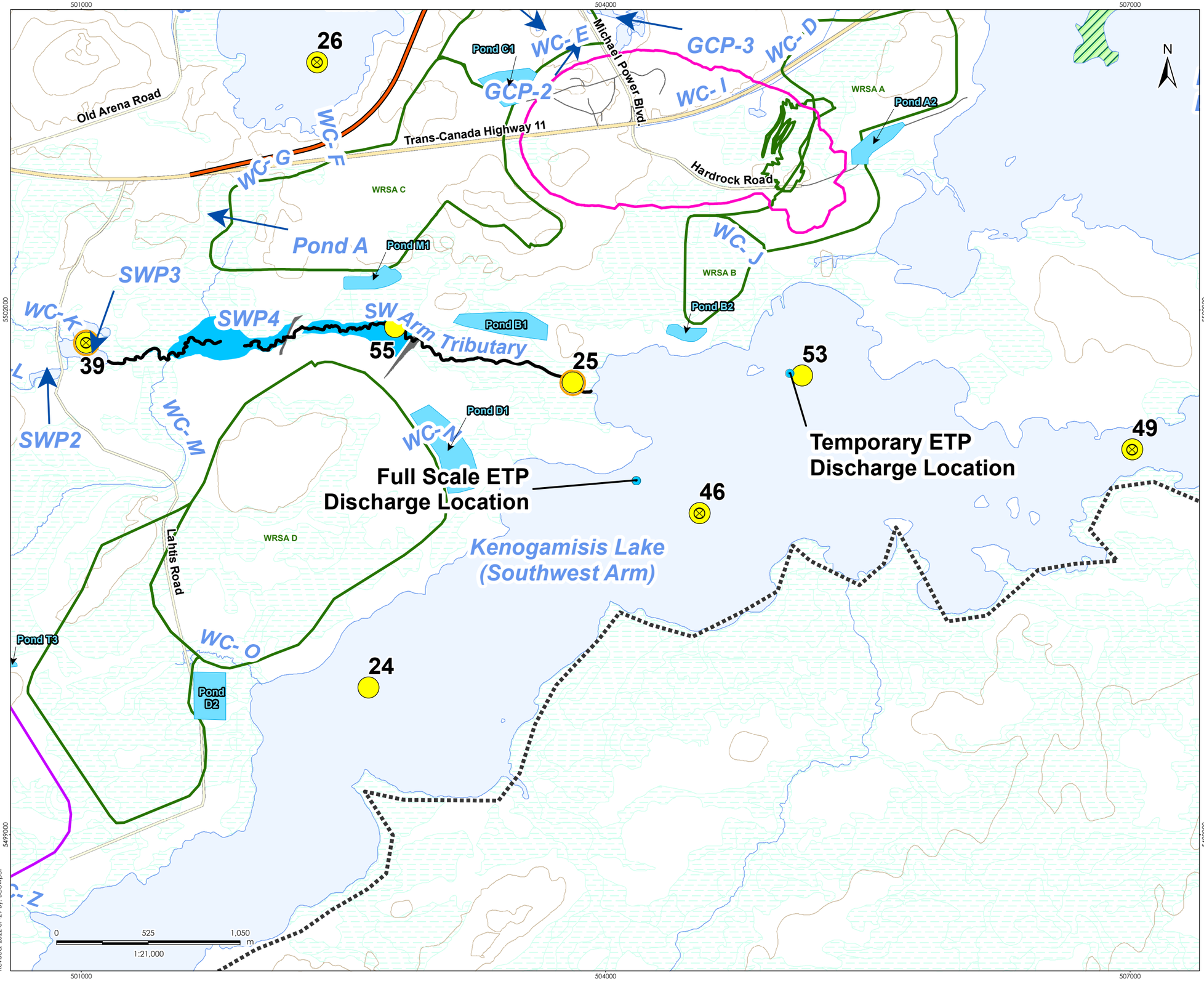
Station 39 is located in the headwater of SWAT (**Figure 1**) at SWP3. Stripping topsoil in the GFC diversion and GFC diversion dam areas are ongoing as well as construction of the GFC diversion and diversion dams. There has been no blasting near Station 39 except about 1 km upstream inside the new GFC Diversion Channel.

Iron concentrations at Station 39 for the last four months, when the baseline 95th percentile of iron concentration was exceeded, are presented in **Table 1**.

Table 1: Iron Concentrations (µg/L) at Station 39

Parameter	Spring			Summer
	4-Apr-22	10-May-22	28-Jun-22	18-Jul-22
Iron Concentration	180	230	150	180
95th Percentile Seasonal	98.2	98.2	98.2	64

Figure 2 shows the concentration of iron over time at Station 39 with a trendline. Monthly sampling of Station 39 commenced in January 2016.



\\ca0004-ppfss04\01.609\active\60960865\drawing\MXD\Surface_Water\ReportFigures\InvestigationReport2022\160961293_IR525_Fig_1_SurfaceQualityWaterStations_Operations.mxd
Revised: 2022-07-29 By: BCowper

Stantec

Legend

- Local Assessment Area
- Regional Assessment Area
- Discharge Location
- Routine Water Quality Monitoring
- Temperature/ DO Profile
- Mercury and Methylmercury Monitoring

Site Plan Revised Post Final EA/EIS

- New Highway 11 Alignment
- Collection Ponds
- Open Pit- Full Extent
- Tailings Management Facility
- Grade Control Structure
- Inundated Area ; Backwater effect
- Waste Rock Storage Area

Existing Features

- Highway
- Major Road
- Local Road
- Existing SW Arm Tributary Channel
- Watercourse
- Provincial Park
- Wetland (Eco-Site Based)
- Waterbody

Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

July 2022
160961293

Client/Project

Greenstone Gold Mines GP Inc. (GGM)
Hardrock Project

Figure No.

1

Title

Surface Water Quality Monitoring Locations

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 39 for Reporting Period April through July 2022**

Despite some construction of diversion channel upstream of Station 39, changes in general water chemistry (turbidity, TSS, conductivity, hardness, etc.) were not observed at Station 39 in 2022. **Table 2** presents water quality at Station 39. In particular, TSS values in SWAT are low (less than 8 NTU) and indicate that erosion control measures during construction activities in and around the SWAT are effective.

No obvious link was established between elevated iron concentrations and mining activities. It is possible that during spring freshet some iron was washed away from disturbed areas and caused elevated concentrations however, there is no indication of erosional process such as elevated TSS, hardness, turbidity, or electrical conductivity.

Table 2: General Water Quality at Station 39

Parameter	8-Mar-22	4-Apr-22	10-May-22	28-Jun-22	18-Jul-22
Iron, µg/L	160	180	230	150	180
95th Percentile	244.4	98.2	98.2	98.2	64
Sulphate, mg/L	2.4	2.4	2.4	2.0	2.4
True Color, TCU	15.0	16.4	58.8	64.6	63.9
pH, field	7.46	7.25	7.17	7.31	7.21
Conductivity, uS/cm	477	494	325	351	393
DOC, mg/L	7.3	7.3	11.6	12.2	6.0
Hardness, mg/L	224	226	122	137	166
Turbidity, NTU	0.9	0.8	1.7	1.8	0.8
TDS, mg/L	235	235	280	280	240
TSS, mg/L	1	1	<0.67	1	<0.67

The following observations were made:

- For the last six months, the iron concentration ranged in a narrow interval between 150 µg/L (in June) and 230 µg/L (in May). The magnitude of the exceedance above the seasonal 95th percentile is up to 2.8 times and represents a measurable deviation from the seasonal 95th percentile which is used in Trigger Threshold 1.
- Figure 2 shows natural seasonal cyclical trends of iron at Station 39 with generally high concentrations in spring and summer. Except for the January 11, 2022 sample, the concentration of iron in spring and summer 2022 seasonal cycle is similar to historical peaks. It is reasonable to expect that the concentration of iron will reduce in late summer and fall.
- Spatial extent of iron exceedance was assessed, and it was concluded that the iron exceedances were also observed in neighboring stations 25 and 52 during the same time period.
- Potential sources of iron were investigated, and no obvious sources of iron were found upstream of Station 39. Channel diversion work is ongoing but general water chemistry (**Table 2**), particularly, turbidity, TSS, color, do not show changes in water chemistry indicating erosion and sedimentation control mitigation measures are effective.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 39 for Reporting Period April through July 2022**

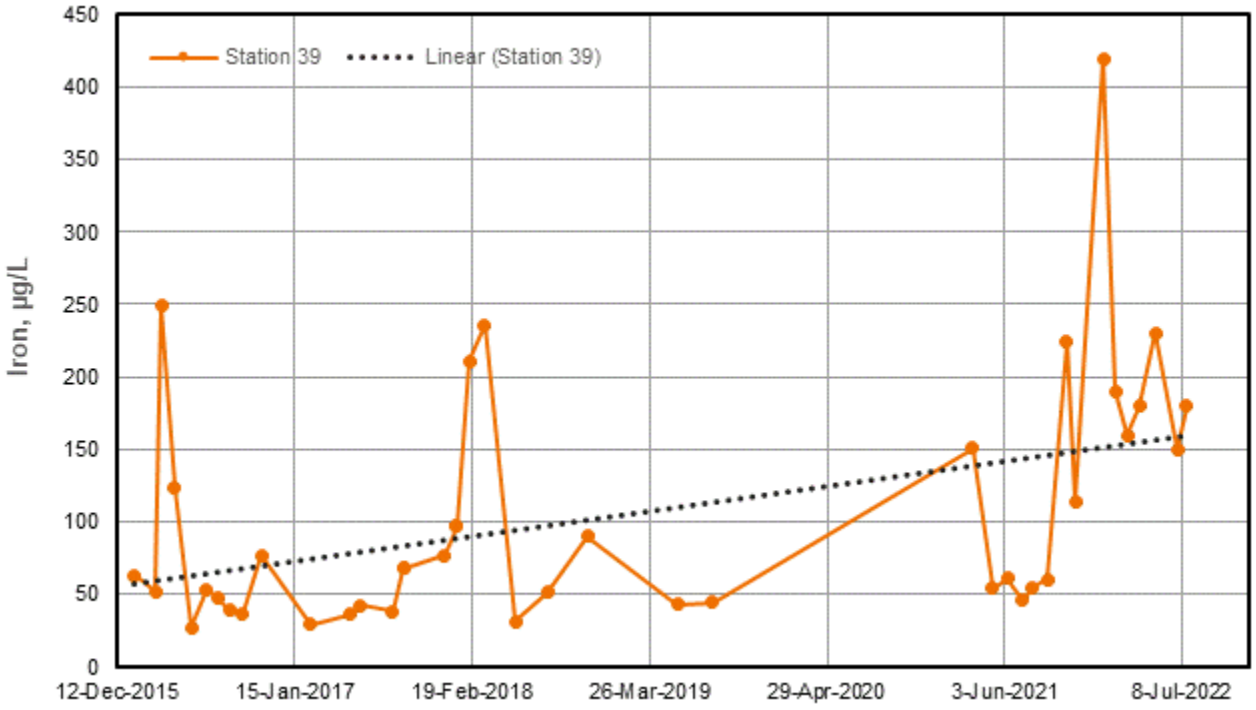


Figure 2: Iron Concentration at Station 39

Step 3 requires a quantitative risk evaluation which is a conceptual evaluation and comparison of concentrations or loads and conclusions drawn from such analysis. The concentration of iron at Station 39 was below PWQO (300 µg/L) and does not represent potential concern to the environment.

Step 4 of the Trigger Threshold 2 action plan is to identify exceedance source. Based on the above evaluation, the source of exceedance or iron at Station 39 is natural variability. No direct link to mine activities can be validated.

SUMMARY AND CLOSING

In summary, during the July 2022 reporting period Trigger Threshold 2 was exceeded for iron at Station 39. The Trigger Threshold 2 action plan was completed and concluded that no direct link of iron exceedances at Station 39 and mine related activities can be established but can be attributed to natural variability.

As the Trigger Threshold 2 exceedance of iron at Station 39 is not mine related, the monitoring plan will continue with no modifications to the monitoring plan recommended at this time.

Reference: **Greenstone Mine Adaptive Management Plan, Investigation of Iron Exceedance of Trigger Threshold at Station 39 for Reporting Period April through July 2022**

Should you have any questions or comments, please contact the undersigned.

Stantec Consulting Ltd.

<original signed by>

Igor Iskra
Water Resources Engineer

Phone: 905 415 6371
Fax: 905 474 9889
Igor.Iskra@stantec.com

EQUINOXGOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Appendix C
Groundwater Data

Appendix C.1 Monitoring Summary

Table C-1-1
Groundwater Monitoring Summary
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Monitoring Location	Spring/Summer					Summer						Fall						Location
	Level		Total Daily Volume	Sample (General Chemistry, Dissolved Metals)	Sample (VOCs, BTEX, and PHCs)	Level		Total Daily Volume	Sample (General Chemistry, Dissolved Metals)	Sample (VOCs, BTEX, and PHCs)	Trigger Threshold Monitoring Location	Level		Total Daily Volume	Sample (General Chemistry, Dissolved Metals)	Sample (VOCs, BTEX, and PHCs)	Trigger Threshold Monitoring Location	
	Manual	Data Logger				Manual	Data Logger					Manual	Data Logger					
Monitoring Wells																		
BH14-01	X	X				X	X				WL	X	X		X		WL	Adjacent to Borrow Area S1 and TMF West Dam
BH14-01A	X					X						X						Within Footprint of TMF West Dam
BH14-02	X	X				X	X					X	X		X			Adjacent to TMF Northeast Dam
BH14-02A	X	X				X	X					X	X		X			Adjacent to TMF Northeast Dam
BH14-03	X*					X*						X*						Within Footprint of TMF Northwest Dam
BH14-04	X*					X*						X*						Within Footprint of TMF Southwest Dam
BH14-05	X*					X*						X*						Within Footprint of TMF Southwest Dam
BH14-08	X*					X*						X*						Within Footprint of Overburden Storage Area 1 and Historical MacLeod Tailings
BH14-09	X*					X*						X*						Within Footprint of Open Pit and Historical MacLeod Tailings
BH14-10	X					X*						X*			X*			Between Overburden Storage Area 1 and Open Pit and within Footprint of Historical MacLeod Tailings
BH14-11	X*					X*						X*						Within Footprint of Open Pit and Historical MacLeod Tailings
BH14-12	X*					X*						X*						Within Footprint of Overburden Storage Area 1 and Historical MacLeod Tailings
BH14-15	X			X		X			X		WQ	X			X		WQ	Between WRSA D and SW Arm Tributary
BH14-18	X*					X*						X*						Within Footprint of WRSA C
BH14-23	X					X						X						Within Footprint of WRSA A/C (Contingency)
G1-OB-13	X*					X*						X*						Within Footprint of WRSA B
G2-OB-13	X*					X*						X*						Within Footprint of WRSA C
G4-OB1-13	X					X						X			X			Within Footprint of Contingency WRSA D and Pond D2
G4-OB2-13	X					X						X			X			Within Footprint of Contingency WRSA D and Pond D2
G5-OB1-14	X*					X*						X*			X*			Within Footprint of TMF
G5-OB2-14	X*					X*						X*			X*			Within Footprint of TMF
G6-BR-14	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of WRSA D and Adjacent to Southwest Arm
G6-OB-14	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of WRSA D and Adjacent to Southwest Arm
G7-OB1-14	X	X		X		X	X		X		WL/WQ	X	X		X		WL/WQ	Adjacent TMF Southwest Dam and Lake A-322
G7-OB2-14	X	X		X		X	X		X		WL/WQ	X	X		X		WL/WQ	Adjacent TMF Southwest Dam and Lake A-322
MAC-1	X					X						X						West of Open Pit
MAC-2	X*					X*						X*						Within Footprint of Open Pit
MAC-3	X*					X*						X*						Within Footprint of Open Pit
MAC-4	X*					X*						X*			X*			South of Open Pit
MAC-5	X*					X*						X*						Within Footprint of Open Pit
MAC-6	X*					X*						X*			X*			Between Open Pit and Ore Stockpile
MAC-7	X*					X*						X*						Within Footprint of WRSA B
MAC-8	X*					X*						X*						Within Footprint of Open Pit
MAC-9	X*					X*						X*						Within Footprint of Open Pit
MW1-BR-14	X	X				X	X					X	X					Downgradient of Overburden Storage Area 1
MW1-OB-14	X	X				X	X					X	X					Downgradient of Overburden Storage Area 1
MW2-OB-13	X	X				X	X				WL	X	X				WL	Downgradient of WRSA A/C (Contingency) and Adjacent to Mosher Lake
MW3-BR-13	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of WRSA A and Adjacent to Central Basin
MW3-OB-13	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of WRSA A and Adjacent to Central Basin
MW4-OB-13	X	X				X	X					X	X					Downgradient of WRSA B and Adjacent to Southwest Arm
MW5-OB1-13	X	X				X	X					X	X		X			Downgradient of WRSA C and Process Plan
MW5-OB2-13	X	X				X	X					X	X		X			Downgradient of WRSA C and Process Plan
MW6-OB-13	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of WRSA C and Adjacent to HWY 11
MW7-BR-13	X	X				X	X					X	X		X			Downgradient of WRSA D (northwest)
MW8-OB-14	X	X				X	X				WL	X	X		X		WL	Downgradient of WRSA D and Adjacent to SW Arm Tributary
MW9-OB1-13	X	X				X	X					X	X		X			Downgradient of Contingency WRSA D (Contingency) and Overburden Storage Area 2
MW9-OB2-13	X	X				X	X					X	X		X			Downgradient of Contingency WRSA D (southeast)
MW10-OB-14	X*					X*						X*						Within Footprint of WRSA D
MW11-BR-14	X*					X*						X*			X*			Within Footprint of TMF
MW11-OB-14	X*					X*						X*			X*			Within Footprint of TMF
MW12-OB-14	X					X						X			X*			Background - South of TMF and Goldfield Creek Tributary
MW13-OB-14	X	X				X	X					X	X		X			Background - South of TMF and Adjacent to Lake A-323
MW14-BR-14	X	X				X	X				WL	X	X		X		WL	Background - Southwest of TMF and Within Footprint of Aggregate Source T2
MW14-OB-14	X	X				X	X				WL	X	X		X		WL	Background - Southwest of TMF and Within Footprint of Aggregate Source T2
MW15-BR-14	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of TMF and north of Goldfield Creek Tributary
MW15-OB-14	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of TMF and north of Goldfield Creek Tributary
MW16-BR-14	X*					X*						X*						Within Footprint of TMF
MW16-OB-14	X*					X*						X*						Within Footprint of TMF
MW17-OB-14	X	X				X	X				WL	X	X		X		WL	Southeast Corner of HWY 11 and Lahtis Road
MW18-BR-21 (MW-A)	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of WRSA C, Adjacent to Mosher Lake
MW19-BR-21 (MW-B)	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of WRSA A, Adjacent to Barton Bay,
MW19-OB-21 (MW-B)	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of WRSA A, Adjacent to Barton Bay, overburden
MW20-BR-21 (MW-D)	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of TMF, adjacent to Southwest Arm, bedrock
MW20-OB-21 (MW-D)	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of TMF, adjacent to Southwest Arm, overburden
MW21-BR-21 (MW-F)	X	X		X	NI	X	X		X	X[1,23]	HG/WQ	X	X		X	X[1,23]	HG/WQ	Downgradient of Process Plant, overburden
MW22-OB-21 (MW-M)	X			X		X			X		WQ	X			X		WQ	Between the Ore Stockpile and Kenogamisis Lake, to the West of MWS-14-04 and East of Proposed Monitoring Well MW-G
MW23-OB-21 (MW-G)	X	X		X	NI	X	X		X	X[1,23]	HG/WQ	X	X		X	X[1,23]	HG/WQ	Downgradient of Process Plant and Pond B1, overburden
MW24-BR-21 (MW-N)	X			X		X			X		WQ	X			X		WQ	Between the TMF and Goldfield Creek Tributary, Northwest of Proposed Monitoring Well MW-E and Southeast of G7-14
MW24-OB-21 (MW-N)	X			X		X			X		WQ	X			X		WQ	Between the TMF and Goldfield Creek Tributary, Northwest of Proposed Monitoring Well MW-E and Southeast of G7-14
MW25-BR-21 (MW-E)	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of TMF, adjacent to Goldfield Creek Tributary, bedrock
MW25-OB-21 (MW-E)	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of TMF, adjacent to Goldfield Creek Tributary, overburden
MW16-04	X	X				X	X					X	X					Within Footprint of Aggregate Source S4
MW16-05	X	X				X	X					X	X					Adjacent to Aggregate Source T2
MW03-BR-18	X	X		X		X	X		X		WQ	X	X		X		WQ	East of WRSA A, Adjacent to Central Basin
MW03-OB-18	X	X		X		X	X		X		WQ	X	X		X		WQ	East of WRSA A, Adjacent to Central Basin
MW10-18	X*					X*						X*			X*			Within Footprint of Open Pit, South of Historical MacLeod Tailings

Table C-1-1
Groundwater Monitoring Summary
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Monitoring Location	Spring/Summer					Summer						Fall						Location
	Level		Total Daily Volume	Sample (General Chemistry, Dissolved Metals)	Sample (VOCs, BTEX, and PHCs)	Level		Total Daily Volume	Sample (General Chemistry, Dissolved Metals)	Sample (VOCs, BTEX, and PHCs)	Trigger Threshold Monitoring Location	Level		Total Daily Volume	Sample (General Chemistry, Dissolved Metals)	Sample (VOCs, BTEX, and PHCs)	Trigger Threshold Monitoring Location	
	Manual	Data Logger				Manual	Data Logger					Manual	Data Logger					
Monitoring Wells (continued)																		
MWS-14-01	X	X				X	X				WL	X	X		X		WL	Downgradient of WRSA D (Northwest)
MWS-14-02 BR	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of WRSA D and Adjacent to Southwest Arm
MWS-14-02 OB	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of WRSA D and Adjacent to Southwest Arm
MWS-14-03 OB1	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of WRSA D and South of SW Arm Tributary
MWS-14-03 OB2	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of WRSA D and South of SW Arm Tributary
MWS-14-04	X			X		X			X		WQ	X			X		WQ	Downgradient of WRSA B and Adjacent to Southwest Arm
MWS-14-05 BR	X*					X*						X*						Within Footprint of WRSA C
MWS-14-05 OB	X*					X*						X*						Within Footprint of WRSA C
MWS-14-06	X					X						X			X			Adjacent to Process Plant
MWS-14-07 BR	X	X		X		X	X		X		WQ	X	X		X		WQ	Downgradient of TMF and Adjacent to Soutwest Arm
MWS-14-07 OB	X	X		X		X	X		X		WL/WQ	X	X		X		WL/WQ	Downgradient of TMF and Adjacent to Soutwest Arm
Historical MacLeod Tailings Monitoring Wells																		
96-01	X*					X*						X*			X			Between Overburden Storage Area 1 and Open Pit, Within Footprint of Historical MacLeod Tailings
96-02	X*					X*						X*			X			Between Overburden Storage Area 1 and Open Pit, Within Footprint of Historical MacLeod Tailings
96-03	X					X						X			X			Downgradient of Overburden Storage Area 1 and Within Footprint of Historical MacLeod Tailings
96-04	X					X						X			X			Downgradient of Overburden Storage Area 1 and Within Footprint of Historical MacLeod Tailings
96-05	X*					X*						X*						Within Footprint of Open Pit
96-06	X*					X*						X*						Within Footprint of Open Pit
96-07A1	X*					X*						X*			X*			Between Overburden Storage Area 1 and Open Pit, Within Footprint of Historical MacLeod Tailings
96-07A2	X*					X*						X*			X*			Between Overburden Storage Area 1 and Open Pit, Within Footprint of Historical MacLeod Tailings
96-08A	X*					X*						X*						Within Footprint of Open Pit
96-08B	X*					X*						X*						Within Footprint of Open Pit
96-08C	X*					X*						X*						Within Footprint of Open Pit
96-09A1	X*					X*						X*						Within Footprint of Overburden Storage Area 1 and Historical MacLeod Tailings
96-09A2	X*					X*						X*						Within Footprint of Overburden Storage Area 1 and Historical MacLeod Tailings
96-09A3	X*					X*						X*						Within Footprint of Overburden Storage Area 1 and Historical MacLeod Tailings
96-09A4	X*					X*						X*						Within Footprint of Overburden Storage Area 1 and Historical MacLeod Tailings
96-10A1	X*					X*						X*						Within Footprint of Overburden Storage Area 1 and Historical MacLeod Tailings
Historical MacLeod Tailings Monitoring Wells (Continued)																		
96-10A2	X*					X*						X*						Within Footprint of Overburden Storage Area 1 and Historical MacLeod Tailings
96-10A3	X*					X*						X*						Within Footprint of Overburden Storage Area 1 and Historical MacLeod Tailings
96-10B	X*					X*						X*						Within Footprint of Overburden Storage Area 1 and Historical MacLeod Tailings
96-10C	X*					X*						X*						Within Footprint of Overburden Storage Area 1 and Historical MacLeod Tailings
96-11A1	X*					X*						X*						Within Footprint of Overburden Storage Area 1 and Historical MacLeod Tailings
96-11A2	X*					X*						X*						Within Footprint of Overburden Storage Area 1 and Historical MacLeod Tailings
96-12A	X					X						X			X			Downgradient of WRSA A and Within Footprint of Historical MacLeod Tailings
96-12B	X	X				X	X					X	X		X			Downgradient of WRSA A and Within Footprint of Historical MacLeod Tailings
96-13	X*					X*						X*						Between Overburden Storage Area 1 and Open Pit, Within Footprint of Historical MacLeod Tailings
96-14b	X					X						X			X			Within Footprint of Overburden Storage Area 1 and Historical MacLeod Tailings
96-15A1	X*					X*						X*						Within Footprint of Open Pit
96-15A3	X*					X*						X*						Within Footprint of Open Pit
96-15B	X*					X*						X*						Within Footprint of Open Pit
MW07-18	X	X				X	X					X	X		X			Within Footprint of Historical MacLeod Low Tailings, Adjacent to Barton Bay
MW08-18	X	X				X	X				WL	X	X		X		WL	Within Footprint of Historical MacLeod Low Tailings, Adjacent to Barton Bay
MW09-18	X	X				X	X					X	X		X			Within Footprint of Historical MacLeod Low Tailings, Adjacent to Barton Bay
Historical Hardrock Tailings Monitoring Wells																		
H96-01	X*					X*						X*						Within Footprint of WRSA A and Historical Hardrock Tailings
H96-02A	X*					X*						X*						Within Footprint of WRSA A and Historical Hardrock Tailings
H96-02B	X*					X*						X*						Within Footprint of WRSA A and Historical Hardrock Tailings
H96-02C	X*					X*						X*						Within Footprint of WRSA A and Historical Hardrock Tailings
H96-03	X*					X*						X*						Within Footprint of WRSA A and Historical Hardrock Tailings
H96-04A1	X*					X*						X*						Within Footprint of WRSA A and Historical Hardrock Tailings
H96-04B	X*					X*						X*						Within Footprint of WRSA A and Historical Hardrock Tailings
H96-05A1	X*					X*						X*						Within Footprint of WRSA A and Historical Hardrock Tailings
H96-05A2	X*					X*						X*						Within Footprint of WRSA A and Historical Hardrock Tailings
H96-06A1	X*					X*						X*			X			Within Footprint of WRSA A and Historical Hardrock Tailings
H96-06A2	X*					X*						X*			X			Within Footprint of WRSA A and Historical Hardrock Tailings
H96-06A3	X*					X*						X*			X			Within Footprint of WRSA A and Historical Hardrock Tailings
H96-06B	X*					X*						X*			X			Within Footprint of WRSA A and Historical Hardrock Tailings
MW01-OB1-18	X	X				X	X					X	X		X			Within Footprint of Historical Hardrock Tailings, Adjacent to Central Basin
MW01-OB2-18	X	X				X	X				WL	X	X		X		WL	Within Footprint of Historical Hardrock Tailings, Adjacent to Central Basin
MW02-OB-18	X					X						X			X			Within Footprint of Historical Hardrock Tailings, Adjacent to Central Basin
Drive-Point Piezometers																		
DP2-14D	X					X						X						Downgradient of WRSA D and South of SW Arm Tributary
DP2-14S	X					X						X						SW Arm Tributary
DP3-14D	X					X						X						SW Arm Tributary
DP3-14S	X					X						X						SW Arm Tributary
DP3-22D	X					X						X						SW Arm Tributary
DP3-22D	X					X						X						SW Arm Tributary
DP4-14	X					X						X						SW Arm Tributary
DP5-14	X					X						X						WC-M
DP6-14D	X*	X*				X*	X*					X*	X*					Goldfield Creek
DP6-14S	X*					X*						X*						Goldfield Creek
DP-A	X					X					WL	X					WL	Within the footprint of the sparse treed fend located east of the TMF
DP-B	X					X					WL	X					WL	Within wetland located at the headwaters of SWAT and confluence with Goldfield Creek Diversion
DP-C	X			NI		X			X		WQ	X			X		WQ	Within Goldfield Cree, downgradient of TMF and Pond T1
Seeps																		
Seep 1															X			Downgradient of WRSA A and Historical MacLeod Tailings
Seep 3															X			Downgradient of WRSA B and Adjacent to Southwest Arm
Seep 5															X			Within Footprint of WRSA A/C (Contingency)

Table C-1-1
Groundwater Monitoring Summary
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Monitoring Location	Spring/Summer					Summer						Fall						Location
	Level		Total Daily Volume	Sample (General Chemistry, Dissolved Metals)	Sample (VOCs, BTEX, and PHCs)	Level		Total Daily Volume	Sample (General Chemistry, Dissolved Metals)	Sample (VOCs, BTEX, and PHCs)	Trigger Threshold Monitoring Location	Level		Total Daily Volume	Sample (General Chemistry, Dissolved Metals)	Sample (VOCs, BTEX, and PHCs)	Trigger Threshold Monitoring Location	
	Manual	Data Logger				Manual	Data Logger					Manual	Data Logger					
Seeps (continued)																		
Seep 6															X			Downgradient of Overburden Storage Area 1, within Footprint of Historical MacLeod Tailings
Seep 7															X			Downgradient of Overburden Storage Area 1, within Footprint of Historical MacLeod Tailings
Seep 8															X			Downgradient of Overburden Storage Area 1, within Footprint of Historical MacLeod Tailings
Seep 9															X			Within Footprint of Open Pit and Historical MacLeod Tailings
Seep 10															X			Within Footprint of WRSA A and Adjacent to HWY 11
Seep 11															X			Within Footprint of Open Pit and Historical MacLeod Tailings
Exploration Boreholes, Historical Shafts and Mine Infrastructure																		
Hardrock Shaft 1				NP					NP						NP			Downgradient of WRSA A and Adjacent to Central Basin
Hardrock Shaft 2	NP**		NP	NP		NP**		NP	NP		PV	NP**		NP	NP		PV	Within Footprint of WRSA A and Adjacent to Historical Hardrock Tailings
Hardrock Glory Hole				NP					NP						NP			Within Footprint of Open Pit and Adjacent to Historical MacLeod Tailings
MacLeod Shaft 1															X		PV	Within Footprint of Open Pit and Adjacent to Historical MacLeod Tailings
Mosher Shaft 1	X	X	NP			X	X	NP			PV	X	X	NP	X		PV	Adjacent to WRSA C and Mosher Lake
Construction Dewatering (Process Plant - Temp ETP PTTW)			X					X						X				Associated with Construction of the Process Plant, TMF, Goldfield Creek Diversion, Culvert Crossings, Water Management Ponds
EP137	X*					X*						X*						Within Footprint of WRSA A
MM006	X*					X*						X*						Within Footprint of Open Pit
MM140	X*					X*						X*						Within Footprint of Open Pit
MHT SCS East Chamber			X					X			HG			X			HG	MHT Seepage Collection System, located between MHT and Kenogamisis Lake
Open Pit and Underground Workings			NP					NP			PV			X			PV	Northern Portion of Project Development Area
Vibrating Wire Piezometers																		
HR041		X					X					X	X					Between the Open Pit and Barton Bay
TN014		X					X					X	X					Between the Open Pit and Central Basin
Total Existing Monitoring Locations:	**153**	**56**	**5**	**35**	**2**	**153**	**56**	**5**	**35**	**2**		**155**	**56**	**5**	**92**	**2**		
Proposed Monitoring Locations																		
Aggregate Pit S1			NP					NP			PV			NP			PV	Northeast of the TMF, Headwaters of the Goldfield Creek Diversion
Aggregate Pit T2			NP					NP			PV			NP			PV	Southwest of the TMF
Aggregate Pit S4			NP					NP			PV			NP			PV	Northeast of the TMF
TMF Quarry			NP					NP						NP				
Construction Dewatering (TMF - South Side PTTW)			NP					NP						NP				
Construction Dewatering (Goldfield Creek Diversion - South Side PTTW)			NP					NP						NP				
Construction Dewatering (Culvert Crossings - South Side PTTW)			NP					NP						NP				
Construction Dewatering (Water Management Ponds - Full Scale ETP PTTW)			NP					NP						NP				
Proposed Monitoring Well MW-C (Ob)	NI	NI		NI		NI	NI		NI		WQ	NI	NI		NI		WQ	Downgradient of TMF and Goldfield Creek Tributary, adjacent to Southwest Arm, overburden
Proposed Monitoring Well MW-C (Bdrk)	NI	NI		NI		NI	NI		NI		WQ	NI	NI		NI		WQ	Downgradient of TMF and Goldfield Creek Tributary, adjacent to Southwest Arm, bedrock
Proposed Monitoring Well MW-H	NI					NI					HG	NI					HG	Downgradient of MHT Seepage Collection System
Proposed Monitoring Well MW-I	NI	NI				NI	NI				HG	NI	NI				HG	Downgradient of MHT Seepage Collection System
Proposed Monitoring Well MW-J	NI					NI					HG	NI					HG	Downgradient of MHT Seepage Collection System
Proposed Monitoring Well MW-K	NI					NI					HG	NI					HG	Downgradient of MHT Seepage Collection System
Proposed Monitoring Well MW-L (Ob)	NI			NI		NI			NI		WQ	NI			NI		WQ	Between WRSA D and Kenogamisis Lake to the northeast of MWS-14-02 and southwest of G6-14
Proposed Monitoring Well MW-L (Bdrk)	NI			NI		NI			NI		WQ	NI			NI		WQ	Between WRSA D and Kenogamisis Lake to the northeast of MWS-14-02 and southwest of G6-14
Proposed Monitoring Well MW-O (Ob)	NI			NI		NI			NI		WQ	NI			NI		WQ	Monitoring well northwest of WRSA D contingency to be installed once access roads have been constructed
Proposed Monitoring Well MW-O (Bdrk)	NI			NI		NI			NI		WQ	NI			NI		WQ	Monitoring well northwest of WRSA D contingency to be installed once access roads have been constructed
Proposed Monitoring Well MW-P	NI			NI		NI			NI			NI			NI			Monitoring well downgradient of WRSA B and the construction and demolition landfill
Proposed Monitoring Well MW-S	NI			NI		NI			NI			NI			NI			Monitoring well downgradient of WRSA B and the construction and demolition landfill
Vibrating Wire Piezometer VWP-A-A	NI	NI				NI	NI					NI	NI					Between the Open Pit and Southwest Arm, shallow bedrock
Vibrating Wire Piezometer VWP-A-B	NI	NI				NI	NI					NI	NI					Between the Open Pit and Southwest Arm, intermediate bedrock
Vibrating Wire Piezometer VWP-A-C	NI	NI				NI	NI					NI	NI					Between the Open Pit and Southwest Arm, intermediate bedrock
Vibrating Wire Piezometer VWP-A-D	NI	NI				NI	NI					NI	NI					Between the Open Pit and Southwest Arm, deep bedrock
Vibrating Wire Piezometer VWP-D-A	NI	NI				NI	NI					NI	NI					West of Open Pit, shallow bedrock
Vibrating Wire Piezometer VWP-D-B	NI	NI				NI	NI					NI	NI					West of Open Pit, intermediate bedrock
Vibrating Wire Piezometer VWP-D-C	NI	NI				NI	NI					NI	NI					West of Open Pit, intermediate bedrock
Vibrating Wire Piezometer VWP-D-D	NI	NI				NI	NI					NI	NI					West of Open Pit, deep bedrock
Total Proposed Monitoring Locations:	**22**	**11**	**0**	**10**	**0**	**22**	**11**	**0**	**10**	**0**		**22**	**11**	**0**	**10**	**0**		
Total Proposed and Existing Monitoring Locations:	**175**	**67**	**5**	**45**	**2**	**175**	**67**	**5**	**45**	**2**		**177**	**67**	**5**	**102**	**2**		

Notes:

Decommissioned or overprinted by mine infrastructure
* Monitoring requirements to be re-evaluated once construction starts. Majority of locations will be removed from program but select locations will require replacement wells to be constructed outside of infrastructure footprint.
** Monthly manual water level monitoring to commence once pumping from shaft has started.
*** Mosher Shaft 1 is sampled at 5 different depth intervals (21 m, 122 m, 244, 396 m and 512 m)
MHT MacLeod High Tailings
Ob/BR Nested monitoring well with one screen in overburden and one screen in shallow bedrock.
TC Location inaccessible due to tree clearing activities
F Frozen. Pressure transducer could not be downloaded
NP No pumping occurred during monitoring period
PV Pumped Volume
WL Water Level
HG Horizontal Gradient
WQ Water Quality
NI Not Yet Installed
FOS Sampling begins once fuel is stored on site

Appendix C.2 Well Completion Table

Table C-2-1
Well Completion Details
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Name	Coordinates UTM NAD 83 Zone 16 Easting	Coordinates UTM NAD 83 Zone 16 Northing	Top of Casing Elevation	Stick-up	Ground Elevation	Total Depth Drilled	Azimuth	Dip	Top of Sand	Bottom of Sand	Top of Screen	Bottom of Screen	Screen Material Description	Hydrostratigraphic Unit
	m	m	m AMSL	m	m AMSL	m	degrees	degrees	m BGS	m BGS	m BGS	m BGS		
Monitoring Wells														
BH14-01	498663	5500278	339.61	0.81	338.80	25.10	-	-	4.57	19.50	16.45	19.50	SAND and GRAVEL	GLACIOFLUVIAL SEDIMENT
BH14-01A	499026	5500466	338.74	0.34	338.40	19.80	-	-	1.82	3.66	2.14	3.66	SAND and GRAVEL TILL	TILL
BH14-02	500179	5500320	337.66	0.96	336.70	17.00	-	-	0.61	1.98	0.61	1.22	SILTY SAND	GLACIOFLUVIAL SEDIMENT
BH14-02A	500131	5500322	337.96	1.26	336.70	4.66	-	-	2.80	4.60	3.10	4.60	BEDROCK	SHALLOW BEDROCK
BH14-03	500966	5499090	334.10	0.80	333.30	37.80	-	-	6.10	10.97	7.62	10.67	SILTY SAND TILL	TILL
BH14-04	499984	5498174	336.22	0.92	335.30	39.80	-	-	18.90	24.19	19.58	22.63	SILTY SAND TILL	TILL
BH14-05	499167	5497601	333.18	0.98	332.20	22.80	-	-	1.83	4.70	2.21	3.37	SILT	GLACIOFLUVIAL SEDIMENT
BH14-06	498112	5498123	338.19	0.69	337.50	30.80	-	-	4.27	7.92	4.57	7.62	SAND	GLACIOFLUVIAL SEDIMENT
BH14-07	504511	5503474	337.42	1.12	336.30	12.00	-	-	6.30	11.30	8.20	11.20	TAILINGS	TAILINGS
BH14-08	504714	5503856	339.69	0.89	338.80	26.20	-	-	5.90	10.10	6.80	9.80	TAILINGS	TAILINGS
BH14-09	504470	5503256	346.03	0.93	345.10	20.70	-	-	13.40	17.70	13.70	16.70	SILTY SAND TO SANDY SILT TILL	TILL
BH14-10	504741	5503408	342.37	0.97	341.40	36.30	-	-	6.90	10.80	7.40	10.50	TAILINGS	TAILINGS
BH14-11	504370	5503406	343.86	0.96	342.90	19.20	-	-	7.90	12.20	8.90	11.90	TAILINGS	TAILINGS
BH14-12	504470	5503644	341.55	0.95	340.60	30.20	-	-	6.40	10.70	7.40	10.40	TAILINGS	TAILINGS
BH14-15	502851	5501580	331.37	0.77	330.60	14.30	-	-	4.90	9.10	6.10	9.10	SILTY SAND TILL	TILL
BH14-18	502429	5502380	338.30	0.90	337.40	4.30	-	-	0.50	1.70	0.80	1.40	SAND and GRAVEL	GLACIOFLUVIAL SEDIMENT
BH14-23	503782	5503775	342.14	0.94	341.20	8.90	-	-	2.40	6.40	3.30	6.30	SILTY SAND TO GRAVELLY SAND	GLACIOFLUVIAL SEDIMENT
G1-OB-13	504776	5502334	332.04	0.91	331.13	6.96	-	-	2.84	4.65	3.33	4.85	SAND to SILTY SAND	GLACIOFLUVIAL SEDIMENT
G2-OB-13	502992	5502748	344.16	0.87	343.29	4.24	-	-	1.17	3.51	1.54	3.07	CLAY	CLAY
G4-OB1-13	501679	5499784	333.69	0.91	332.78	12.19	-	-	9.91	12.19	10.67	12.19	SANDY SILT TILL	TILL
G4-OB2-13	501677	5499784	333.68	0.91	332.77	5.49	-	-	4.11	5.49	4.57	5.18	SANDY SILT	GLACIOFLUVIAL SEDIMENT
G5-OB1-14	499499	5498253	333.32	1.07	332.25	12.80	-	-	10.36	12.19	10.67	12.19	SILT TILL	TILL
G5-OB2-14	499499	5498254	333.38	1.05	332.33	5.18	-	-	3.05	5.19	3.67	5.19	SILT to SAND	GLACIOFLUVIAL SEDIMENT
G6-BR-14	503229	5500999	331.89	0.87	331.02	15.65	-	-	10.67	12.75	10.92	12.44	BEDROCK	SHALLOW BEDROCK
G6-OB-14	503227	5500998	331.68	0.64	331.04	3.05	-	-	1.22	3.05	1.52	3.05	SILT to CLAYEY SILT	GLACIOFLUVIAL SEDIMENT
G7-OB1-14	498165	5497879	334.39	0.88	333.51	15.24	-	-	13.41	15.24	13.72	15.24	SILT to SAND and GRAVEL	GLACIOFLUVIAL SEDIMENT
G7-OB2-14	498166	5497878	334.24	0.74	333.50	5.85	-	-	3.35	5.85	3.56	5.18	SAND	GLACIOFLUVIAL SEDIMENT
MAC-1	503580	5502775	344.14	0.39	343.75	4.98	-	-	-	-	2.54	4.98	BEDROCK	SHALLOW BEDROCK
MAC-2	503597	5502873	342.27	0.57	341.70	4.78	-	-	-	-	2.46	3.99	BEDROCK	SHALLOW BEDROCK
MAC-3	504094	5502597	339.35	0.91	338.44	4.72	-	-	-	-	1.68	4.72	BEDROCK	SHALLOW BEDROCK
MAC-4	504184	5502573	338.02	0.48	337.54	4.83	-	-	-	-	1.78	4.83	BEDROCK	SHALLOW BEDROCK
MAC-5	504210	5502643	337.81	0.70	337.11	4.75	-	-	-	-	1.70	4.75	BEDROCK	SHALLOW BEDROCK
MAC-6	504354	5502544	336.96	0.73	336.23	6.78	-	-	4.00	6.78	2.80	6.20	BEDROCK	SHALLOW BEDROCK
MAC-7	504595	5502427	335.03	0.94	334.09	6.40	-	-	3.43	6.40	6.40	2.80	BEDROCK	SHALLOW BEDROCK
MAC-8	503905	5502744	342.83	0.81	342.02	4.85	-	-	0.90	4.85	1.50	4.85	BEDROCK	SHALLOW BEDROCK
MAC-9	504010	5502736	342.15	0.83	341.32	4.88	-	-	0.70	4.88	1.50	4.50	BEDROCK	SHALLOW BEDROCK
MW1-BR-14	503837	5504139	332.68	0.72	331.96	14.15	-	-	9.60	11.43	9.91	11.43	BEDROCK	SHALLOW BEDROCK
MW1-OB-14	503835	5504139	332.70	0.71	331.99	3.05	-	-	1.22	3.05	1.52	3.05	SAND to SILT to SILTY-CLAY	GLACIOFLUVIAL SEDIMENT
MW2-OB-13	502866	5503690	334.31	0.77	333.54	4.11	-	-	3.05	4.11	3.20	4.11	SILTY SAND	GLACIOFLUVIAL SEDIMENT
MW3-BR-13	505814	5502934	331.19	0.80	330.39	14.91	-	-	13.03	14.91	13.39	14.91	BEDROCK	SHALLOW BEDROCK
MW3-OB-13	505812	5502935	331.23	0.91	330.32	10.52	-	-	8.63	10.52	8.99	10.52	SILTY SAND	GLACIOFLUVIAL SEDIMENT
MW4-OB-13	504915	5502024	330.77	0.78	329.99	7.26	-	-	2.63	4.46	2.94	4.46	SILT to SILTY CLAY	CLAY
MW5-OB1-13	502691	5502101	333.11	1.04	332.07	13.01	-	-	9.32	12.11	10.59	12.11	HARD TILL	TILL
MW5-OB2-13	502690	5502106	333.09	0.96	332.13	6.35	-	-	4.57	6.35	4.88	5.79	HARD TILL	TILL
MW6-OB-13	502067	5502769	337.01	0.90	336.11	3.25	-	-	1.68	3.25	2.34	3.25	SAND	GLACIOFLUVIAL SEDIMENT
MW7-BR-13	501560	5500971	335.49	0.80	334.69	12.18	-	-	9.45	12.18	9.85	12.18	BEDROCK	SHALLOW BEDROCK
MW8-OB-14	503637	5501573	330.69	0.64	330.05	9.75	-	-	3.66	6.40	4.57	6.10	SANDY SILT	GLACIOFLUVIAL SEDIMENT
MW9-OB1-13	501735	5499186	333.06	0.78	332.28	12.29	-	-	10.06	12.29	10.77	12.29	SANDY SILT to SILTY SAND TILL	TILL
MW9-OB2-13	501731	5499185	333.32	0.72	332.60	4.57	-	-	2.87	4.57	3.35	4.27	SANDY SILT to SILTY SAND TILL	TILL
MW10-OB-14	502563	5500943	333.64	0.81	332.83	5.18	-	-	3.35	5.18	3.66	5.18	SILTY SAND	GLACIOFLUVIAL SEDIMENT
MW11-BR-14	499902	5499832	337.70	0.66	337.04	7.92	-	-	4.57	6.40	4.88	6.40	BEDROCK	SHALLOW BEDROCK
MW11-OB-14	499901	5499831	337.69	0.66	337.03	2.13	-	-	0.61	2.13	0.91	2.13	SANDY SILT	GLACIOFLUVIAL SEDIMENT
MW12-OB-14	498460	5496708	336.22	0.78	335.45	4.57	-	-	2.74	4.57	3.05	4.57	SAND and SILT	GLACIOFLUVIAL SEDIMENT
MW13-OB-14	497596	5496576	343.67	0.85	342.82	7.62	-	-	5.79	7.62	6.10	7.62	SILT to SILTY CLAY	CLAY
MW14-BR-14	496777	5497590	358.91	0.70	358.21	25.68	-	-	22.56	24.69	22.86	24.38	BEDROCK	SHALLOW BEDROCK
MW14-OB-14	496777	5497587	359.04	0.87	358.17	6.10	-	-	2.74	6.10	3.05	6.10	SILTY SAND to SANDY SILT TILL	TILL
MW15-BR-14	499671	5497708	330.52	0.57	329.95	13.72	-	-	11.28	13.72	12.19	13.72	BEDROCK	SHALLOW BEDROCK
MW15-OB-14	499670	5497709	330.53	0.55	329.98	6.10	-	-	4.11	6.10	4.57	6.10	SAND	GLACIOFLUVIAL SEDIMENT
MW16-BR-14	499012	5498878	338.18	0.76	337.42	19.71	-	-	15.24	17.37	15.54	17.07	BEDROCK	SHALLOW BEDROCK
MW16-OB-14	499009	5498884	337.91	1.05	336.86	13.41	-	-	2.74	4.88	3.05	4.88	SILT	GLACIOFLUVIAL SEDIMENT
MW17-OB-14	501274	5502714	339.81	0.72	339.09	3.81	-	-	1.83	3.81	2.13	3.65	SAND	GLACIOFLUVIAL SEDIMENT
MW18-BR-21 (MW-A)	502821	5503253	351.30	1.09	350.22	21.61	-	-	19.50	21.60	19.80	21.30	BEDROCK	SHALLOW BEDROCK
MW19-BR-21 (MW-B)	505743	5503790	336.28	0.95	335.33	14.17	-	-	12.00	14.20	12.30	13.90	BEDROCK	SHALLOW BEDROCK
MW19-OB-21 (MW-B)	505745	5503790	336.32	0.82	335.50	8.80	-	-	7.00	8.80	7.30	8.80	SAND and GRAVEL	GLACIOFLUVIAL SEDIMENT
MW20-BR-21 (MW-D)	500357	5498108	334.77	0.93	333.84	23.60	-	-	21.50	23.60	21.80	23.30	BEDROCK	SHALLOW BEDROCK
MW20-OB-21 (MW-D)	500357	5498110	334.64	0.81	333.83	4.27	-	-	2.40	4.30	2.40	3.90	SILT	TILL
MW21-BR-21 (MW-F)	503116	5501954	334.17	0.93	333.24	4.78	-	-	2.10	4.80	2.10	3.60	BEDROCK	SHALLOW BEDROCK
MW22-OB-21 (MW-M)	504142	5501895	335.43	0.90	334.53	8.18	-	-	6.40	8.20	6.70	8.20	SILTY SAND	GLACIOFLUVIAL SEDIMENT
MW23-OB-21 (MW-G)	503568	5501816	330.92	0.88	330.04	8.08	-	-	2.90	8.10	3.20	4.70	SILTY SAND AND BEDROCK	SHALLOW BEDROCK
MW24-BR-21 (MW-N)	498743	5497479	334.10	0.93	333.17	11.15	-	-	9.10	11.20	9.50	11.00	BEDROCK	SHALLOW BEDROCK
MW24-OB-21 (MW-N)	498742	5497477	334.06	0.77	333.29	4.57	-	-	2.40	4.60	2.70	4.20	SILTY SAND	GLACIOFLUVIAL SEDIMENT
MW25-BR-21 (MW-E)	499145	5497367	332.90	0.82	332.08	9.68	-	-	7.50	9.70	7.90	9.40	BEDROCK	SHALLOW BEDROCK
MW25-OB-21 (MW-E)	499148	5497368	332.93	0.93	332.01	4.27	-	-	2.20	4.20	2.50	4.00	SAND	GLACIOFLUVIAL SEDIMENT
MW16-04	499800	5500949	349.16	0.76	348.40	13.70	-	-	5.48	7.62	6.10	7.62	SILT	GLACIOFLUVIAL SEDIMENT
MW16-05	497400	5497375	-	0.76	341.10	7.30	-	-	4.87	7.01	5.48	7.01	SILT and SAND	GLACIOFLUVIAL SEDIMENT
MW03-BR-18	506073	5503364	332.40	1.20	331.20	25.80	-	-	22.00	24.30	22.70	24.30	BEDROCK	SHALLOW BEDROCK
MW03-OB-18	506070	5503370	332.38	1.18	331.20	6.00	-	-	-	6.00	4.50	6.00	SILT	GLACIOLACUSTRINE SEDIMENT
MW10-18	504815	5502746	337.93	1.03	336.90	3.30	-	-	1.80	3.30	1.80	3.30	SAND AND SILT	GLACIOFLUVIAL SEDIMENT
MWS-14-01	501564	5500893	336.70	0.90	335.80	12.20	-	-	4.30	6.50	4.60	6.10	SILTY SAND TILL	TILL
MWS-14-02 BR	502592	5500266	331.94	0.64	331.30	13.40	-	-	7.60	9.50	7.90	9.40	BEDROCK	SHALLOW BEDROCK
MWS-14-02 OB	502592	5500266	331.83	0.53	331.30	5.80	-	-	4.00	5.30	4.30	5.80	SILTY SAND TILL	TILL
MWS-14-03 OB1	501856	5501600	332.76	0.86	331.90	45.00	-	-	41.60	43.74	42.22	43.74	SILTY SAND TILL	TILL
MWS-14-03 OB2	501856	5501600	332.83	0.93	331.90	5.33	-	-	3.51	5.33	3.81	5.33	SILT TO SILTY SAND TILL	TILL
MWS-14-04	504451	5501792	331.90	0.90	331.00	7.50	-	-	5.00	7.50	5.90	7.50	BEDROCK	SHALLOW BEDROCK
MWS-14-05 BR	502689	5502346	340.50	0.90	339.60	7.30	-	-	3.70	6.30	4.60	6.10	BEDROCK	SHALLOW BEDROCK
MWS-14-05 OB	502689	5502346	340.45	0.85	339.60	1.50	-	-	0.50	1.50	0.80	1.40	SAND and GRAVEL	GLACIOFLUVIAL SEDIMENT
MWS-14-06	503349	5502096	334.37	0.87	333.50	6.60	-	-	4.20	6.60	5.10	6.60	BEDROCK	SHALLOW BEDROCK
MWS-14-07 BR	500938	5498669	332.05	0.85	331.20	12.10	-	-	7.60	11.00	9.10	10.70	BEDROCK	SHALLOW BEDROCK
MWS-14-07 OB	500938	5498669	332.01	0.81	331.20	6.10	-	-	4.40	6.10	4.60	6.10	SAND and GRAVEL TILL	GLACIOFLUVIAL SEDIMENT
Historical MacLeod Tailings Monitoring Wells														
96-01	504888	5503361	334.67	0.22	334.45	15.00	-	-	12.90	15.00	13.40	14.60	Fine SAND	GLACIOFLUVIAL SEDIMENT
96-02	504852	5503422	341.32	0.35	340.97	10.36	-	-	8.30	10.36	8.90	10.00	TAILINGS	TAILINGS
96-03	504751	5503958	333.39	0.65	332.74	12.19	-	-	10.1	12.19	10.80	11.90	Fine SAND / Silty Sand TILL	GLACIOFLUVIAL SEDIMENT / TILL
96-04	504760	5503941	331.54	0.10	331.44	10.36	-	-	7.30	10.36	7.80	9.00	TAILINGS	TAILINGS
96-05	504809	5503267	335.25	1.50	333.75	1.47	-	-	0.70	2.43	1.00	2.24	TAILINGS	TAILINGS
96-06	504691	5503269	342.98	1.56	341.42	21.49	-	-	8.20	14.38	10.60	11.60	TAILINGS / SILT	TAILINGS / TILL
96-07A1	504509	5503476	343.45	1.03	342.42	12.04	-	-	6.30	11.25	8.20	11.25	TAILINGS	TAILINGS
96-07A2	504510	5503475	343.73	1.33	342.40	7.80	-	-	6.38	7.80	7.05	7.80	TAILINGS	TAILINGS
96-08A	504157	5503443	342.33	1.13	341.20	7.16	-	-	2.95	7.00	3.95	7.00	TAILINGS	TAILINGS
96-08B	504157	5503443	342.51	1.55	340.96	-	-	-	-	-	-	-	TAILINGS	TAILINGS
96-08C	504157	5503443	342.59	1.60	340.99	-	-	-	-	-	-	-	TAILINGS	TAILINGS
96-09A1	504522	5503964	339.36	1.09	338.27	9.65	-	-	2.98	9.40	6.30	9.40	TAILINGS	TAILINGS

Table C-2-1
Well Completion Details
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Name	Coordinates UTM NAD 83 Zone 16 Easting	Coordinates UTM NAD 83 Zone 16 Northing	Top of Casing Elevation	Stick-up	Ground Elevation	Total Depth Drilled	Azimuth	Dip	Top of Sand	Bottom of Sand	Top of Screen	Bottom of Screen	Screen Material Description	Hydrostratigraphic Unit
	m	m	m AMSL	m	m AMSL	m	degrees	degrees	m BGS	m BGS	m BGS	m BGS		
96-09A2	504522	5503966	339.63	1.32	338.31	9.65	-	-	8.70	9.66	9.10	9.66	TAILINGS	TAILINGS
96-09A3	504522	5503964	339.67	1.35	338.32	7.54	-	-	1.97	5.49	2.40	5.40	TAILINGS	TAILINGS
96-09A4	504521	5503965	339.60	1.33	338.27	4.57	-	-	1.00	4.57	1.50	4.57	TAILINGS	TAILINGS
96-10A1	504747	5503574	341.86	1.45	340.41	10.87	-	-	9.60	10.86	7.70	10.50	TAILINGS	TAILINGS
96-10A2	504749	5503574	341.79	1.40	340.39	10.97	-	-	9.40	10.90	9.98	10.90	TAILINGS	TAILINGS
96-10A3	504748	5503576	341.75	1.36	340.39	5.49	-	-	1.92	5.49	2.40	5.40	TAILINGS	TAILINGS
96-10B	504746	5503577	341.63	1.17	340.46	-	-	-	-	-	-	-	TAILINGS	TAILINGS
96-10C	504749	5503576	341.48	1.23	340.25	-	-	-	-	-	-	-	TAILINGS	TAILINGS
96-11A1	505058	5503628	339.26	1.13	338.13	7.01	-	-	2.60	7.1	4.05	7.1	TAILINGS	TAILINGS
96-11A2	505062	5503630	339.18	1.33	337.85	4.57	-	-	-	-	3.00	4.57	TAILINGS	TAILINGS
96-12A	505318	5503864	332.57	1.65	330.92	-	-	-	-	-	-	-	TAILINGS	TAILINGS
96-12B	505320	5503862	332.42	1.70	330.72	-	-	-	-	-	-	-	TAILINGS	TAILINGS
96-13	504154	5503485	335.65	1.16	334.49	-	-	-	-	-	-	-	TAILINGS	TAILINGS
96-14b	504399	5504251	333.02	1.78	331.24	-	-	-	-	-	-	-	TAILINGS	TAILINGS
96-15A1	504655	5503033	336.10	1.05	335.05	3.58	-	-	1.26	3.80	2.1	3.80	TAILINGS	TAILINGS
96-15B	504653	5503033	336.86	1.80	335.06	-	-	-	-	-	-	-	TAILINGS	TAILINGS
96-15A3	504653	5503036	336.09	1.17	334.92	1.98	-	-	-	-	0.4	1.98	TAILINGS	TAILINGS
MW07-18	505057	5504076	331.28	1.18	330.10	7.60	-	-	1.20	2.90	1.4	2.90	SAND AND SILT	GLACIOLACUSTRINE SEDIMENT
MW08-18	504845	5504337	331.41	1.21	330.20	17.10	-	-	1.50	3.30	1.80	3.30	TAILINGS	TAILINGS
MW09-18	504537	5504460	331.52	1.32	330.20	8.40	-	-	1.00	2.70	1.20	2.70	TAILINGS	TAILINGS
Historical Hardrock Tailings Monitoring Wells														
H96-01	505121	5502580	334.67	0.22	334.45	1.55	-	-	0.60	1.80	1.10	1.70	TAILINGS	TAILINGS
H96-02A	505124	5502443	332.85	0.80	332.05	1.14	-	-	0.20	1.20	0.60	1.10	TAILINGS	TAILINGS
H96-02B	505123	5502445	332.62	0.40	332.22	-	-	-	-	-	-	-	TAILINGS	TAILINGS
H96-02C	505126	5502445	333.63	1.44	332.19	-	-	-	-	-	-	-	TAILINGS	TAILINGS
H96-03	505070	5502525	334.32	1.42	332.90	-	-	-	-	-	-	-	TAILINGS	TAILINGS
H96-04A1	505363	5502429	333.15	1.86	331.29	3.12	-	-	1.20	3.10	1.50	2.70	TAILINGS	TAILINGS
H96-04B	505362	5502431	332.68	1.42	331.26	-	-	-	-	-	-	-	TAILINGS	TAILINGS
H96-05A1	505324	5502625	335.67	1.17	334.50	4.72	-	-	1.90	4.80	3.30	4.50	TAILINGS	TAILINGS
H96-05A2	505323	5502622	335.76	1.34	334.42	2.44	-	-	test pit	test pit	0.80	2.40	TAILINGS	TAILINGS
H96-06A1	505560	5502644	332.65	1.40	331.25	3.30	-	-	1.20	3.40	1.80	3.00	TAILINGS	TAILINGS
H96-06A2	505559	5502645	332.78	1.54	331.24	3.30	-	-	2.60	3.20	2.90	3.20	TAILINGS	TAILINGS
H96-06A3	505558	5502641	332.39	1.16	331.23	1.93	-	-	test pit	test pit	0.40	1.80	TAILINGS	TAILINGS
H96-06B	505557	5502643	332.67	1.41	331.26	-	-	-	-	-	-	-	TAILINGS	TAILINGS
MW01-OB1-18	505710	5502654	332.08	1.38	330.70	26.70	-	-	18.40	18.20	16.70	18.20	SAND AND SILT	GLACIOFLUVIAL SEDIMENT
MW01-OB2-18	505706	5502658	332.13	1.23	330.90	4.20	-	-	2.40	4.20	2.70	4.20	TAILINGS AND SAND	TAILINGS
MW02-OB-18	505528	5502418	331.60	1.30	330.30	12.80	-	-	1.20	3.00	1.50	3.00	TAILINGS	TAILINGS
Drive Point Piezometers														
DP2-14D	501541	5501743	331.58	0.86	330.72	2.19	-	-	-	-	1.77	2.19	-	-
DP2-14S	501541	5501743	331.42	0.59	330.83	1.54	-	-	-	-	1.12	1.54	-	-
DP3-14D	502943	5501816	330.50	1.22	329.28	1.83	-	-	-	-	1.41	1.83	-	-
DP3-14S	502943	5501816	330.64	1.35	329.29	0.78	-	-	-	-	0.36	0.78	-	-
DP4-14	503689	5501608	330.10	0.96	329.14	1.17	-	-	-	-	0.75	1.17	-	-
DP5-14	501523	5501019	333.18	0.53	332.65	1.60	-	-	-	-	1.18	1.60	-	-
DP6-14D	499468	5499799	334.64	1.54	333.10	-	-	-	-	-	#VALUE!	-	-	-
DP6-14S	499468	5499798	334.67	1.57	333.10	0.56	-	-	-	-	0.14	0.56	-	-
DP-A	500498	5500553	336.48	0.90	335.52	1.38	-	-	-	-	0.96	1.38	-	-
DP-B	500456	5501639	334.08	1.22	332.86	1.36	-	-	-	-	0.94	1.36	-	-
DP-C	500057	5498096	330.47	1.15	329.32	1.70	-	-	-	-	1.28	1.70	-	-
Seeps														
Seep 1	505396	5503722	-	-	-	-	-	-	-	-	-	-	-	-
Seep 2	505195	5502277	-	-	-	-	-	-	-	-	-	-	-	-
Seep 3	504937	5502054	-	-	-	-	-	-	-	-	-	-	-	-
Seep 5	503648	5503387	-	-	-	-	-	-	-	-	-	-	-	-
Seep 6	504645	5504153	-	-	-	-	-	-	-	-	-	-	-	-
Seep 6	504667	5504167	-	-	-	-	-	-	-	-	-	-	-	-
Seep 7	504705	5504064	-	-	-	-	-	-	-	-	-	-	-	-
Seep 8	504740	5504012	-	-	-	-	-	-	-	-	-	-	-	-
Seep 9	504807	5503263	-	-	-	-	-	-	-	-	-	-	-	-
Seep 10	505290	5503541	-	-	-	-	-	-	-	-	-	-	-	-
Seep 11	504561	5503159	-	-	-	-	-	-	-	-	-	-	-	-
Exploration Boreholes, Historical Shafts and Mine Infrastructure														
Hardrock Shaft 1	505162	5502761	-	-	331.73	174.27	-	-	-	-	-	-	-	DEEP BEDROCK
Hardrock Shaft 2	505927	5502717	-	-	341.86	446.01	-	-	-	-	-	-	-	DEEP BEDROCK
Hardrock Glory Hole	504877	5503143	-	-	225.64	127.62	-	-	-	-	-	-	-	DEEP BEDROCK
MacLeod Shaft 1	504206	5503001	-	-	340.45	776.91	-	-	-	-	-	-	-	DEEP BEDROCK
Mosher Shaft 1	502678	5503070	-	-	348.92	756.88	-	-	-	-	-	-	-	DEEP BEDROCK
EP137	505550	5503049	-	-	338.85	300.00	1.07	-54.77	-	-	-	-	-	DEEP BEDROCK
MM006	504199	5502695	-	-	339.85	201.00	354.56	-42.03	-	-	-	-	-	DEEP BEDROCK
MM140	503700	5502851	-	-	343.16	450.00	356.00	-49.31	-	-	-	-	-	DEEP BEDROCK
Vibrating Wire Piezometers														
HR041 (VWP-C)-1	503805	5503862	-	-	337.4	537	183.4	-39.5	Sensor installation depth 198.65 m BGS				-	DEEP BEDROCK
HR041 (VWP-C)-2	503805	5503862	-	-	337.4	537	183.4	-39.5	Sensor installation depth 317.65 m BGS				-	DEEP BEDROCK
TN014 (VWP-B)-1	505474	5502349	-	-	330.4	552	355.9	-55.5	Sensor installation depth 53.60 m BGS				-	DEEP BEDROCK
TN014 (VWP-B)-2	505474	5502349	-	-	330.4	552	355.9	-55.5	Sensor installation depth 230.60 m BGS				-	DEEP BEDROCK
TN014 (VWP-B)-3	505474	5502349	-	-	330.4	552	355.9	-55.5	Sensor installation depth 465.60 m BGS				-	DEEP BEDROCK

Notes:

- Monitoring location overprinted by mine infrastructure

m AMSL - Metres above mean sea level

m BGS - Metres below ground surface

TOC - Top of Casing

UTM - Universal Transverse Mercator

NAD - North American Datum

1. Exploration hole data provided by Premier
2. Ground and depth elevations for shafts estimated using Premier Wireframe - Hardrock Glory Hole elevation appears erroneous
3. Screen information from historical wells estimated using available borehole logs

Appendix C.3 Pumping Data and Hydrographs

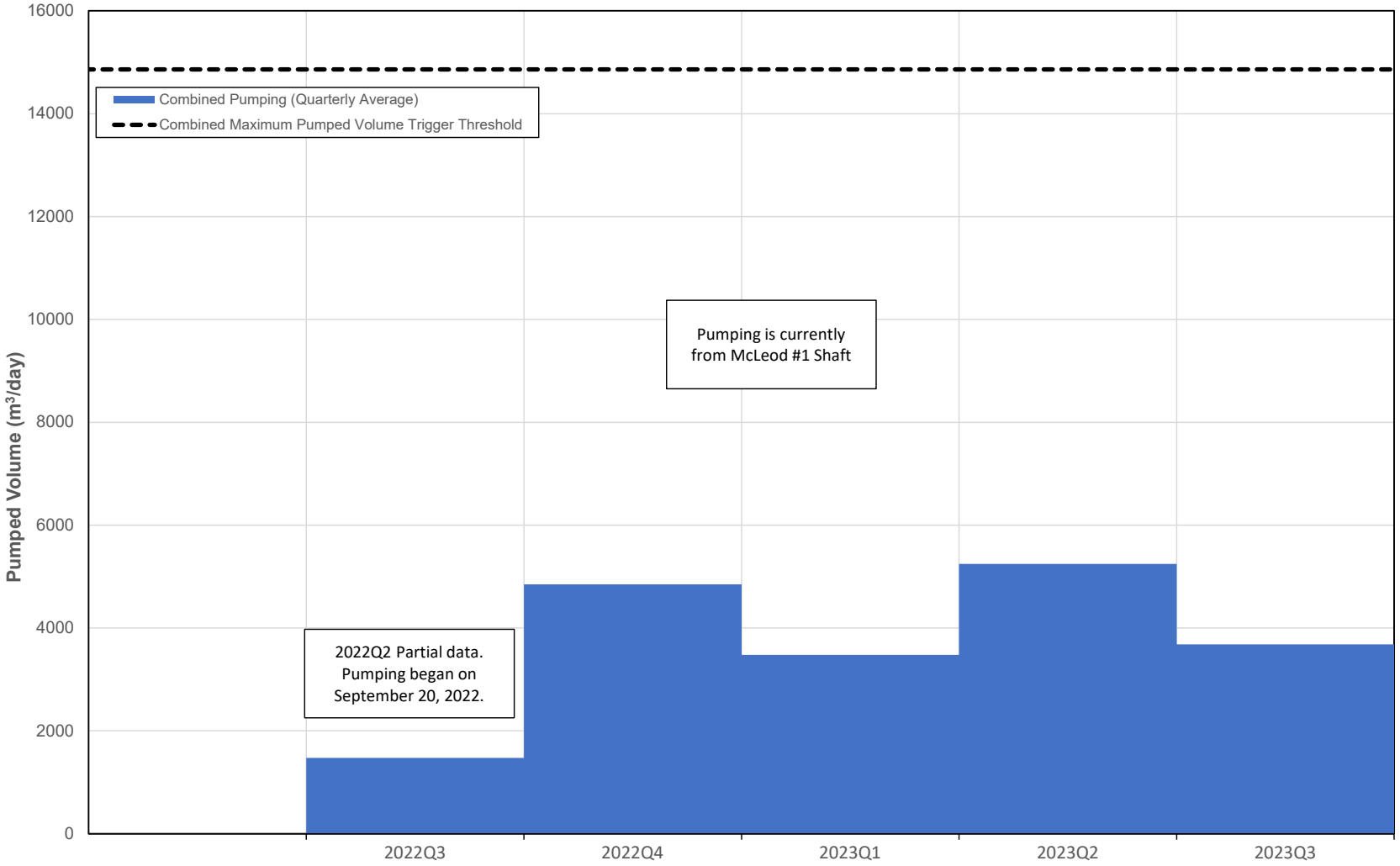
Table C-3-1
Manual Groundwater Elevations
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Monitoring Location	Date	Time	Manual Groundwater Level (m BTOC)	Groundwater Elevation (m AMSL)	Monitoring Location	Date	Time	Manual Groundwater Level (m BTOC)	Groundwater Elevation (m AMSL)
96-01	7-Jun-23	9:56	9.76	324.91	DP6-14S	6-Jul-23	15:30	0.15	334.52
96-01	3-Aug-23	15:05	*	*	DP6-14S	17-Aug-23	14:18	0.15	334.52
96-02	7-Jun-23	9:59	6.20	335.12	DP-A	3-Jul-23	16:17	0.52	335.96
96-02	3-Aug-23	14:40	6.36	334.96	DP-A	17-Aug-23	12:54	0.58	335.90
96-04	7-Jun-23	10:06	5.83	325.71	DP-B	20-Jun-23	10:04	0.22	333.86
96-04	3-Aug-23	13:05	6.16	325.38	DP-B	12-Aug-23	10:23	0.26	333.82
96-05	7-Jun-23	10:10	2.71	332.54	DP-C	6-Jul-23	13:00	0.43	330.05
96-05	9-Aug-23	12:00	3.00	332.25	DP-C	23-Aug-23	10:49	1.40	329.07
96-06	7-Jun-23	10:15	7.73	335.25	EP137	12-Jun-23	15:25	17.00	322.19
96-06	9-Aug-23	12:12	8.28	334.70	EP137	1-Aug-23	16:49	25.13	314.06
96-07A1	7-Jun-23	10:25	9.15	334.30	G1-OB-13	19-Jun-23	12:07	1.76	330.28
96-07A1	3-Aug-23	15:20	8.79	334.66	G1-OB-13	2-Aug-23	11:33	1.44	330.60
96-07A2	7-Jun-23	10:29	*	*	G2-OB-13	28-Jun-23	14:17	1.69	342.47
96-07A2	3-Aug-23	15:24	*	*	G2-OB-13	12-Aug-23	14:45	1.45	342.71
96-08A	7-Jun-23	10:35	*	*	G4-OB1-13	13-Jun-23	14:15	1.54	332.15
96-08A	3-Aug-23	15:33	5.08	337.25	G4-OB1-13	8-Aug-23	15:30	2.32	331.37
96-08B	7-Jun-23	10:38	*	*	G4-OB2-13	13-Jun-23	14:18	1.73	331.96
96-08B	3-Aug-23	15:35	*	*	G4-OB2-13	8-Aug-23	15:33	2.42	331.26
96-08C	7-Jun-23	10:43	12.20	330.39	G5-OB1-14	6-Jul-23	8:02	**	333.32
96-08C	3-Aug-23	15:38	12.29	330.30	G5-OB1-14	16-Aug-23	8:31	**	333.32
96-09A1	7-Jun-23	11:01	3.14	336.22	G5-OB2-14	6-Jul-23	8:04	**	333.38
96-09A1	3-Aug-23	13:54	4.11	335.25	G5-OB2-14	16-Aug-23	8:33	**	333.38
96-09A2	7-Jun-23	11:03	3.55	336.08	G6-BR-14	5-Jul-23	11:42	2.08	329.81
96-09A2	3-Aug-23	13:49	4.49	335.14	G6-BR-14	3-Aug-23	12:00	2.08	329.81
96-09A3	7-Jun-23	11:06	3.33	336.34	G6-OB-14	5-Jul-23	11:18	2.62	329.06
96-09A3	3-Aug-23	13:56	4.31	335.36	G6-OB-14	3-Aug-23	12:19	2.62	329.06
96-09A4	7-Jun-23	11:12	3.20	336.40	G7-OB1-14	20-Jun-23	14:50	0.76	333.63
96-09A4	3-Aug-23	13:58	4.24	335.36	G7-OB1-14	1-Aug-23	14:14	0.84	333.55
96-10A1	7-Jun-23	11:28	5.13	336.73	G7-OB2-14	20-Jun-23	14:12	1.46	332.78
96-10A1	3-Aug-23	14:16	5.61	336.25	G7-OB2-14	1-Aug-23	14:22	1.68	332.56
96-10A2	7-Jun-23	11:31	5.07	336.72	H96-01	19-Jun-23	13:37	2.65	332.02
96-10A2	3-Aug-23	14:14	5.61	336.18	H96-01	2-Aug-23	12:36	3.27	331.40
96-10A3	7-Jun-23	11:34	4.82	336.93	H96-02A	19-Jun-23	11:07	9.88	322.97
96-10A3	3-Aug-23	14:21	3.78	337.97	H96-02A	2-Aug-23	12:49	15.70	317.16
96-10B	7-Jun-23	12:09	8.65	332.98	H96-02B	19-Jun-23	11:01	4.36	328.26
96-10B	3-Aug-23	14:25	10.16	331.47	H96-02B	2-Aug-23	12:46	5.51	327.11
96-10C	7-Jun-23	12:09	19.60	321.88	H96-02C	19-Jun-23	10:57	2.72	330.91
96-10C	3-Aug-23	14:33	16.25	325.23	H96-02C	2-Aug-23	12:53	*	*
96-11A1	7-Jun-23	12:15	4.91	334.35	H96-03	19-Jun-23	13:33	4.75	329.57
96-11A1	3-Aug-23	14:50	5.67	333.59	H96-03	2-Aug-23	12:43	*	*
96-11A2	7-Jun-23	12:18	4.83	334.35	H96-04A1	19-Jun-23	10:43	3.14	330.01
96-11A2	3-Aug-23	14:52	*	*	H96-04A1	2-Aug-23	13:02	3.08	330.08
96-12A	29-Jun-23	12:20	1.82	330.75	H96-04B	19-Jun-23	10:45	7.80	324.88
96-12A	3-Aug-23	12:50	1.65	330.92	H96-04B	2-Aug-23	12:59	9.96	322.72
96-13	7-Jun-23	13:01	2.71	332.94	H96-05A1	19-Jun-23	13:52	3.59	332.08
96-13	9-Aug-23	12:30	2.94	332.71	H96-05A1	2-Aug-23	12:12	4.01	331.66
96-15A3	28-Jun-23	11:38	*	*	H96-05A2	19-Jun-23	13:57	3.55	332.21
96-15A3	1-Aug-23	11:14	*	*	H96-05A2	2-Aug-23	12:14	*	*
96-15B	28-Jun-23	11:41	9.35	327.52	H96-06A1	12-Jun-23	15:30	3.00	329.65
96-15B	1-Aug-23	11:18	*	*	H96-06A1	2-Aug-23	13:15	3.69	328.96
BH14-02	29-Jun-23	10:49	1.34	336.32	H96-06A2	12-Jun-23	15:30	2.81	329.97
BH14-02	14-Aug-23	10:43	1.35	336.31	H96-06A2	2-Aug-23	13:18	3.97	328.81
BH14-02A	29-Jun-23	11:14	1.48	336.19	H96-06A3	12-Jun-23	15:31	2.31	330.08
BH14-02A	14-Aug-23	9:50	1.45	336.21	H96-06A3	2-Aug-23	13:10	*	*
BH14-05	20-Jun-23	16:33	1.27	331.91	H96-06B	12-Jun-23	15:33	7.90	324.77
BH14-05	1-Aug-23	15:32	1.27	331.91	H96-06B	2-Aug-23	13:13	*	*
BH14-08	7-Jun-23	14:05	9.10	330.59	MAC-1	28-Jun-23	12:33	1.21	342.93
BH14-08	3-Aug-23	13:13	4.94	334.75	MAC-1	23-Aug-23	12:14	1.31	342.83
BH14-09	7-Jun-23	14:07	11.93	334.10	MAC-2	28-Jun-23	12:27	*	*
BH14-09	9-Aug-23	12:08	12.80	333.23	MAC-2	23-Aug-23	12:21	4.70	337.57
BH14-10	7-Jun-23	13:22	6.24	336.13	MAC-7	19-Jun-23	12:22	1.73	333.30
BH14-10	3-Aug-23	15:10	6.46	335.91	MAC-7	2-Aug-23	11:47	1.63	333.41
BH14-11	7-Jun-23	13:18	10.10	333.76	MM140	28-Jun-23	12:16	20.00	323.75
BH14-11	3-Aug-23	15:28	9.94	333.92	MM140	23-Aug-23	12:30	1.31	342.44
BH14-12	7-Jun-23	13:12	5.25	336.30	Mosher Shaft	27-Jun-23	15:23	***	***
BH14-12	3-Aug-23	13:21	5.32	336.23	Mosher Shaft	25-Aug-23	7:52	****	****
BH14-15	28-Jun-23	12:58	1.15	330.22	MW01-OB1-18	5-Jun-23	13:15	4.43	327.65
BH14-15	3-Aug-23	13:45	1.10	330.27	MW01-OB1-18	10-Aug-23	12:53	4.44	327.64
BH14-23	7-Jun-23	13:10	7.00	335.14	MW01-OB2-18	5-Jun-23	13:40	3.22	328.91
BH14-23	9-Aug-23	1:05	6.99	335.15	MW01-OB2-18	10-Aug-23	11:20	3.25	328.88
DP2-14D	5-Jul-23	13:43	0.37	331.21	MW02-OB-18	5-Jun-23	15:02	2.40	327.90
DP2-14D	29-Aug-23	15:05	0.10	331.48	MW02-OB-18	2-Aug-23	15:03	3.09	327.21
DP2-14S	5-Jul-23	15:50	0.19	331.23	MW03-BR-18	5-Jun-23	12:01	1.90	330.50
DP2-14S	29-Aug-23	15:10	**	**	MW03-BR-18	13-Aug-23	10:15	3.80	328.60
DP3-22D	17-Jun-23	14:37	0.33	329.72	MW03-OB-18	5-Jun-23	11:46	2.29	330.07
DP3-22D	17-Aug-23	10:33	0.37	329.69	MW03-OB-18	13-Aug-23	10:39	2.44	329.92
DP3-22S	17-Jun-23	14:21	1.00	329.37	MW07-18	13-Jun-23	15:04	1.87	329.41
DP3-22S	17-Aug-23	10:36	1.02	329.35	MW07-18	3-Aug-23	10:02	1.21	330.07
DP4-14	16-Jun-23	13:52	-0.08	330.18	MW08-18	13-Jun-23	13:53	2.33	329.08
DP4-14	14-Aug-23	15:28	**	**	MW08-18	3-Aug-23	11:00	1.72	329.69
DP5-14	19-Jun-23	16:00	1.16	332.02	MW09-18	13-Jun-23	12:57	2.50	329.02
DP5-14	12-Aug-23	16:14	1.10	332.08	MW09-18	3-Aug-23	11:36	1.84	329.68
DP6-14D	6-Jul-23	15:30	0.40	334.24	MW10-18	12-Jun-23	14:40	*	*
DP6-14D	17-Aug-23	14:17	0.40	334.24	MW10-OB-14	5-Jul-23	10:40	1.96	331.68
MW11-BR-14	28-Jun-23	15:31	1.40	336.30	MW10-OB-14	1-Aug-23	16:58	*	*

Table C-3-1
Manual Groundwater Elevations
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Monitoring Location	Date	Time	Manual Groundwater Level (m BTOC)	Groundwater Elevation (m AMSL)
MW11-BR-14	15-Aug-23	14:45	1.93	335.77
MW11-OB-14	28-Jun-23	15:34	1.12	336.57
MW11-OB-14	15-Aug-23	14:40	1.98	335.71
MW12-OB-14	6-Jul-23	10:41	2.18	334.04
MW12-OB-14	17-Aug-23	11:45	2.40	333.82
MW13-OB-14	6-Jul-23	12:35	5.28	338.39
MW13-OB-14	24-Aug-23	10:54	5.33	338.34
MW14-BR-14	14-Jun-23	14:38	5.36	353.55
MW14-BR-14	21-Aug-23	13:40	5.62	353.29
MW14-OB-14	14-Jun-23	14:32	1.96	357.08
MW14-OB-14	21-Aug-23	14:00	2.79	356.25
MW15-BR-14	29-Jun-23	13:04	0.42	330.10
MW15-BR-14	8-Aug-23	13:42	0.75	329.77
MW15-OB-14	29-Jun-23	12:51	0.15	330.38
MW15-OB-14	8-Aug-23	13:54	0.37	330.16
MW16-04	19-Jun-23	14:54	7.40	341.76
MW16-04	12-Aug-23	11:01	7.42	341.74
MW16-05	6-Jul-23	13:10	3.82	338.04
MW16-05	22-Aug-23	9:57	3.86	338.00
MW16-BR-14	20-Jun-23	13:18	2.18	336.00
MW16-BR-14	12-Aug-23	9:03	2.06	336.12
MW16-OB-14	20-Jun-23	13:16	1.84	336.07
MW16-OB-14	12-Aug-23	9:14	1.80	336.11
MW17-OB-14	19-Jun-23	17:33	2.26	337.55
MW17-OB-14	12-Aug-23	16:24	2.51	337.31
MW18-BR-21	8-Jun-23	11:51	11.22	340.08
MW18-BR-21	14-Aug-23	12:58	11.29	340.01
MW19-BR-21	8-Jun-23	15:35	6.11	330.17
MW19-BR-21	1-Aug-23	12:10	6.37	329.91
MW19-OB-21	8-Jun-23	13:21	6.30	330.02
MW19-OB-21	1-Aug-23	13:27	6.47	329.85
MW1-BR-14	7-Jun-23	11:20	1.07	331.61
MW1-BR-14	9-Aug-23	12:51	1.04	331.64
MW1-OB-14	7-Jun-23	11:22	1.56	331.14
MW1-OB-14	9-Aug-23	14:00	1.10	331.60
MW20-BR-21	5-Jul-23	14:00	4.46	330.31
MW20-BR-21	8-Aug-23	14:33	8.08	326.69
MW20-OB-21	5-Jul-23	13:35	4.91	329.73
MW20-OB-21	8-Aug-23	2:20	*	*
MW21-BR-21	29-Jun-23	16:15	3.37	330.80
MW21-BR-21	14-Aug-23	12:51	2.85	331.32
MW22-OB-21	14-Jun-23	12:31	2.58	331.48
MW22-OB-21	10-Aug-23	14:50	2.25	331.82
MW23-OB-21	29-Jun-23	15:47	1.93	328.99
MW23-OB-21	10-Aug-23	14:21	1.72	329.20
MW24-BR-21	13-Jun-23	12:11	3.85	330.25
MW24-BR-21	2-Aug-23	12:00	5.75	328.35
MW24-OB-21	13-Jun-23	11:26	1.38	332.69
MW24-OB-21	2-Aug-23	12:48	1.73	332.33
MW25-BR-21	29-Jun-23	14:10	0.42	332.48
MW25-BR-21	2-Aug-23	14:09	2.40	330.50
MW25-OB-21	29-Jun-23	13:56	2.23	330.70
MW25-OB-21	2-Aug-23	13:49	1.73	331.20
MW2-OB-13	28-Jun-23	10:30	1.62	332.69
MW2-OB-13	14-Aug-23	13:30	1.56	332.75
MW3-BR-13	8-Jun-23	12:09	3.62	327.57
MW3-BR-13	13-Aug-23	8:53	5.97	325.22
MW3-OB-13	8-Jun-23	11:21	2.42	328.81
MW3-OB-13	13-Aug-23	9:27	4.71	326.52
MW4-OB-13	14-Jun-23	11:47	1.25	329.52
MW4-OB-13	1-Aug-23	17:10	1.30	329.47
MW5-OB1-13	27-Jun-23	15:47	1.24	331.87
MW5-OB1-13	12-Aug-23	15:08	1.56	331.56
MW6-OB-13	8-Jun-23	13:14	1.46	335.55
MW6-OB-13	2-Aug-23	15:21	2.38	334.63
MW8-OB-14	16-Jun-23	13:34	1.31	329.37
MW8-OB-14	3-Aug-23	13:10	1.21	329.48
MW9-OB1-13	28-Jun-23	15:25	2.89	330.17
MW9-OB1-13	8-Aug-23	15:41	5.42	327.64
MW9-OB2-13	28-Jun-23	15:29	1.94	331.38
MW9-OB2-13	8-Aug-23	15:38	*	*
MWS-14-01	13-Jun-23	13:50	1.63	335.07
MWS-14-01	8-Aug-23	15:10	2.06	334.64
MWS-14-02 BR	30-Jun-23	11:12	2.23	329.71
MWS-14-02 BR	14-Aug-23	14:38	2.66	329.29
MWS-14-02 OB	30-Jun-23	11:25	2.64	329.19
MWS-14-02 OB	14-Aug-23	14:54	2.92	328.91
MWS-14-03 OB1	5-Jul-23	14:26	1.77	331.00
MWS-14-03 OB1	10-Aug-23	12:29	1.44	331.32
MWS-14-03 OB2	5-Jul-23	14:04	2.05	330.79
MWS-14-03 OB2	10-Aug-23	12:53	1.87	330.96
MWS-14-04	30-Jun-23	10:19	3.19	328.71
MWS-14-04	15-Aug-23	10:29	3.59	328.32
MWS-14-06	6-Jul-23	15:56	1.85	332.52
MWS-14-06	10-Aug-23	12:37	1.39	332.98
MWS-14-07 BR	5-Jul-23	15:21	2.75	329.30
MWS-14-07 BR	3-Aug-23	15:14	2.77	329.28
MWS-14-07 OB	5-Jul-23	14:53	2.79	329.22
MWS-14-07 OB	3-Aug-23	14:43	2.81	329.20

Notes:
* Location dry
** No access due to flooding
*** Water level meter and logger cable stuck in shaft
**** Location being prepared for pumping



Notes:

Combined maximum pumped volume may include volumes from the Open Pit and Historical Underground Workings

Client/Project

2023 Fish and Fish Habitat
Federal EIS Follow-Up Monitoring Report
Greenstone Project

Figure No.

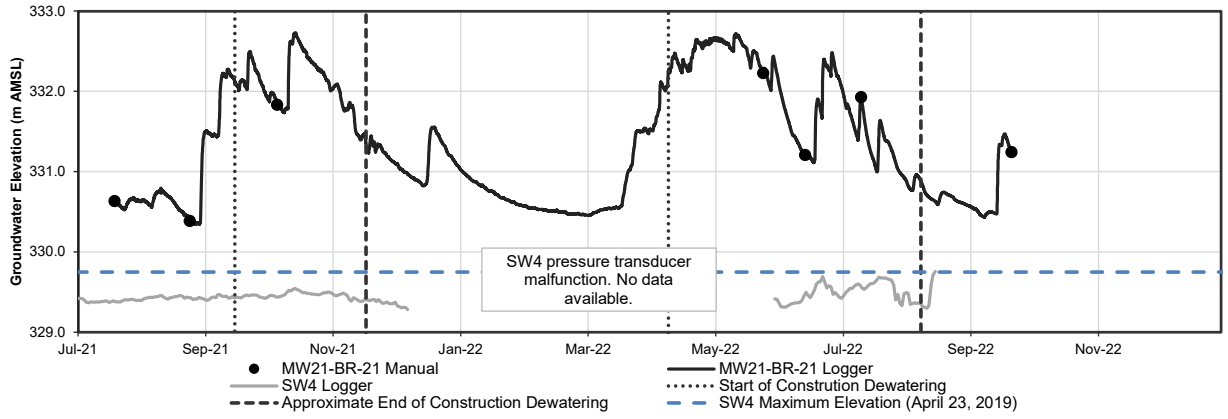
C -3-1

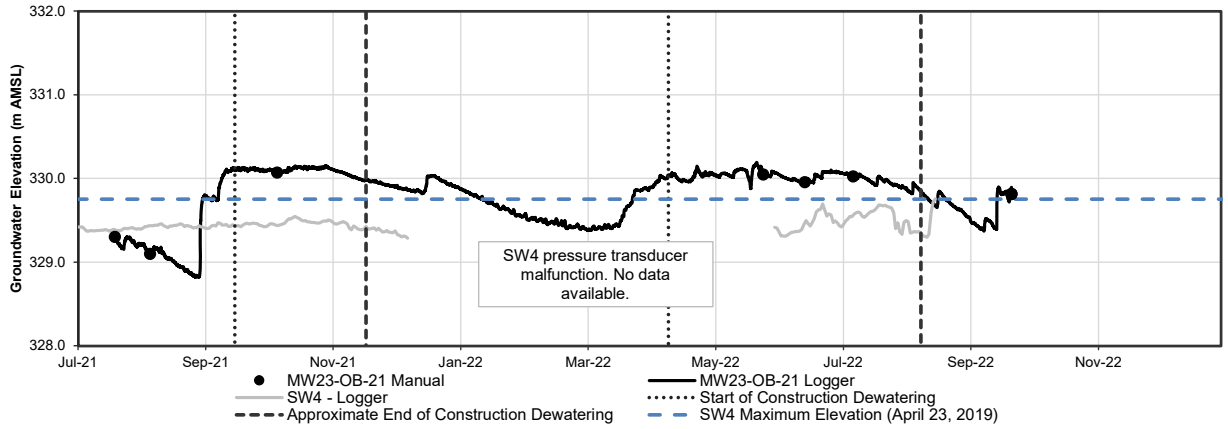
Title

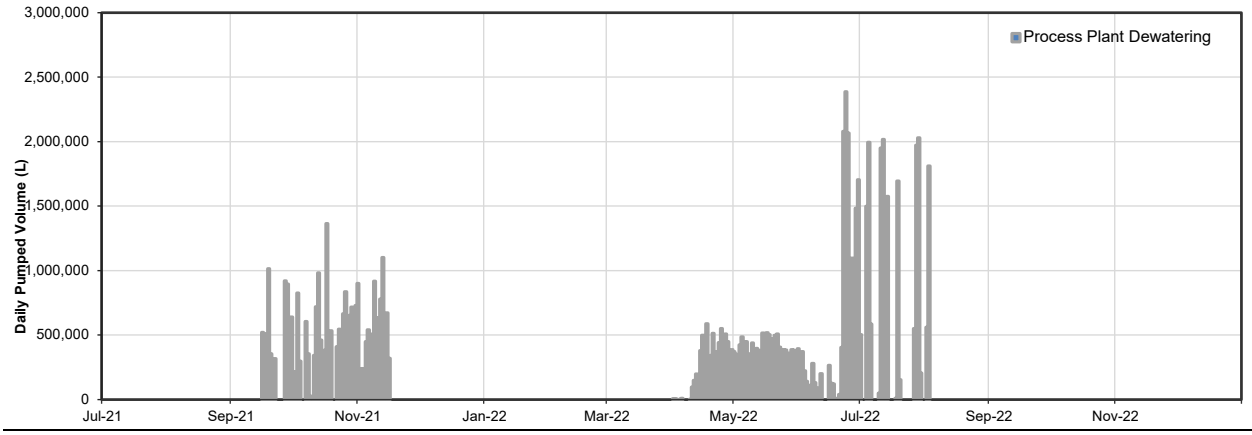
Pumped Volume
Open Pit Area

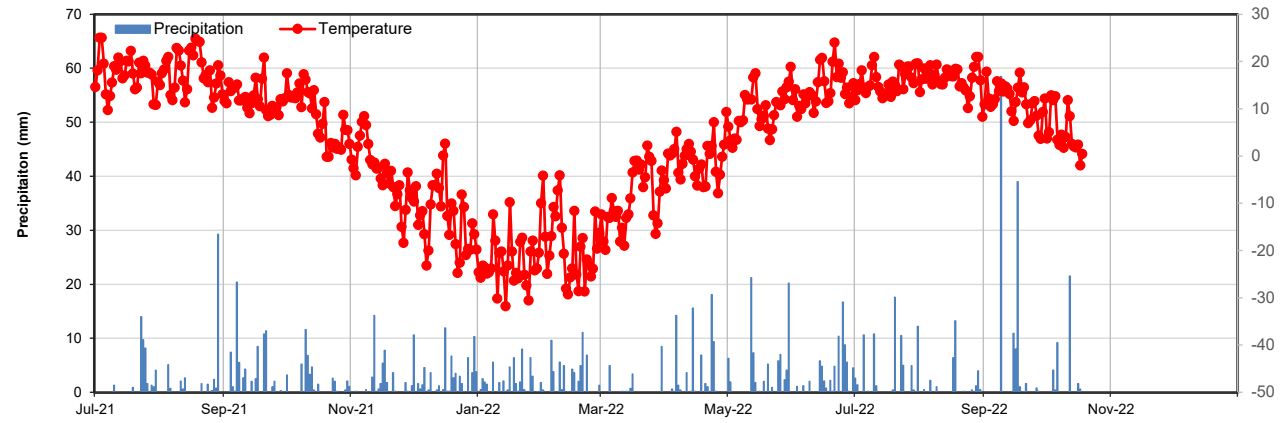
Stantec

\\CD1004-F01\work_group\01609\active\160901057\03_data\field\Groundwater\Logger data\Corrected\2023 Fish Report Figures\App C3 Fig C-3-1 Shaft Pumped Volumes.xlsx









Notes:

Climate data obtain from the Environment Canada Website: Station Geraldton A

Client/Project

2023 Fish and Fish Habitat
Federal EIS Follow-Up Monitoring Report
Greenstone Mine

Figure No.

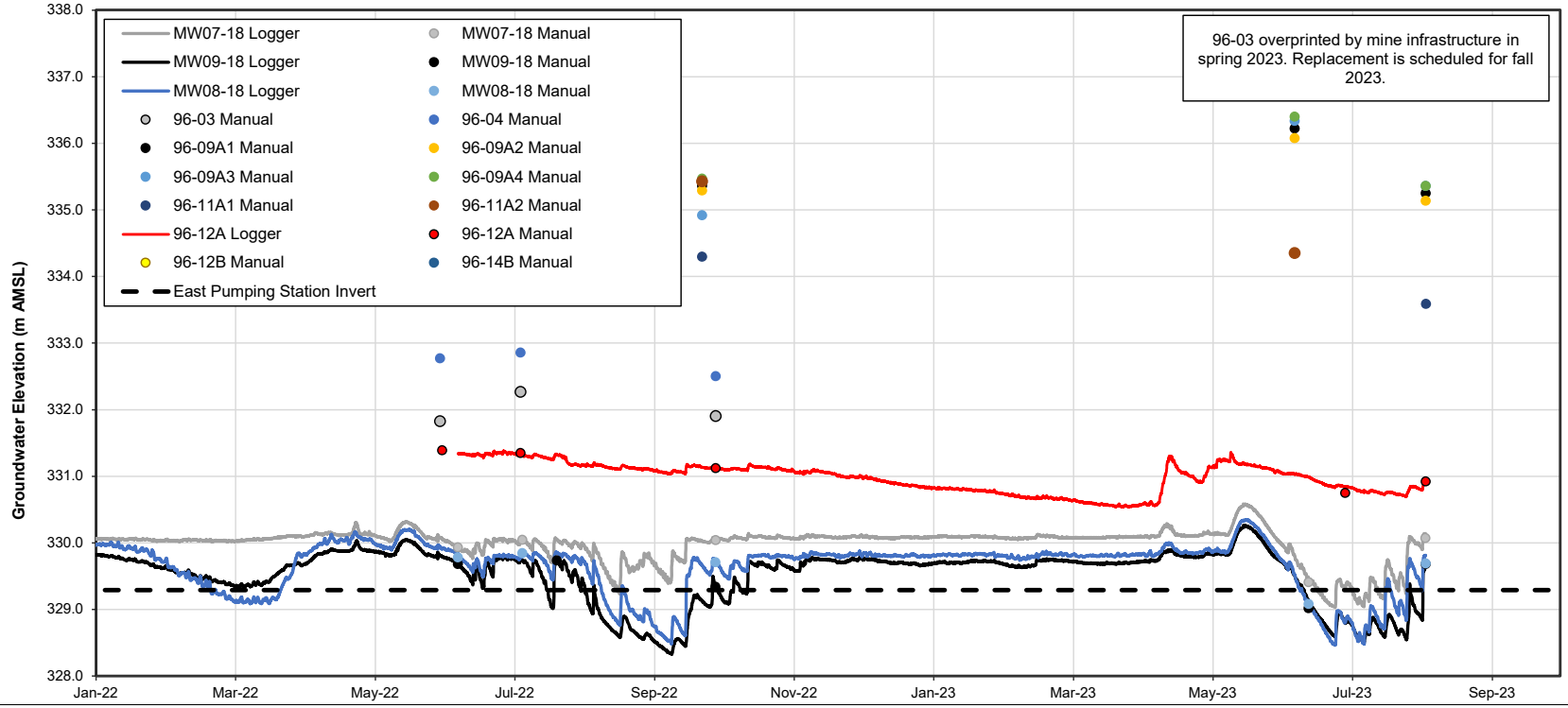
C-3-2

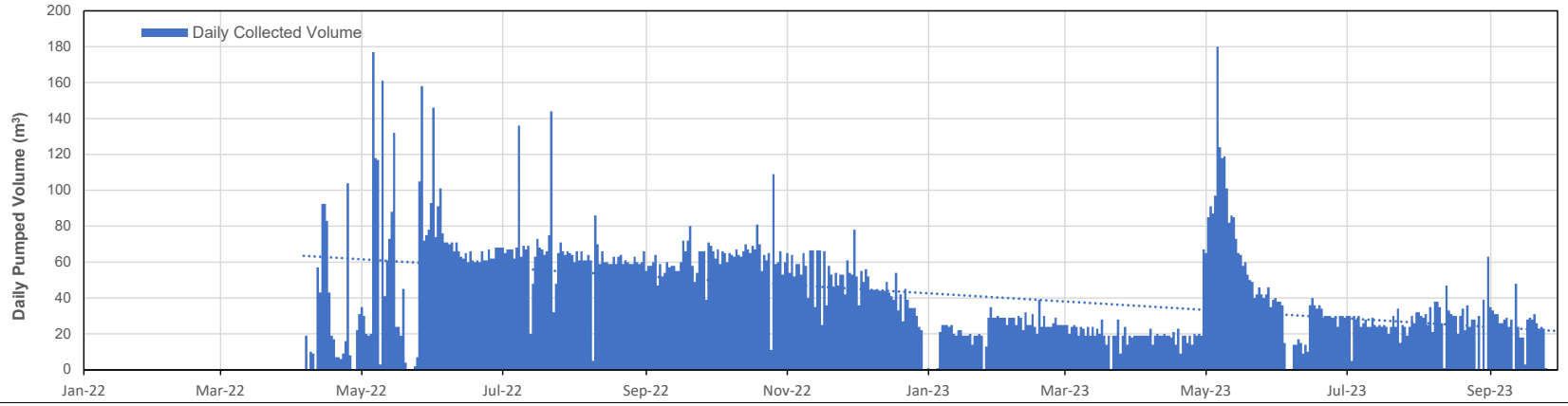
Title

Process Plant Hydrographs

Stantec

\\CD1004-F01\work_group\01609\active\160901057\03_data\field\Groundwater\Logger data\Corrected\2023 Fish Report Figures\App C3 Fig C-3-2 MW21-MW23-SW4 Trigger Hydrographs.xlsx





Notes:

Climate data obtain from the Environment Canada Website: Station Geraldton A
96-12B overprinted by mine infrastructure. Data logger temporarily placed in 96-12A

Client/Project

2023 Fish and Fish Habitat
Federal EIS Follow-Up Monitoring Report
Greenstone Project

Figure No.

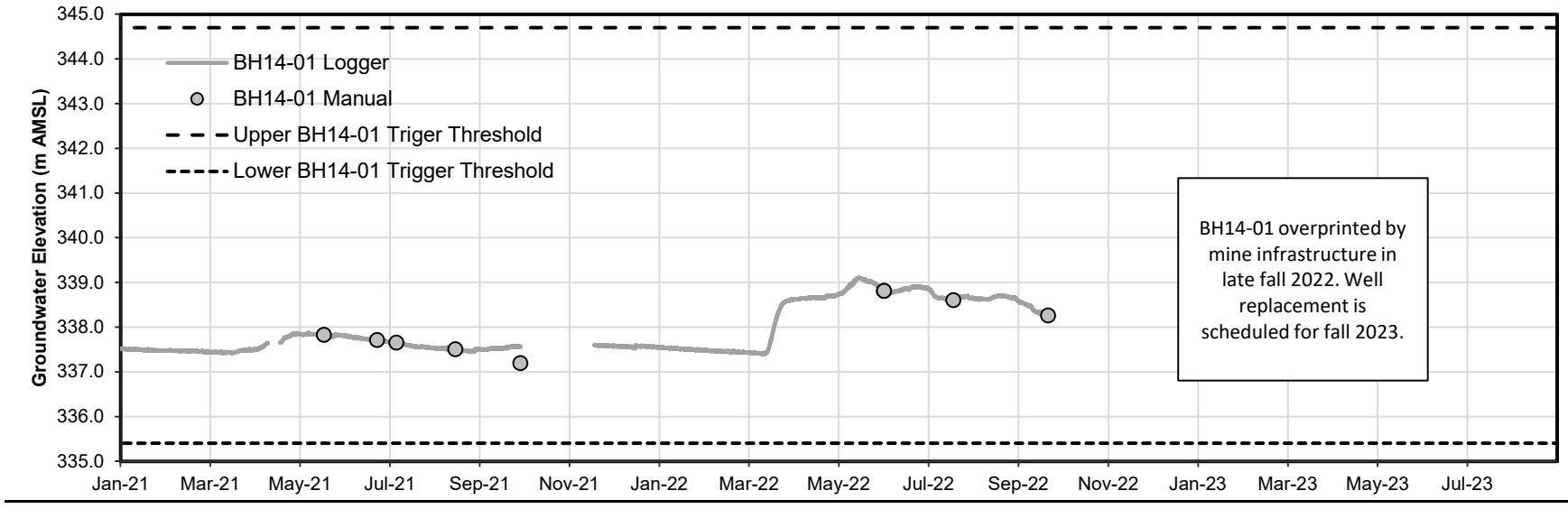
C -3-3

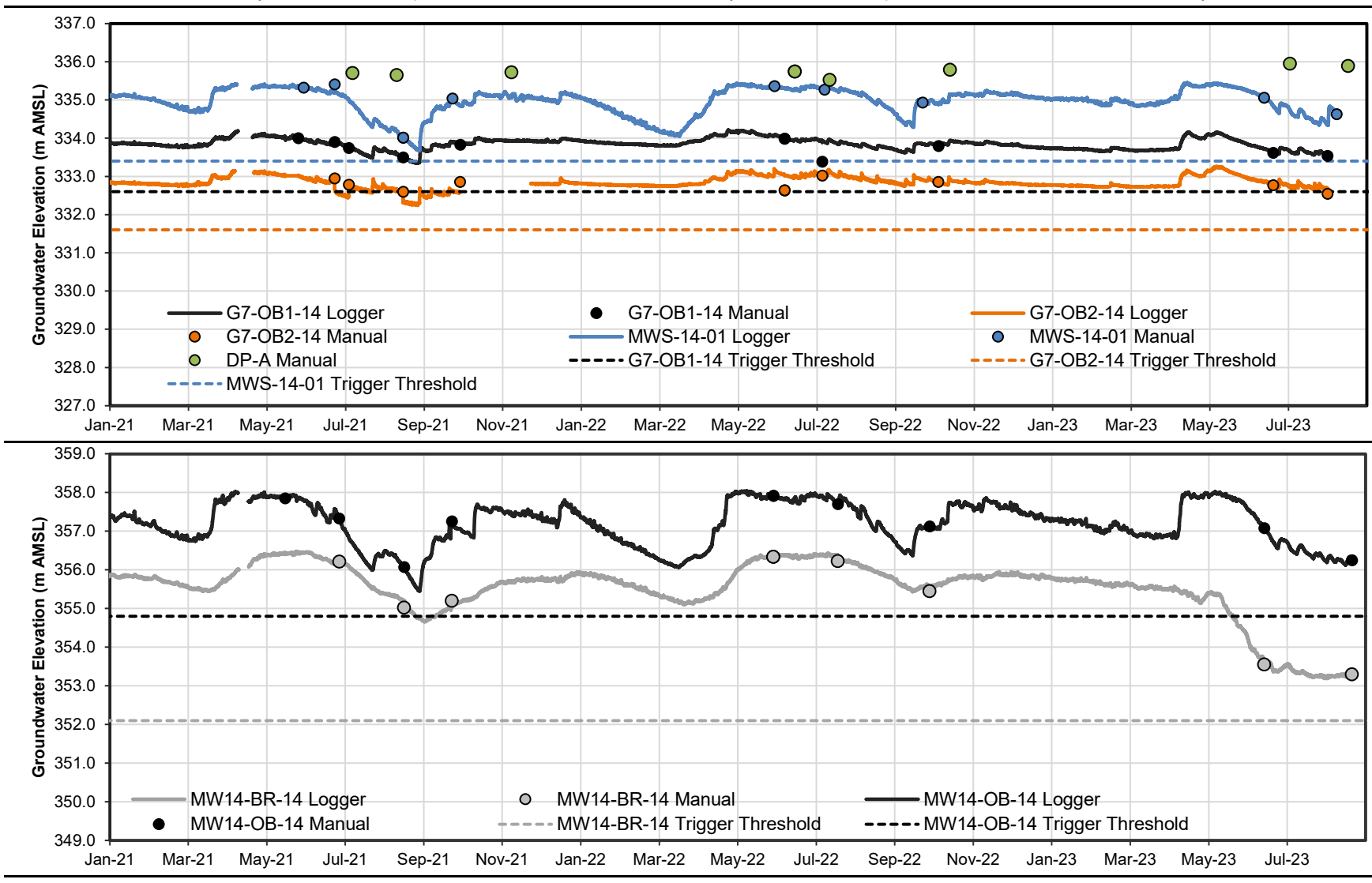
Title

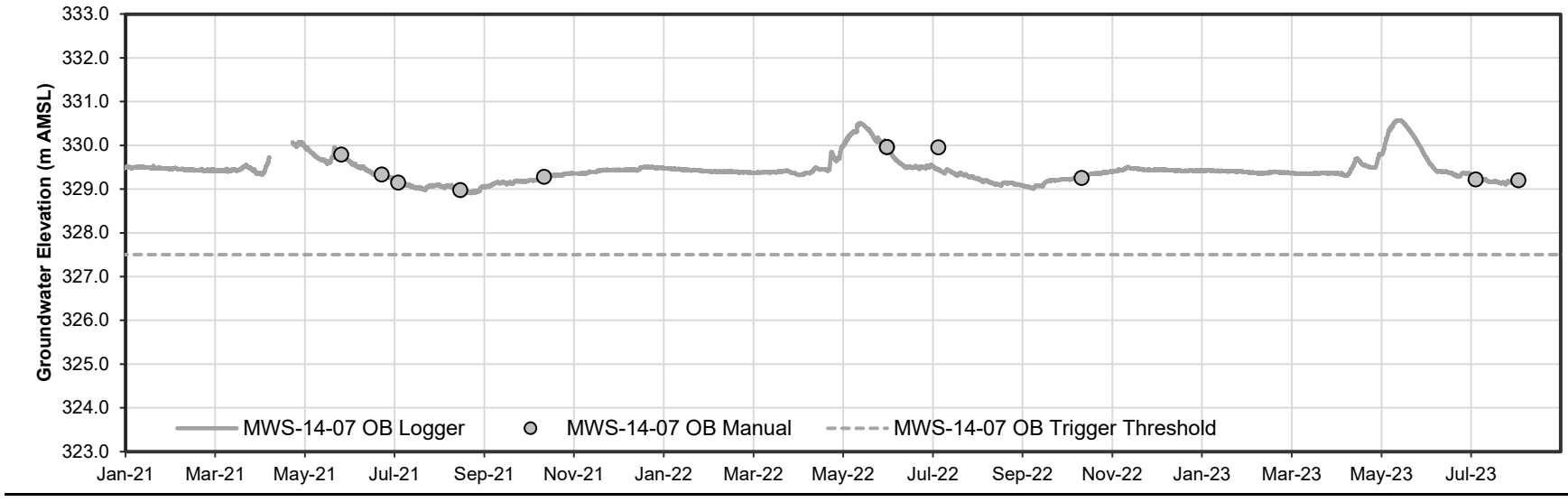
MHT Hydrographs

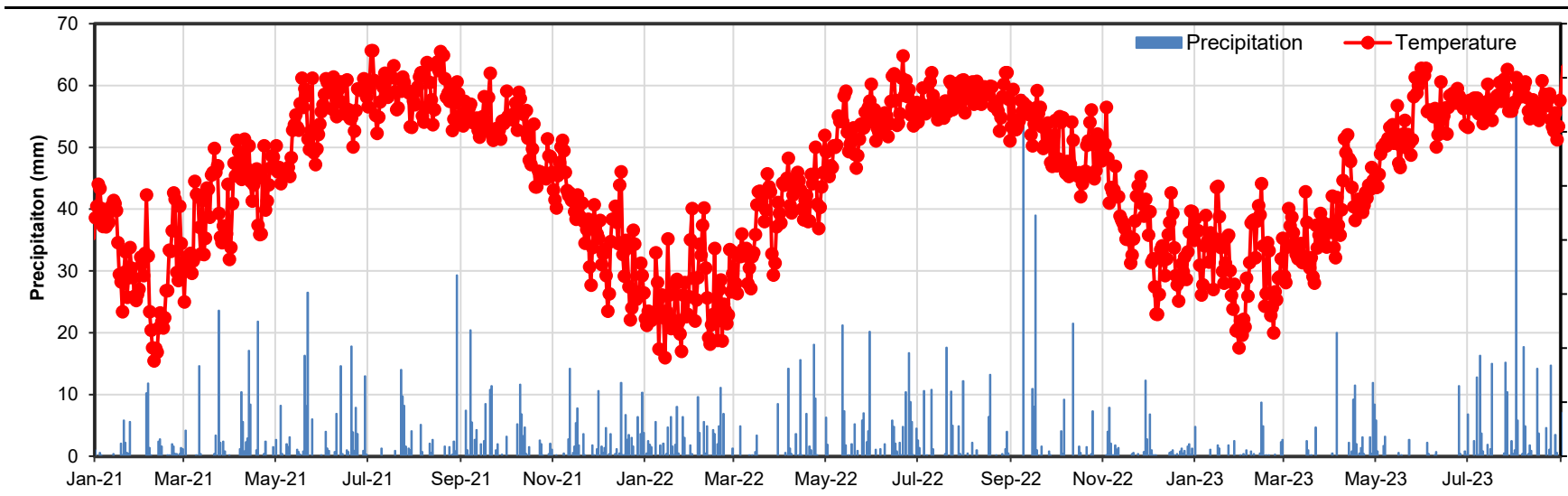
Stantec

\\CD1004-F01\work_group\01609\active\160901057\03_data\field\Groundwater\Logger data\Corrected\2023 Fish Report Figures\App C3 Fig C-3-3 MHT Hydrograph.xlsx









Notes:

Error in barologger. Data from mid-April 2021 removed.
Climate data obtain from the Environment Canada Website: Station Geraldton A

Client/Project

2023 Fish and Fish Habitat
Federal EIS Follow-Up Monitoring Report
Greenstone Project

Figure No.

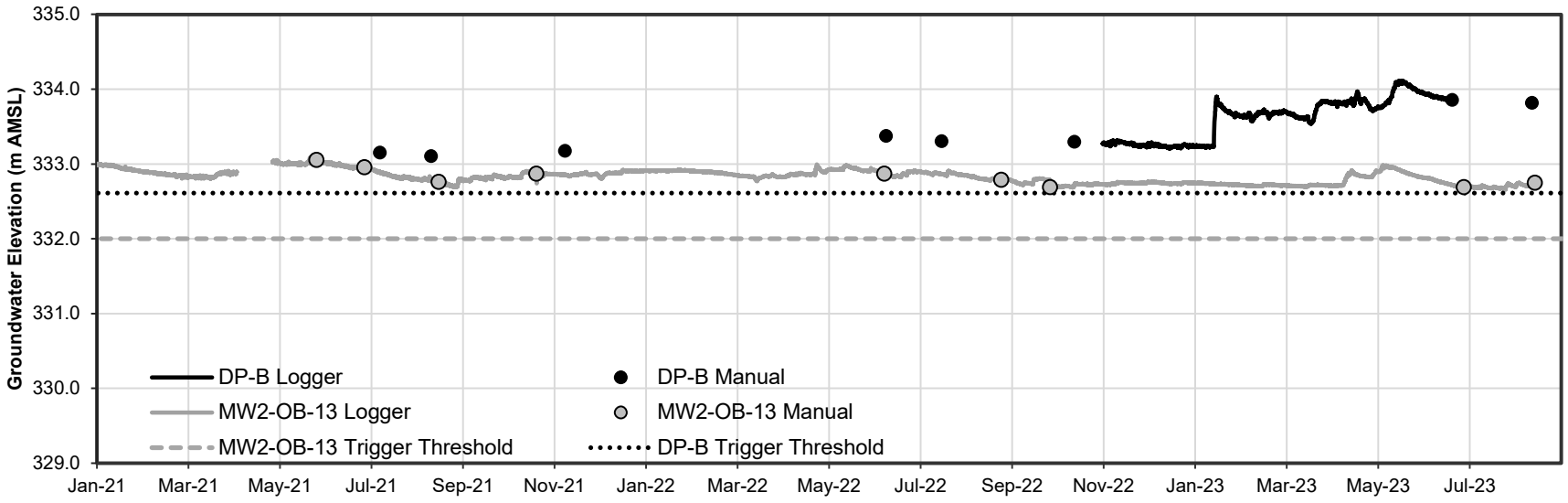
C -3-4

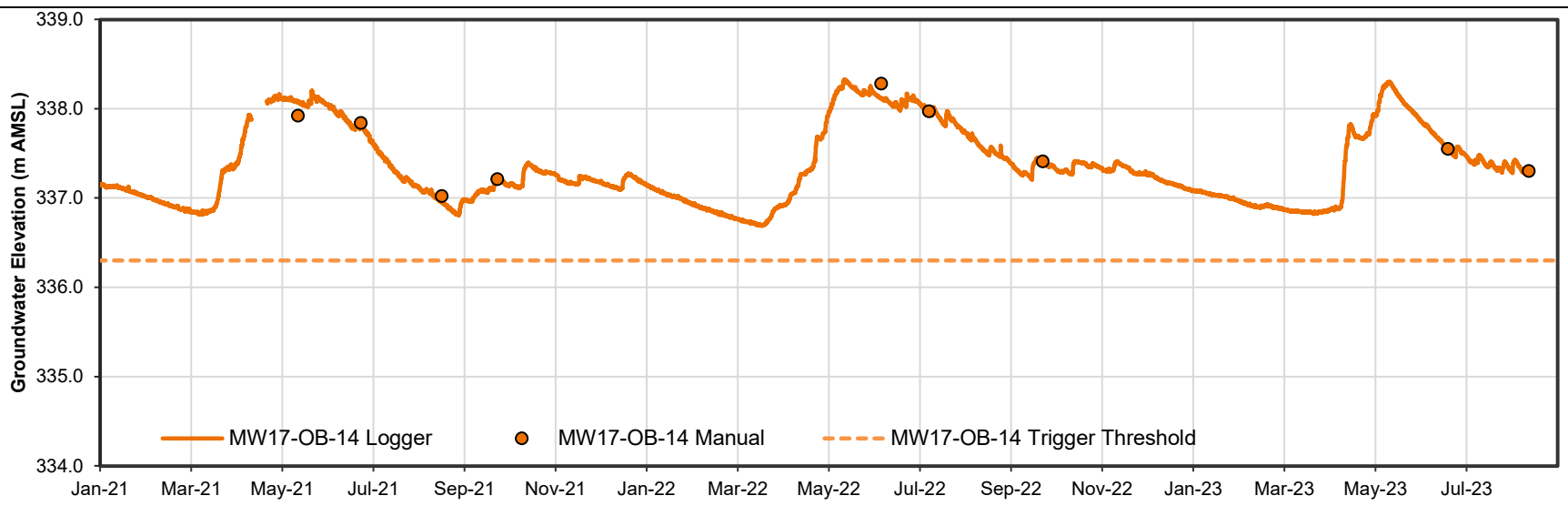
Title

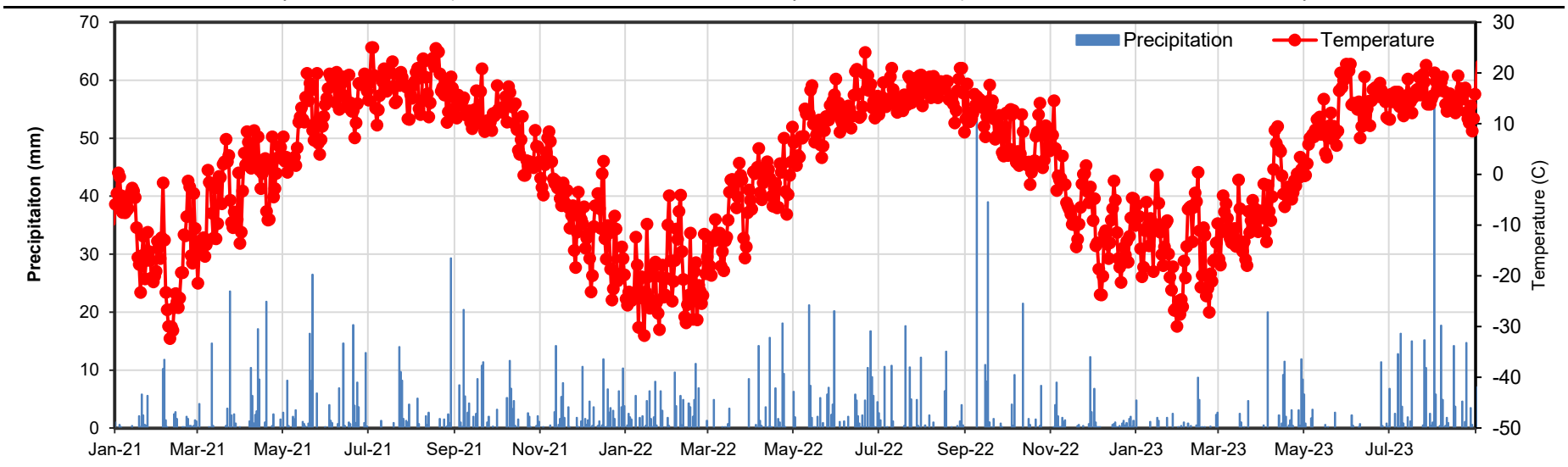
Hydrographs

Stantec

\\CD1004-F01\work_group\01609\active\160901057\03_data\field\Groundwater\Logger data\Corrected\2023 Fish Report Figures\App C3 Fig C-3-4 Hydrographs.xlsx







Notes:

'Error in barologger. Data from mid-April 2021 removed.
Climate data obtain from the Environment Canada Website: Station Geraldton A

Client/Project

2023 Fish and Fish Habitat
Federal EIS Follow-Up Monitoring Report
Greenstone Project

Figure No.

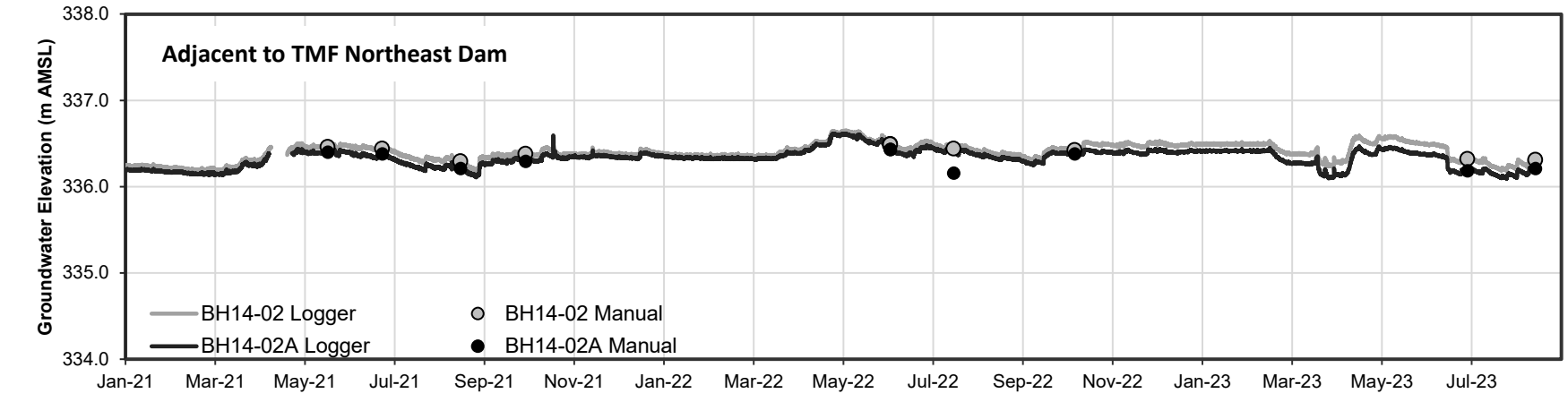
C -3-5

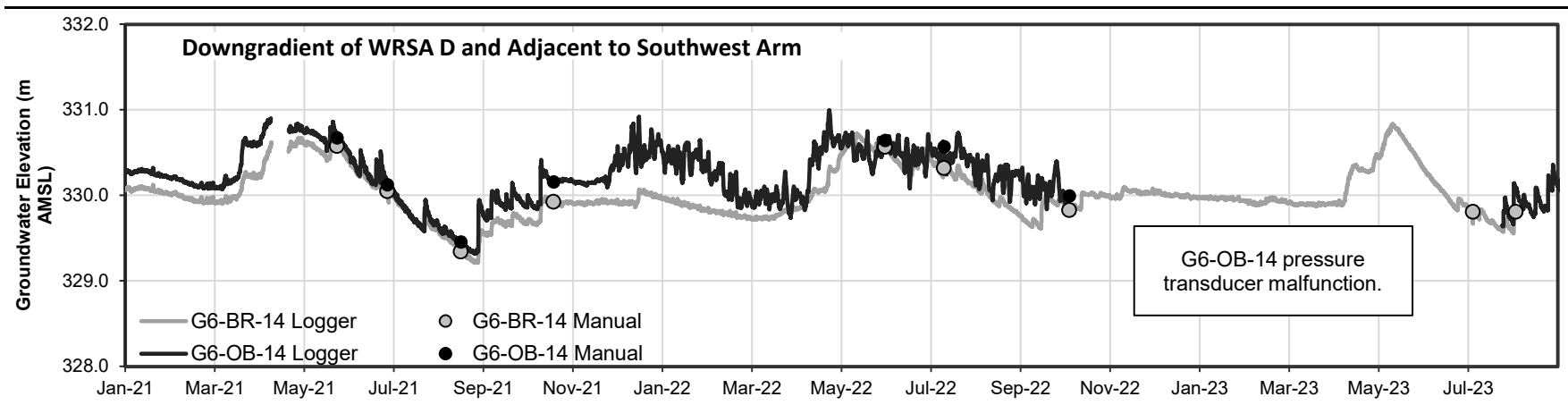
Title

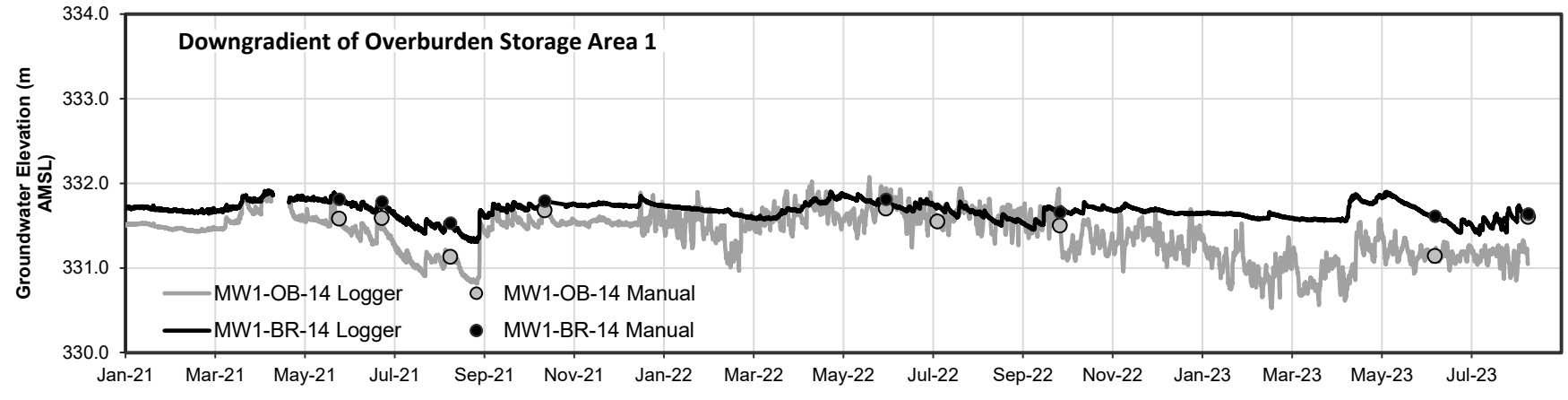
Hydrographs

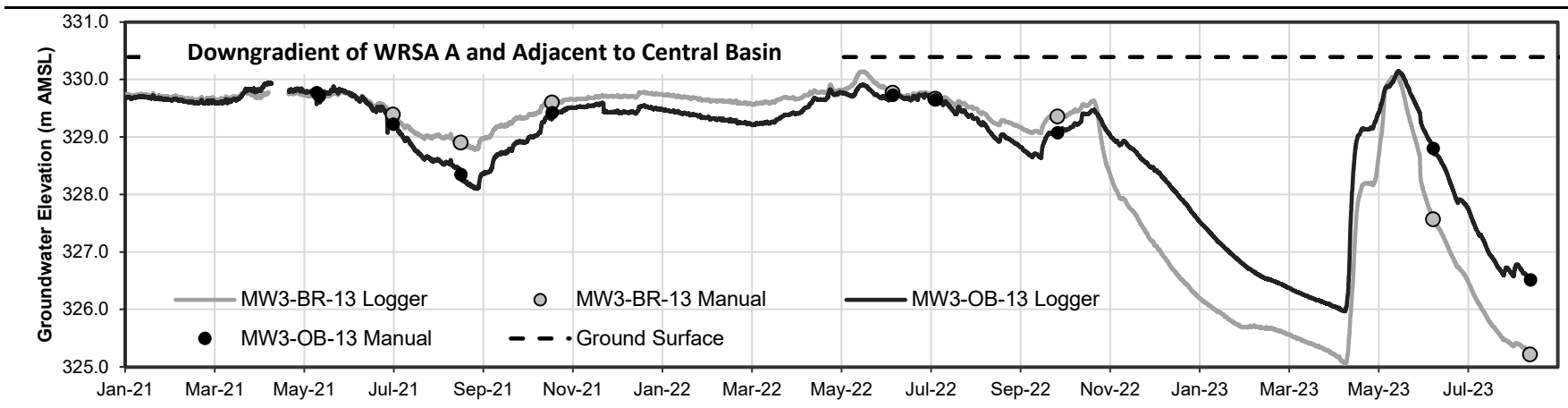
Stantec

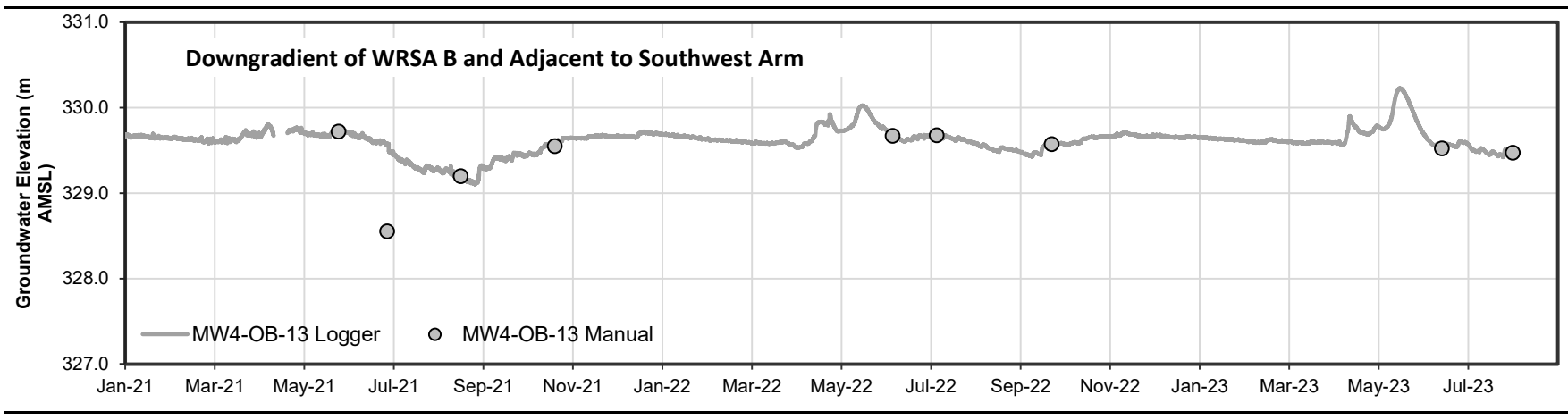
\\CD1004-F01\work_group\01609\active\160901057\03_data\field\Groundwater\Logger data\Corrected\2023 Fish Report Figures\App C3 Fig C-3-4 C-3-5 Hydrographs.xlsx

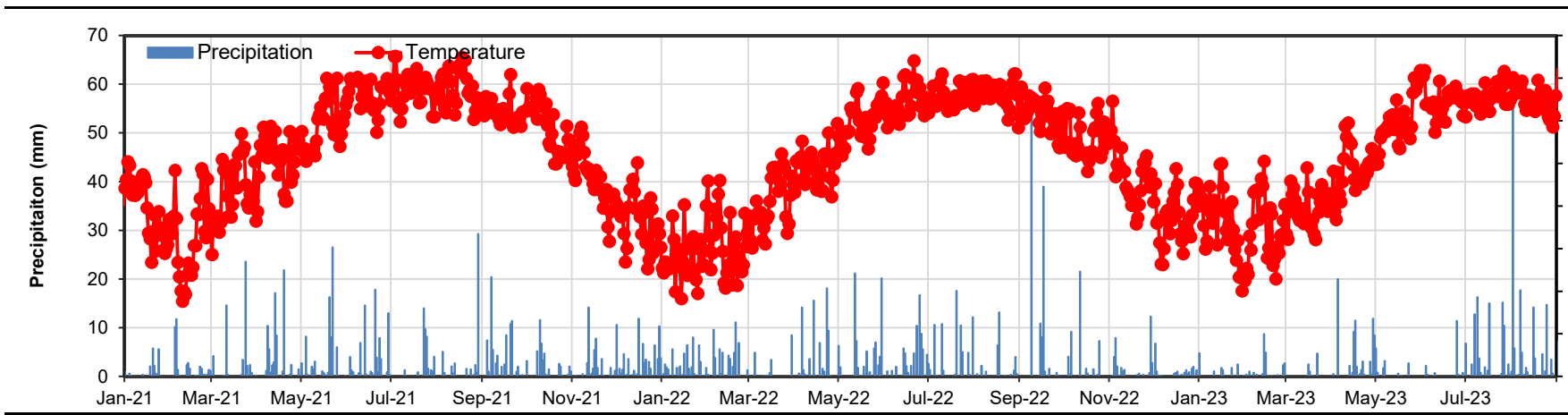












Notes:

Error in barologger. Data from mid-April 2021 removed.
Climate data obtain from the Environment Canada Website: Station Geraldton A

Client/Project

2023 Fish and Fish Habitat
Federal EIS Follow-Up Monitoring Report
Greenstone Project

Figure No.

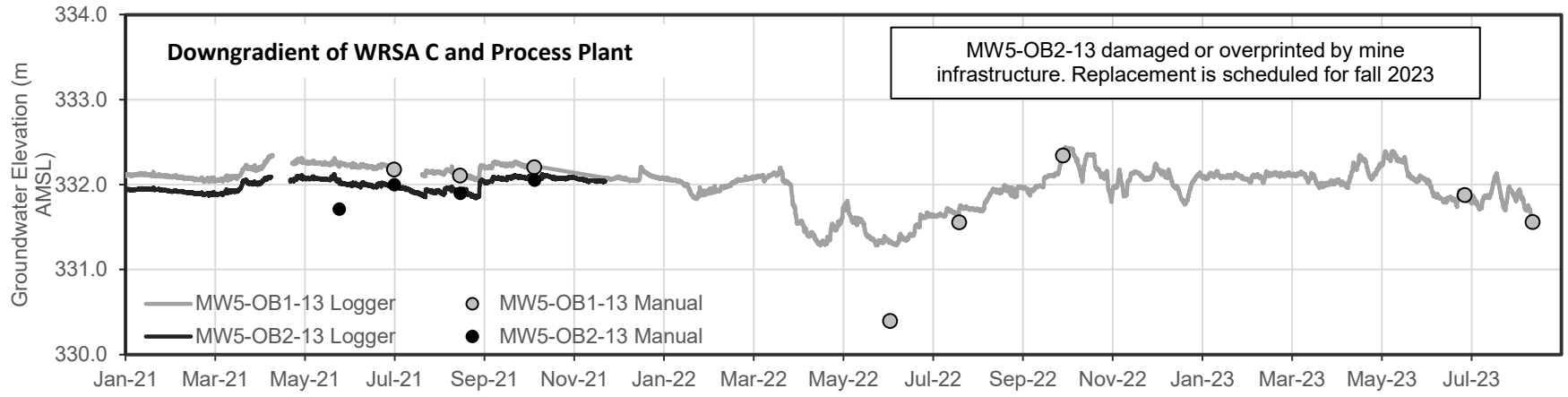
C -3-6

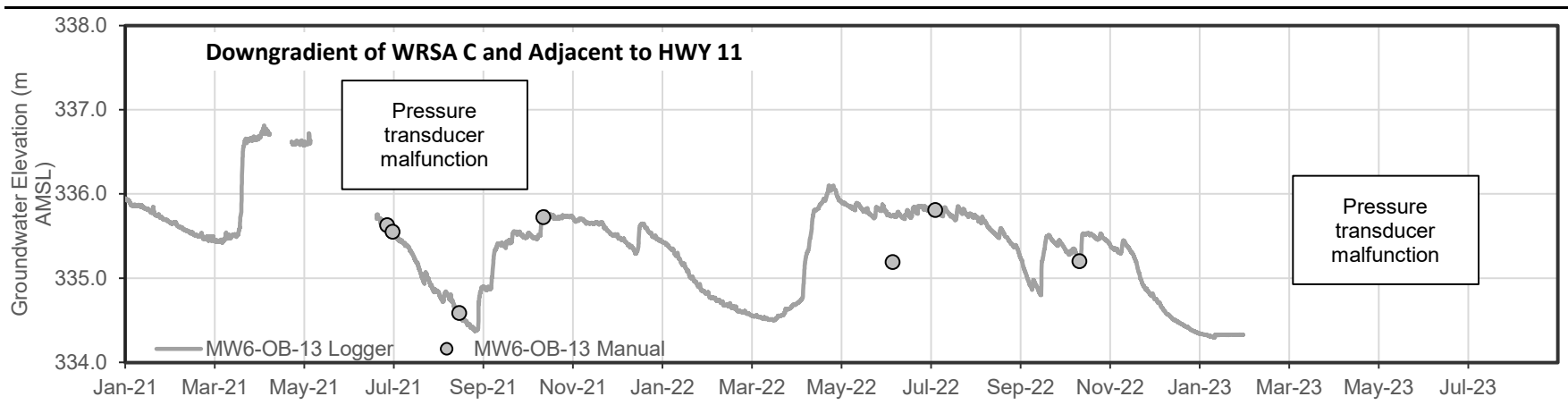
Title

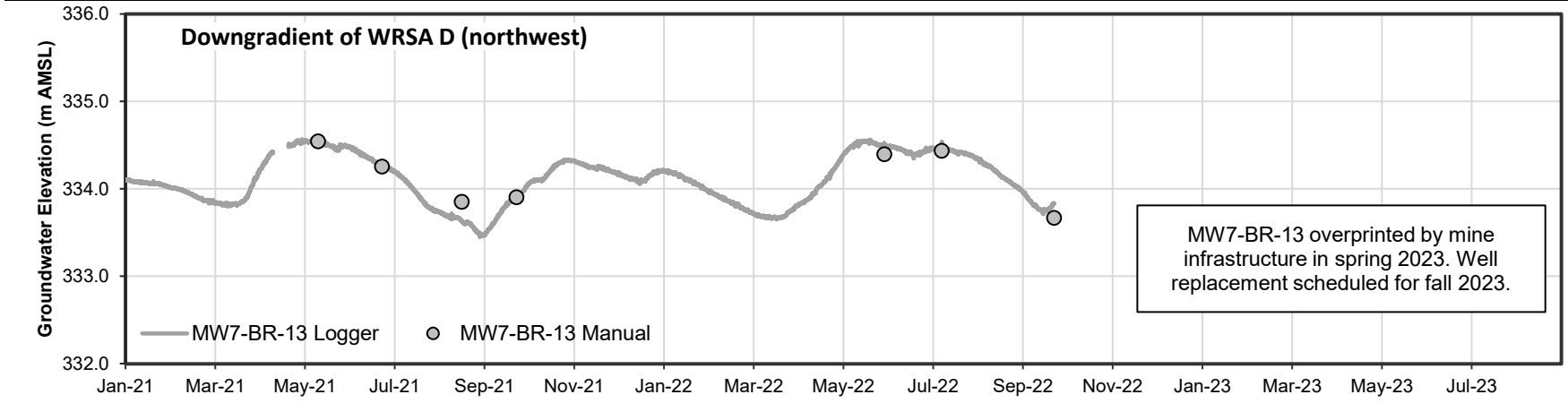
Hydrographs

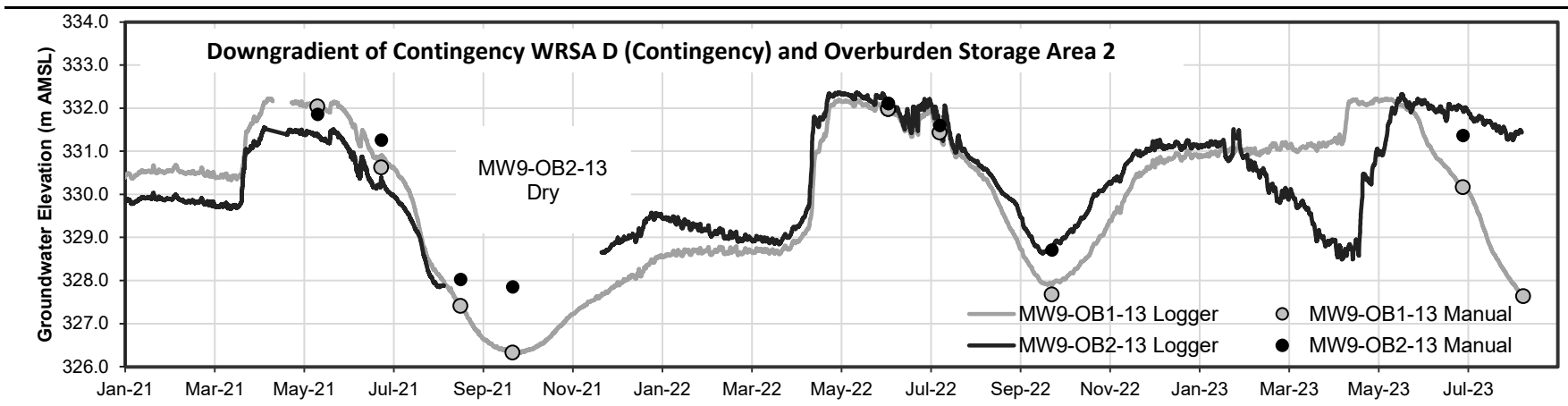
Stantec

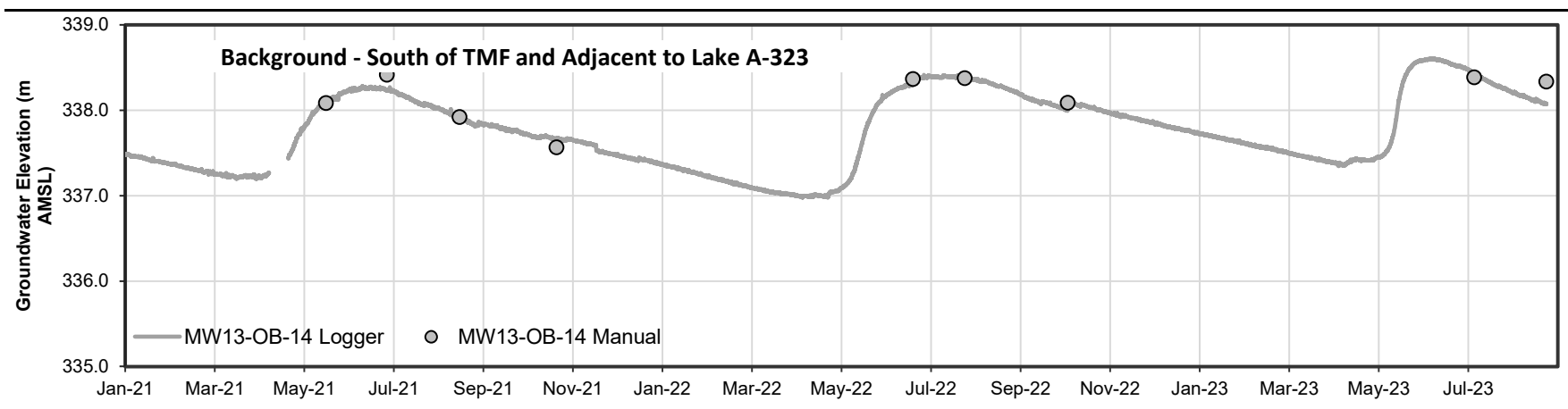
\\CD1004-F01\work_group\01609\active\160901057\03_data\field\Groundwater\Logger data\Corrected\2023 Fish Report Figures\App C3 Fig C-3-6 to C-3-9_Hydrographs.xlsx

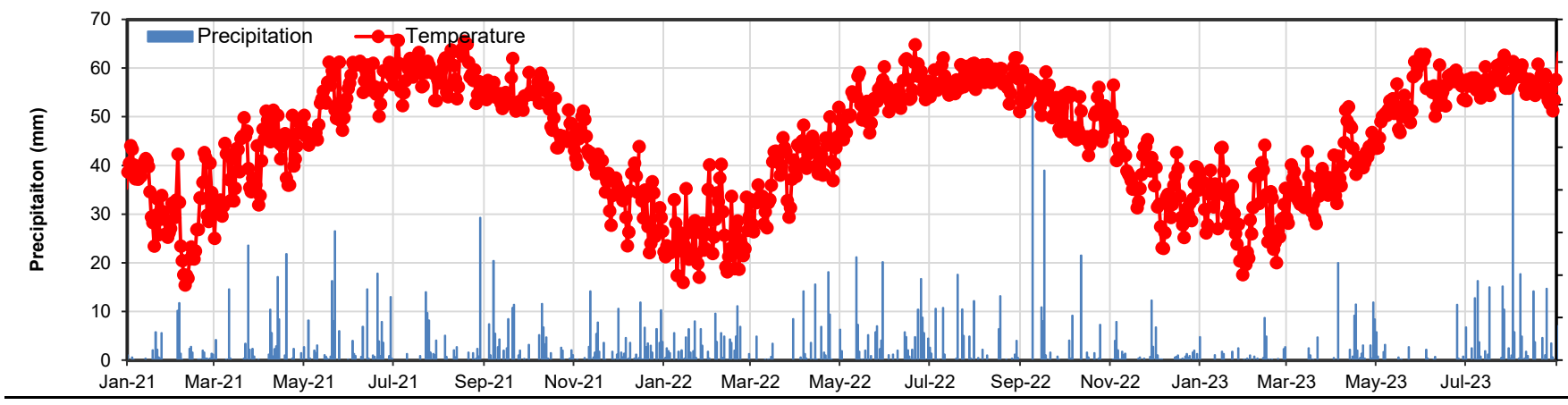












Notes:

Error in barologger. Data from mid-April 2021 removed.
Climate data obtain from the Environment Canada Website: Station Geraldton A

Client/Project

2023 Fish and Fish Habitat
Federal EIS Follow-Up Monitoring Report
Greenstone Project

Figure No.

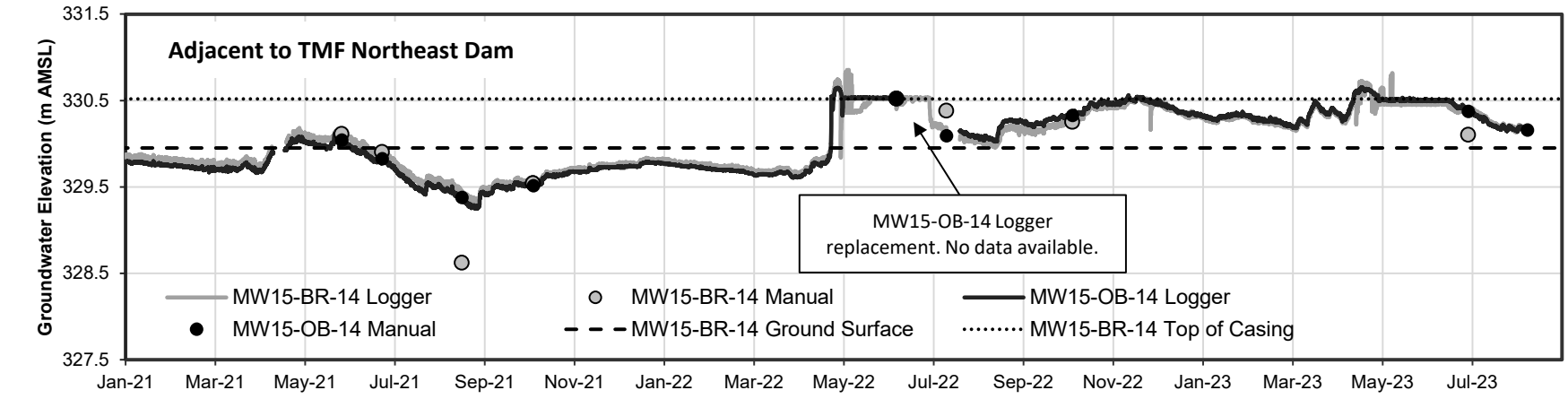
C -3-7

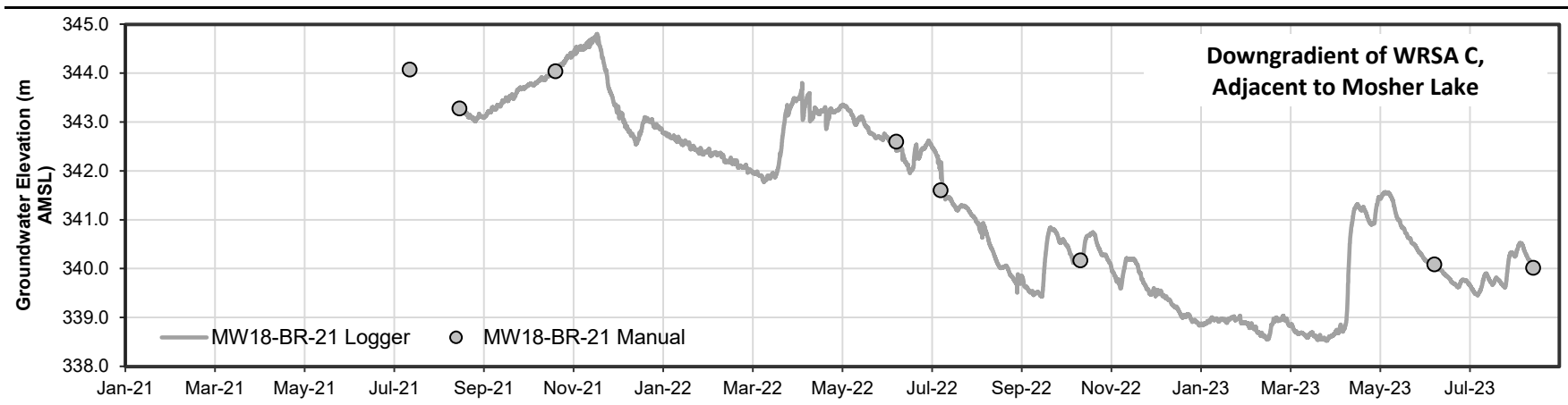
Title

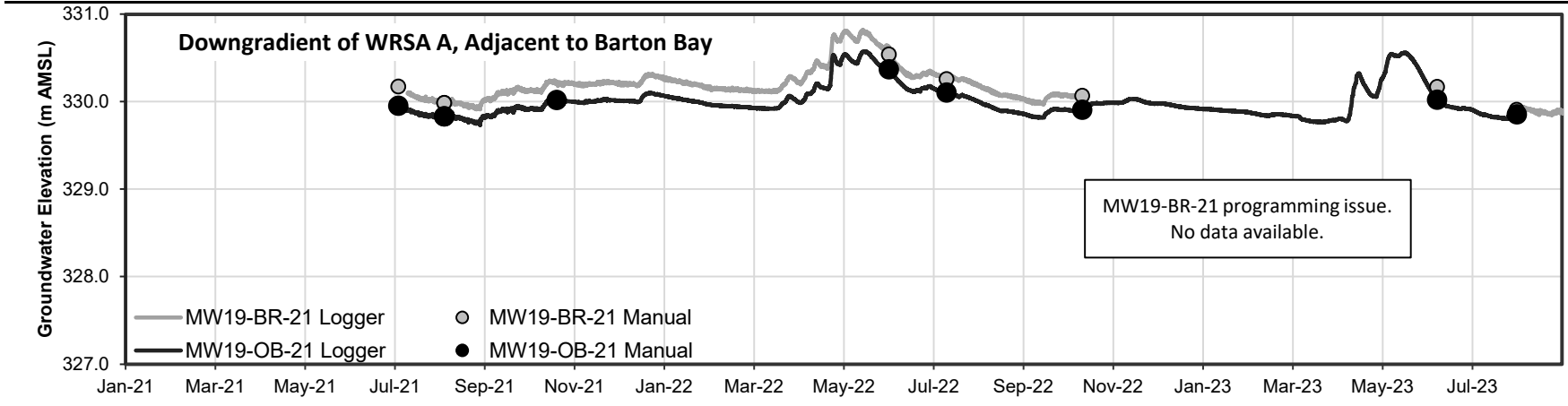
Hydrographs

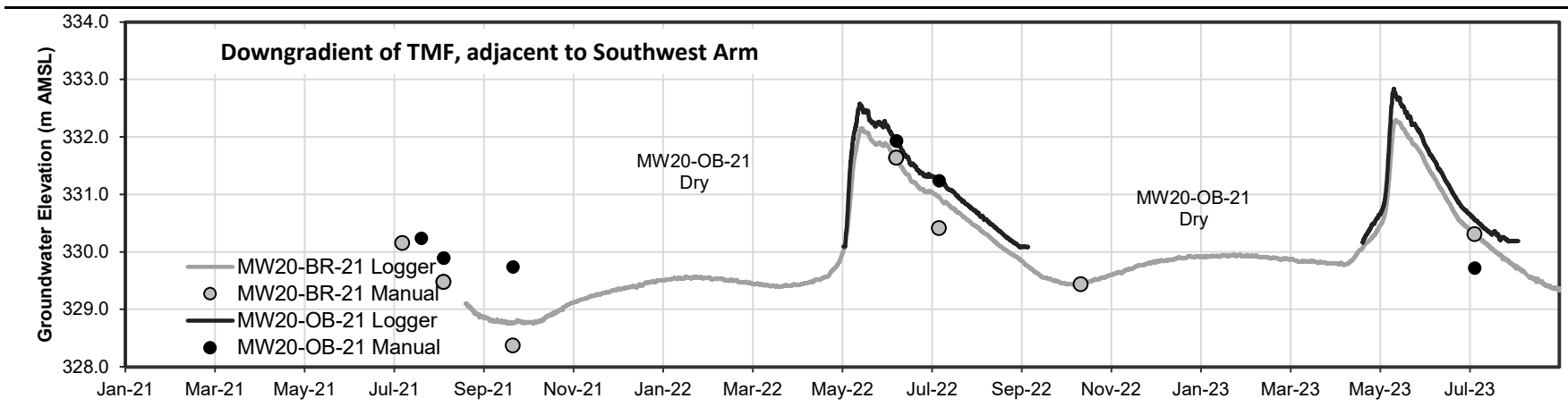
Stantec

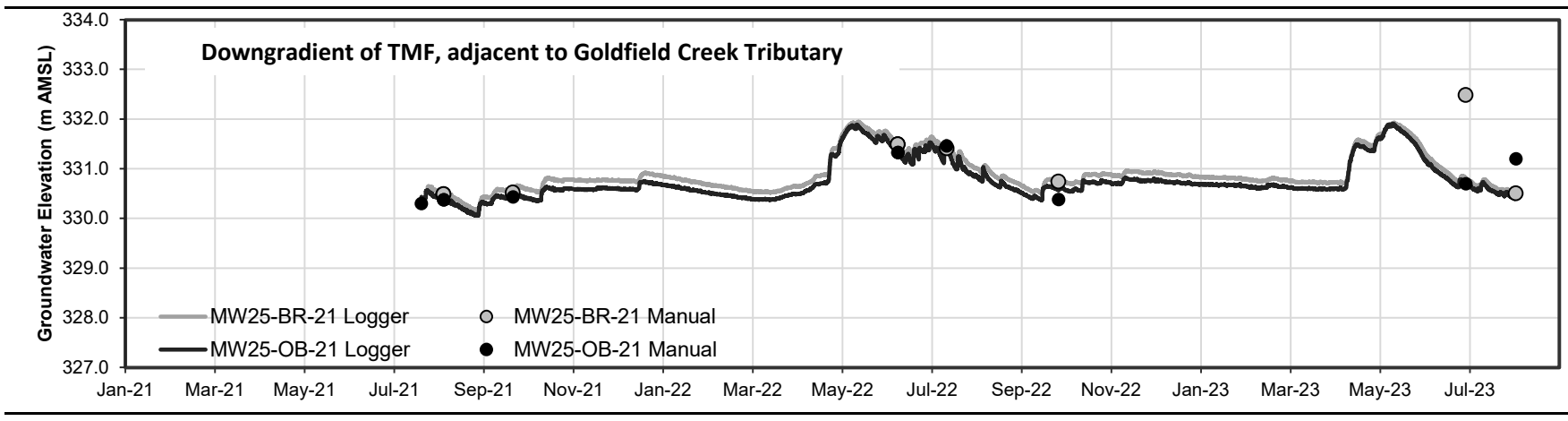
\\CD1004-F01\work_group\01609\active\160901057\03_data\field\Groundwater\Logger data\Corrected\2023 Fish Report Figures\App C3 Fig C-3-6 to C-3-9_Hydrographs.xlsx

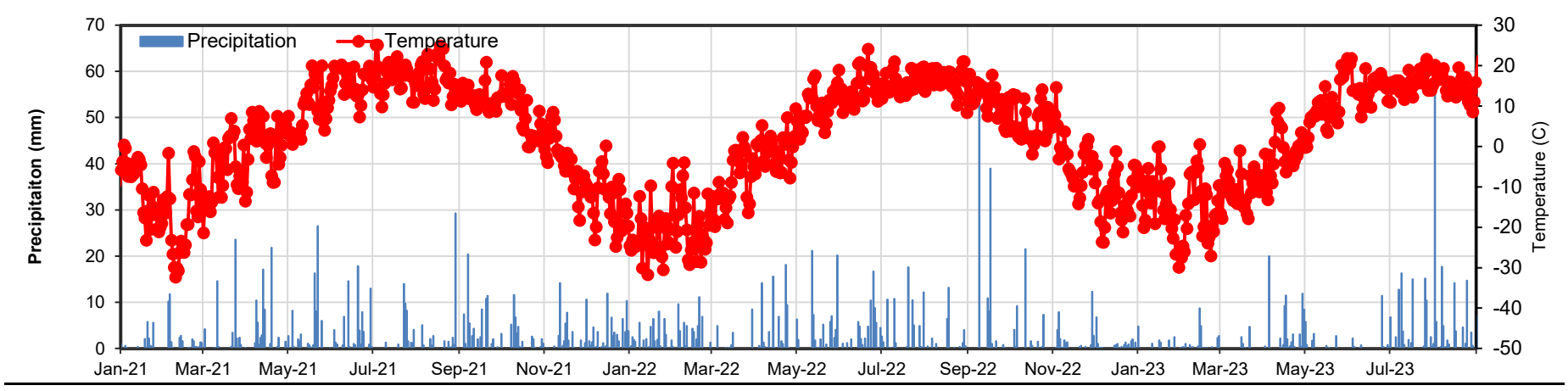












Notes:

Error in barologger. Data from mid-April 2021 removed.
Climate data obtain from the Environment Canada Website: Station Geraldton A

Client/Project

2023 Fish and Fish Habitat
Federal EIS Follow-Up Monitoring Report
Greenstone Project

Figure No.

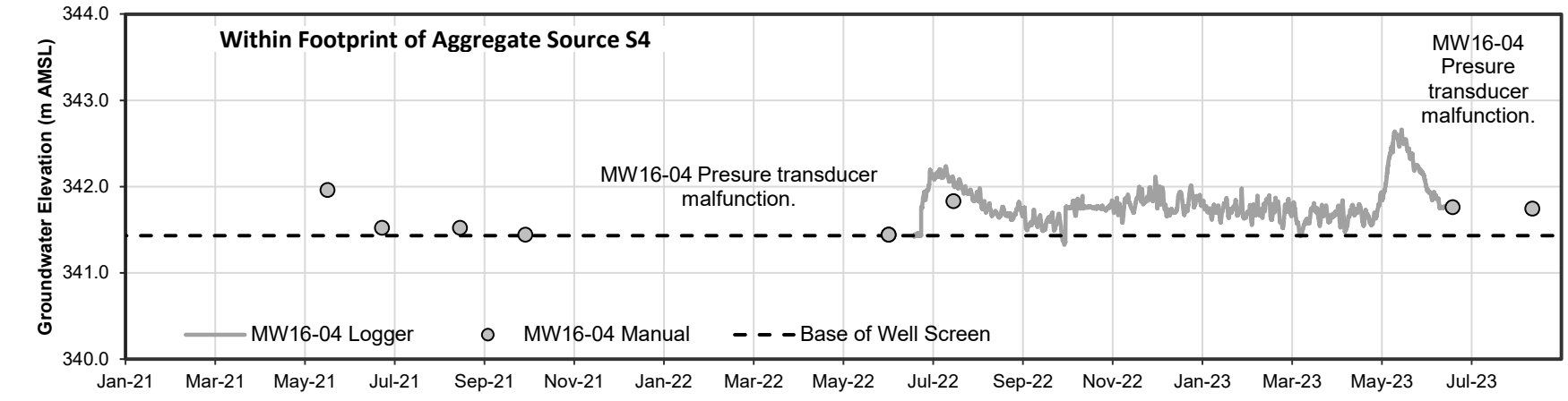
C -3-8

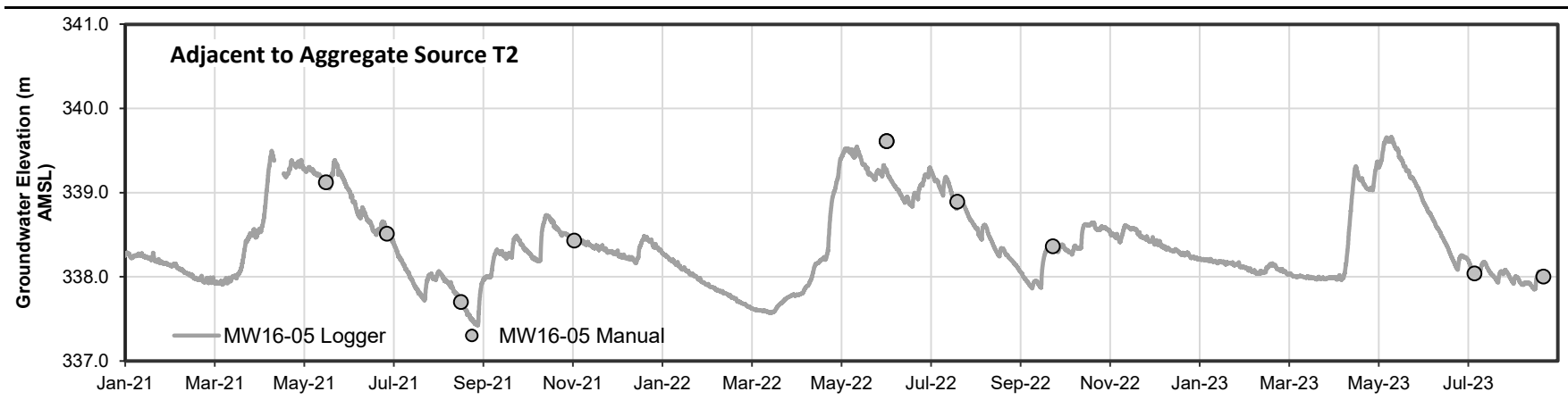
Title

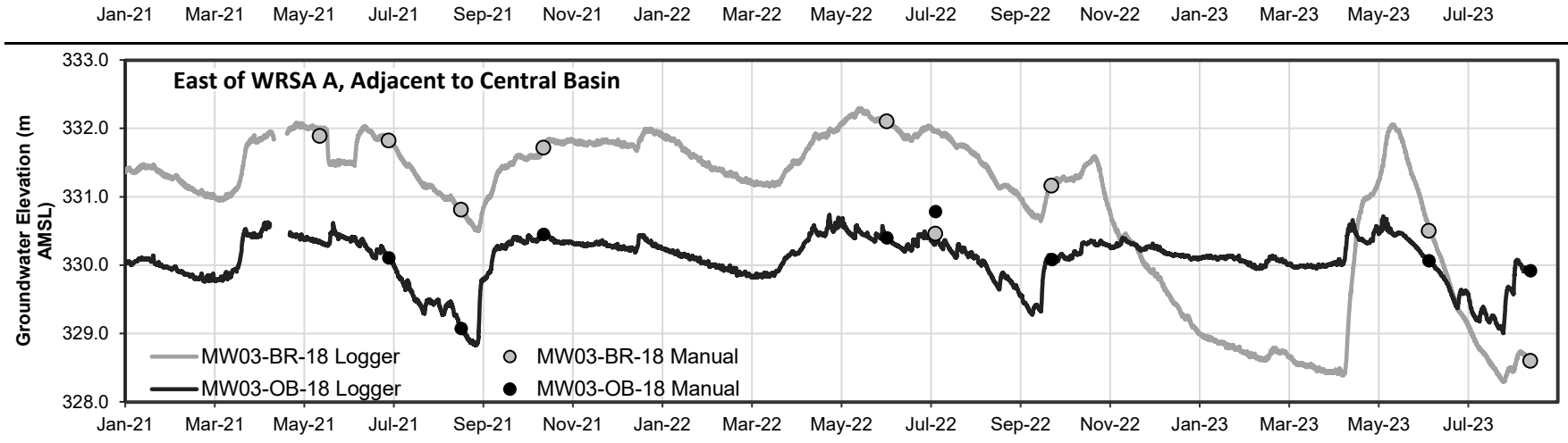
Hydrographs

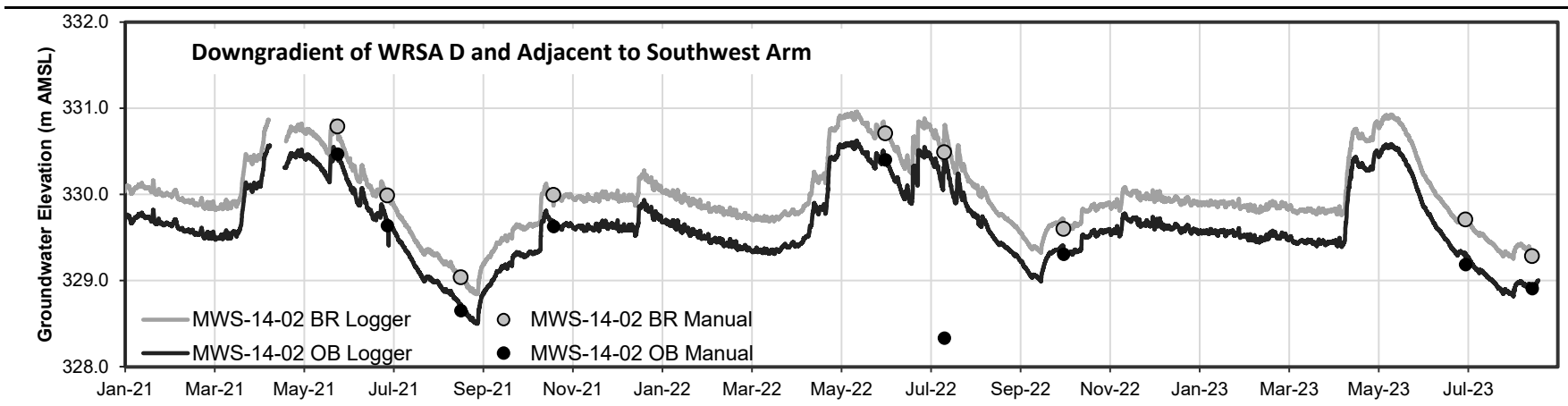
Stantec

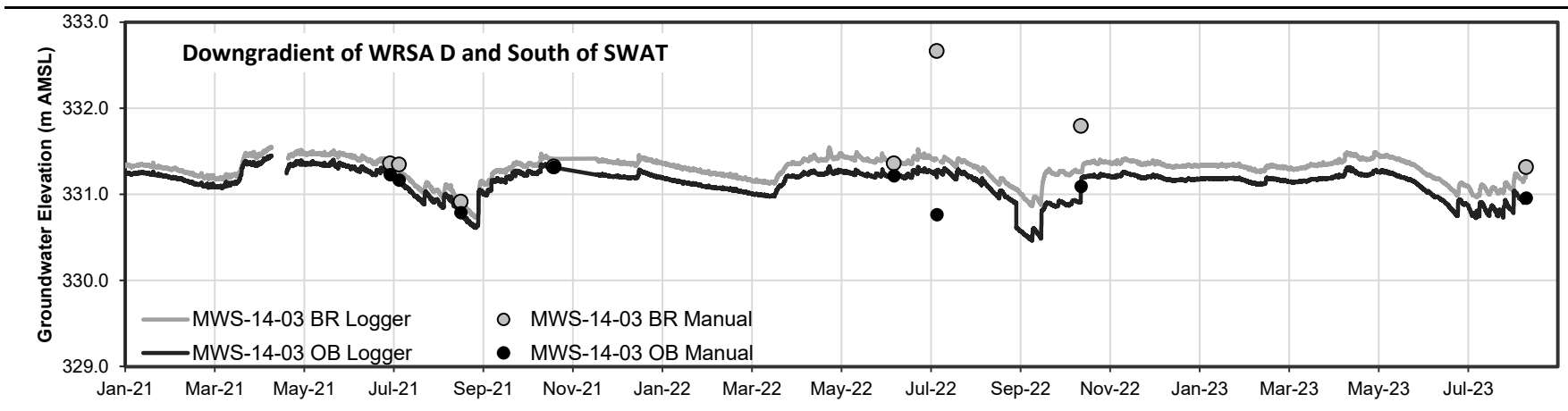
\\CD1004-F01\work_group\01609\active\160901057\03_data\field\Groundwater\Logger data\Corrected\2023 Fish Report Figures\App C3 Fig C-3-6 to C-3-9_Hydrographs.xlsx

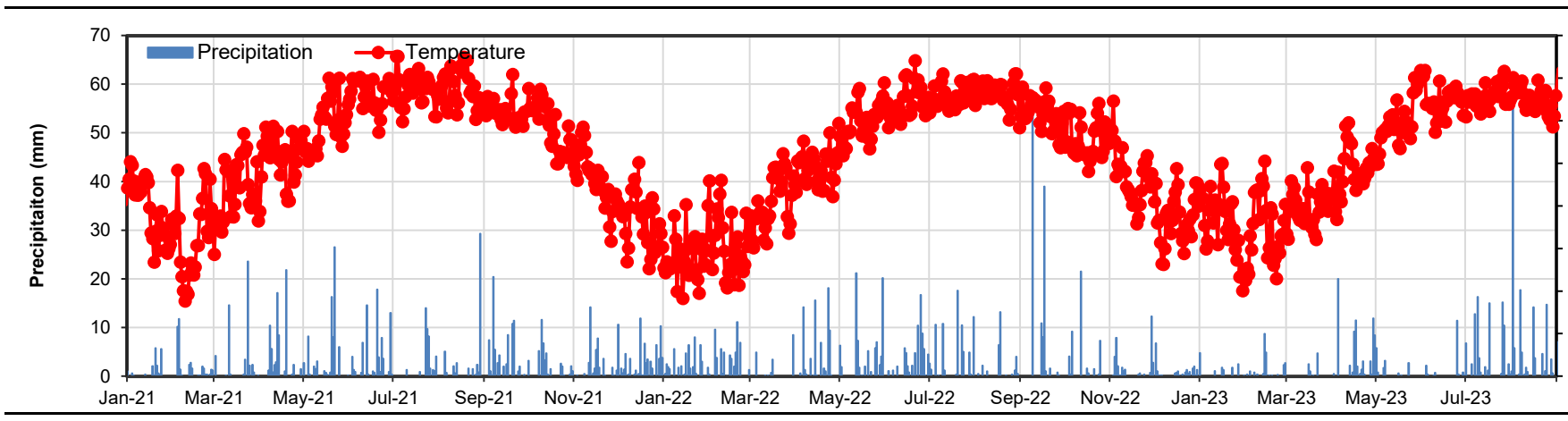












Notes:

Error in barologger. Data from mid-April 2021 removed.
Climate data obtain from the Environment Canada Website: Station Geraldton A

Client/Project

2023 Fish and Fish Habitat
Federal EIS Follow-Up Monitoring Report
Greenstone Project

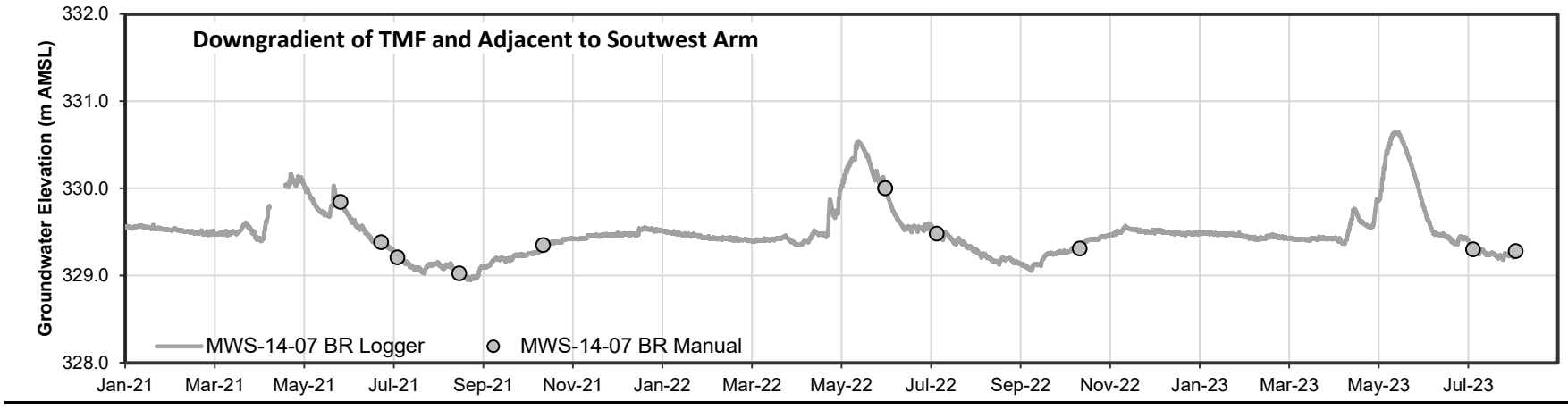
Figure No.

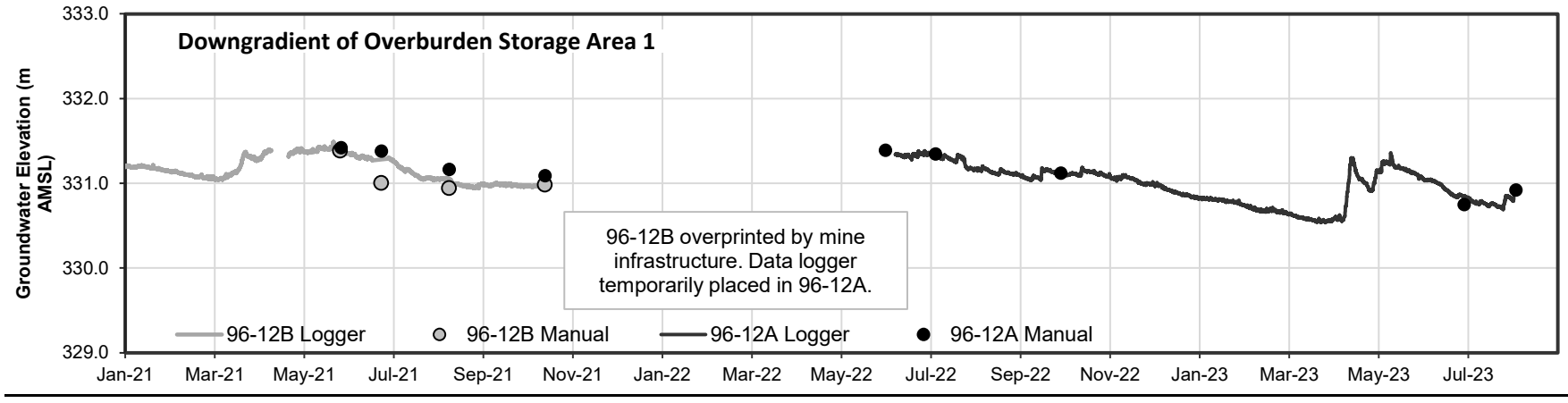
C -3-9

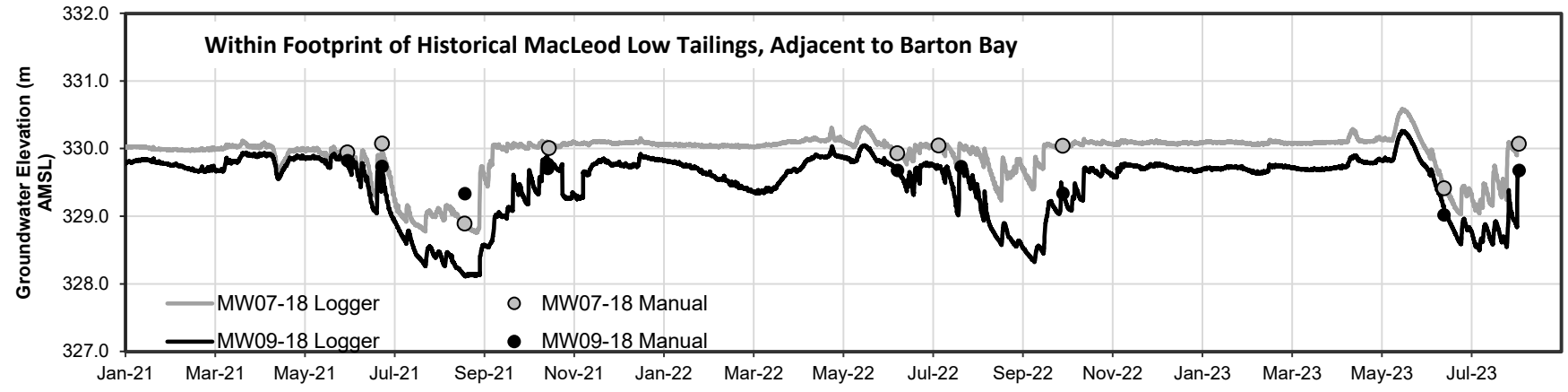
Title

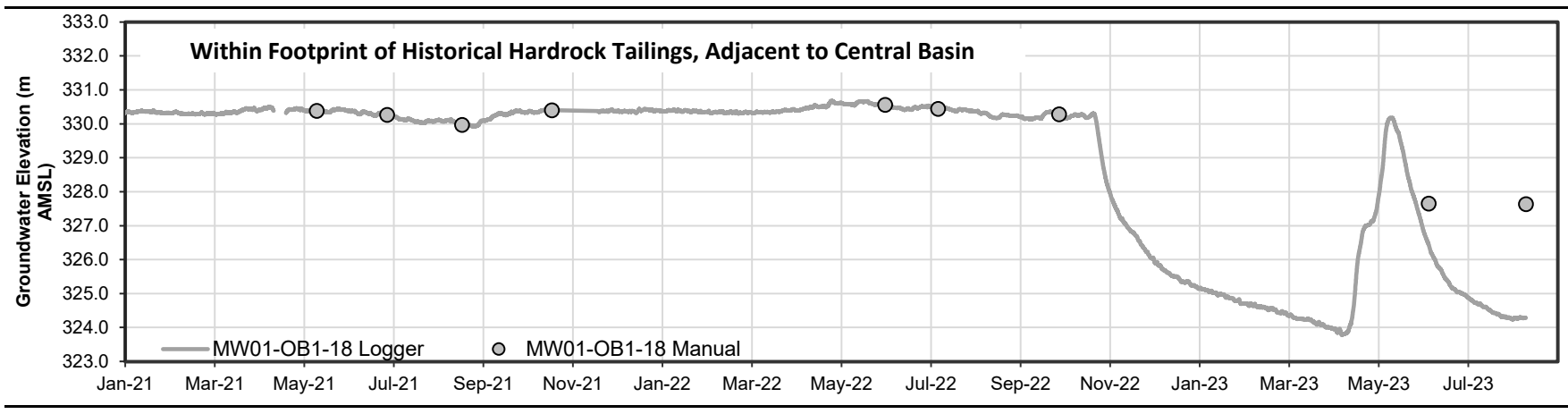
Hydrographs

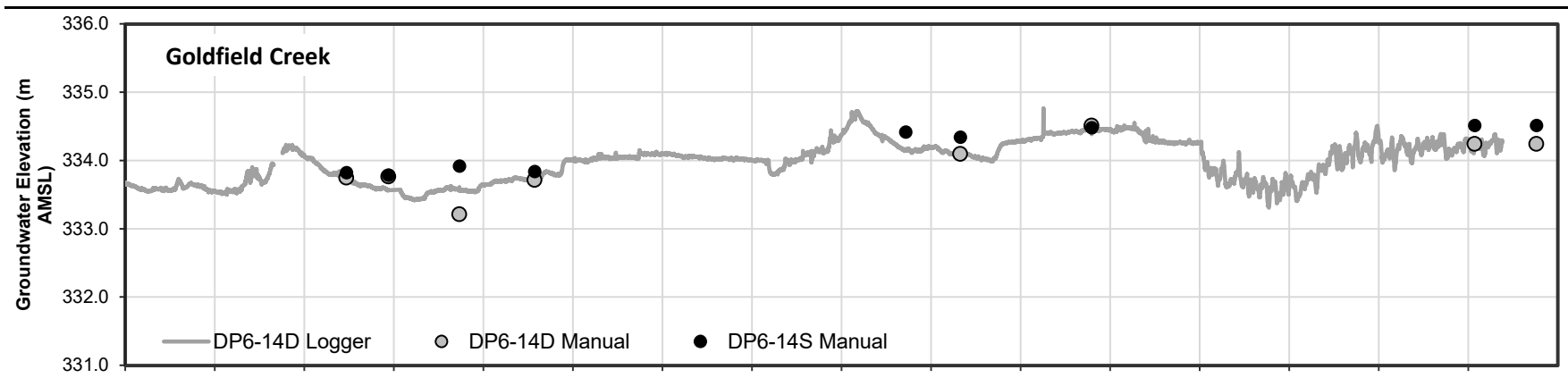
Stantec

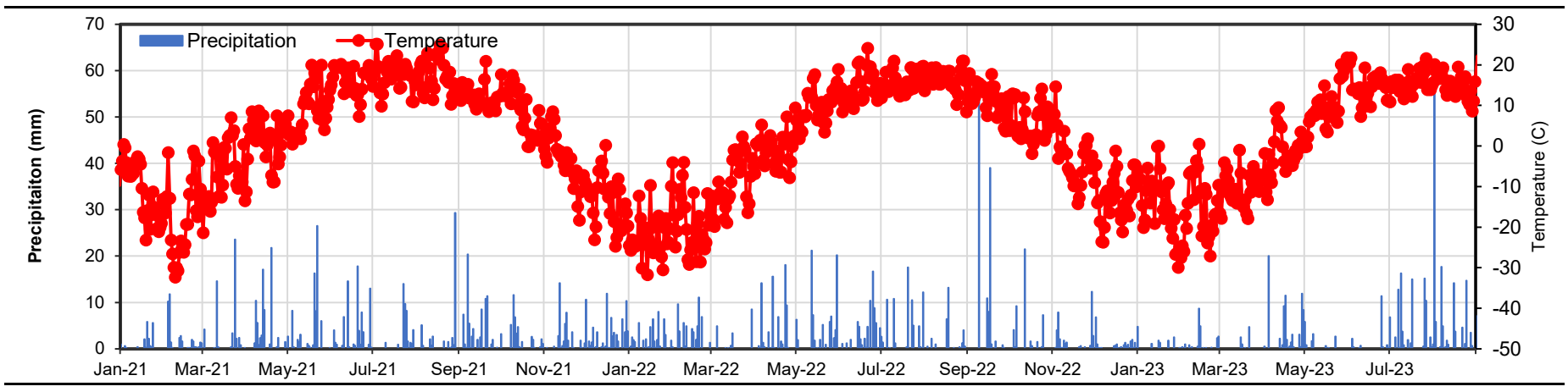












Notes:

Error in barologger. Data from mid-April 2021 removed.
Climate data obtain from the Environment Canada Website: Station Geraldton A

Client/Project

2023 Fish and Fish Habitat
Federal EIS Follow-Up Monitoring Report
Greenstone Project

Figure No.

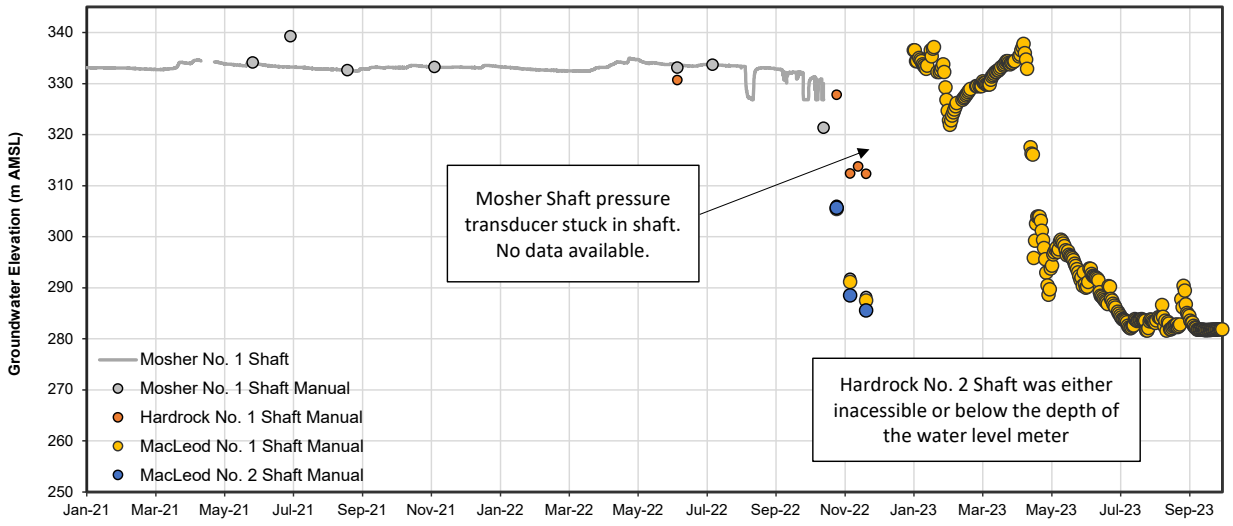
C -3-10

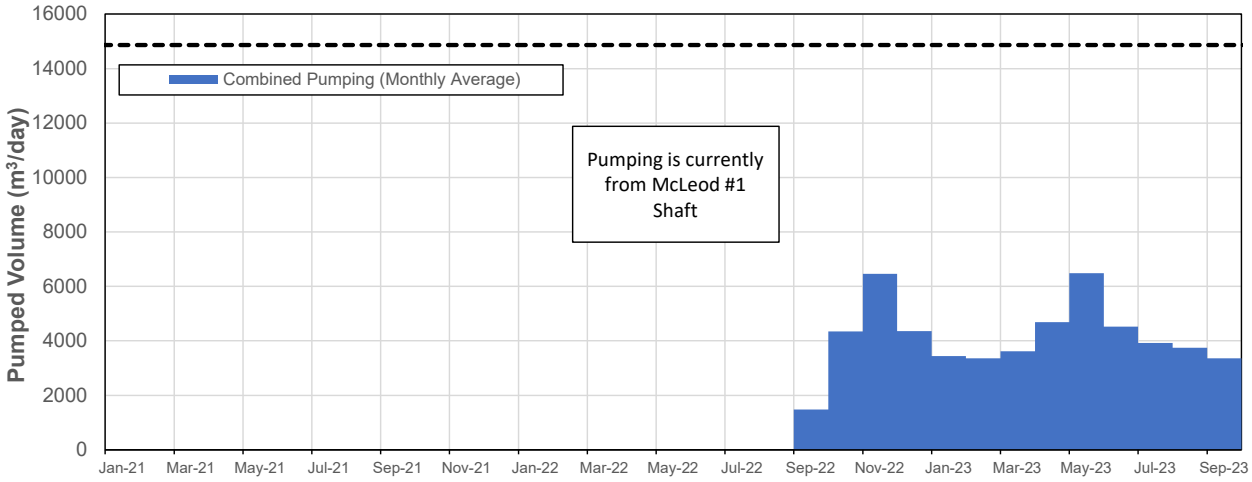
Title

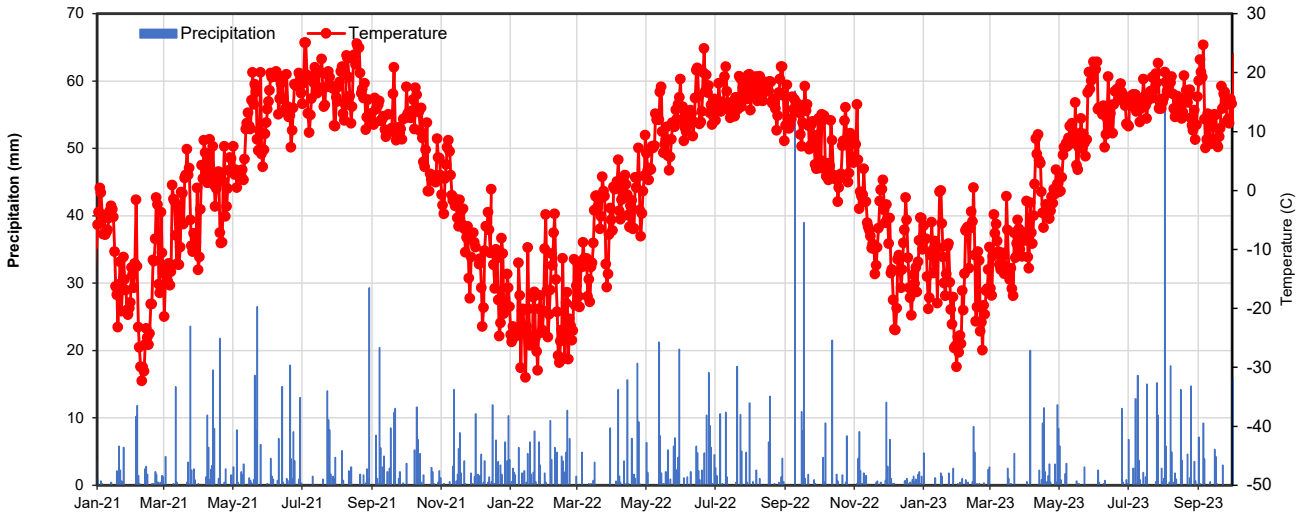
Hydrographs

Stantec

\\CD1004-F01\work_group\01609\active\160901057\03_data\field\Groundwater\Logger data\Corrected\2023 Fish Report Figures\App C3 Fig C-3-10 Hydrograph.xlsx







Notes:

Error in barologger. Data from mid-April 2021 removed.
Climate data obtain from the Environment Canada Website: Station Geraldton A

Client/Project

2023 Fish and Fish Habitat
Federal EIS Follow-Up Monitoring Report
Greenstone Project

Figure No.

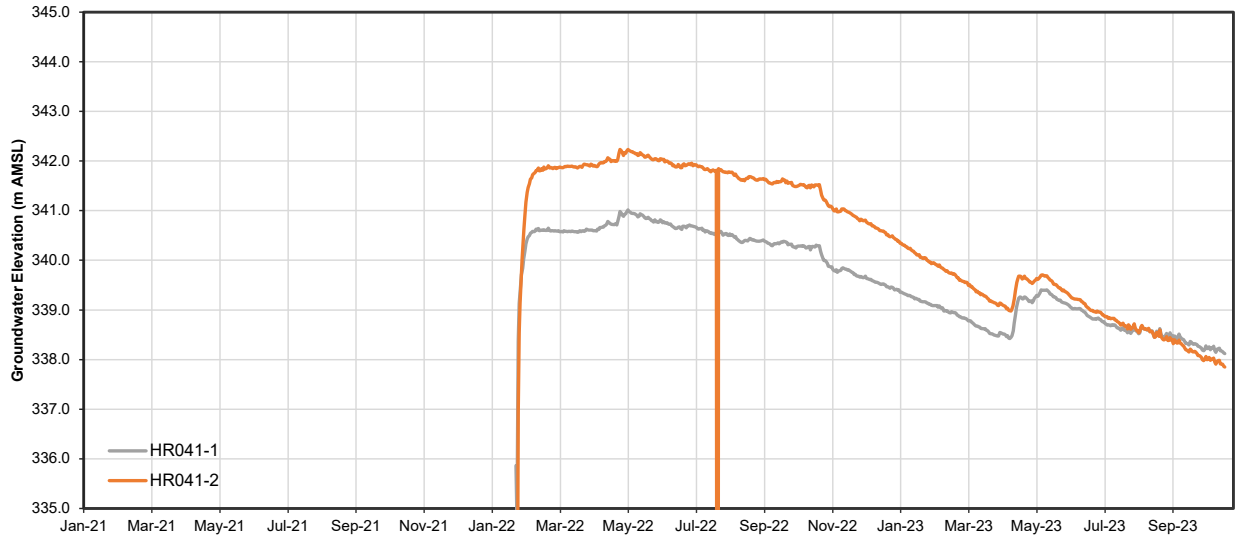
C -3-11

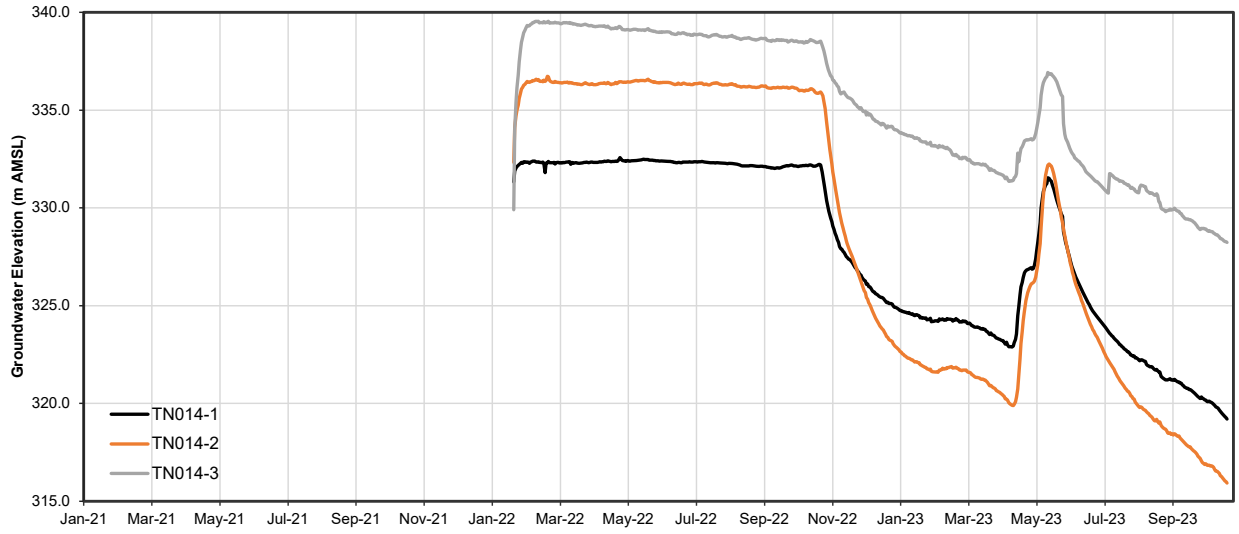
Title

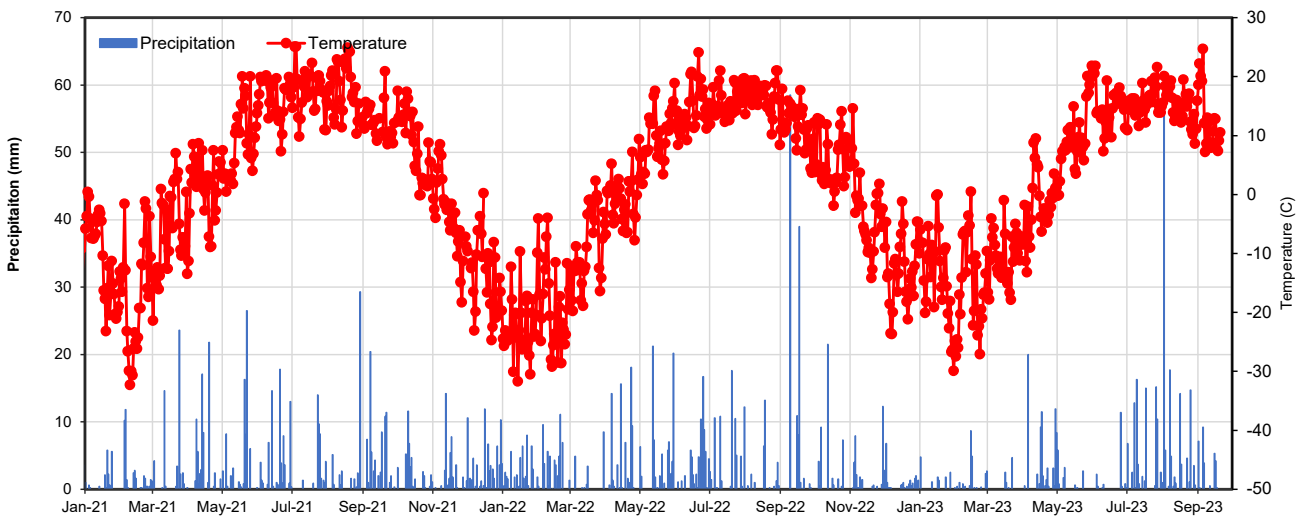
Hydrographs

Stantec

\\CD1004-F01\work_group\01609\active\160901057\03_data\field\Groundwater\Logger data\Corrected\2023 Fish Report Figures\App C3 Fig C-3-11 Shaft Level Hydrograph.xlsx







Notes:

Climate data obtain from the Environment Canada Website: Station Geraldton A

Client/Project

2023 Fish and Fish Habitat
Federal EIS Follow-Up Monitoring Report
Greenstone Project

Figure No.

C -3-12

Title

VWP Hydrographs

Stantec

Appendix C.4 Groundwater Certificates and Water Quality Tables

Your P.O. #: 4800001036
Your C.O.C. #: 712696

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/14
Report #: R7716151
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3G5381
Received: 2023/06/06, 16:46

Sample Matrix: Water
Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	8	N/A	2023/06/15	ATL SOP-00205	SM 23 2310B
Alkalinity	7	N/A	2023/06/12	CAM SOP-00448	SM 23 2320 B m
Alkalinity	1	N/A	2023/06/26	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	8	N/A	2023/06/13	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	7	N/A	2023/06/13	CAM SOP-00463	SM 23 4500-Cl E m
Chloride by Automated Colourimetry	1	N/A	2023/06/27	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	8	N/A	2023/06/12	CAM SOP-00414	SM 23 2510 m
Petroleum Hydrocarbons F2-F4 in Water (3)	1	2023/06/11	2023/06/11	CAM SOP-00316	CCME PHC-CWS m
Fluoride	8	2023/06/09	2023/06/12	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	7	N/A	2023/06/15	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO3)	1	N/A	2023/06/22	CAM SOP 00102/00408/00447	SM 2340 B
Mercury in Water by CVAA	1	2023/06/15	2023/06/15	CAM SOP-00453	EPA 7470A m
Dissolved Mercury (low level)	8	2023/06/12	2023/06/12	CAM SOP-00453	EPA 7470 m
Mercury (low level)	6	2023/06/12	2023/06/12	CAM SOP-00453	EPA 7470 m
Mercury (low level)	1	2023/06/14	2023/06/14	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	1	2023/06/12	2023/06/13	CAM SOP-00408	EPA 6010D m
Dissolved Metals Analysis by ICP	7	2023/06/22	2023/06/23	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	6	N/A	2023/06/15	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS (low level)	1	N/A	2023/06/22	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS (low level)	1	N/A	2023/07/13	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	7	N/A	2023/06/13	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICPMS	1	2023/07/07	2023/07/10	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	1	2023/06/12	2023/06/12	CAM SOP-00408	EPA 6010D m
Total Metals Analysis by ICP	7	2023/06/22	2023/06/22	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	6	N/A	2023/06/13	CAL SOP-00266	EPA 9016d R0 m
Cyanide (Free) (2)	2	N/A	2023/06/15	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	7	2023/06/14	2023/06/14	CAL SOP-00270	SM 23 4500-CN m
Cyanide, Strong Acid Dissociable (SAD) (2)	1	2023/06/28	2023/06/28	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	6	2023/06/13	2023/06/14	AB SOP-00024	SM 24 4500-P A,B,F m

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your C.O.C. #: 712696

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/14
Report #: R7716151
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3G5381
Received: 2023/06/06, 16:46

Sample Matrix: Water
Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Phosphorus Low Level Total (2)	2	2023/06/13	2023/06/15	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	7	N/A	2023/06/13	CAM SOP-00441	USGS I-2522-90 m
Total Ammonia-N	1	N/A	2023/06/14	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (4)	8	N/A	2023/06/12	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	8	2023/06/09	2023/06/12	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (5)	6	N/A	2023/06/08		Field pH Meter
Sulphate by Automated Turbidimetry	7	N/A	2023/06/13	CAM SOP-00464	SM 23 4500-SO42- E m
Sulphate by Automated Turbidimetry	1	N/A	2023/06/27	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	7	2023/06/10	2023/06/12	CAM SOP-00428	SM 23 2540C m
Total Dissolved Solids	1	2023/06/12	2023/06/13	CAM SOP-00428	SM 23 2540C m
Field Temperature (5)	6	N/A	2023/06/08		Field Thermometer
Total Kjeldahl Nitrogen in Water	8	2023/06/12	2023/06/13	CAM SOP-00938	OMOE E3516 m
Low Level Total Suspended Solids	8	2023/06/10	2023/06/12	CAM SOP-00428	SM 23 2540D m
Turbidity	8	N/A	2023/06/09	CAM SOP-00417	SM 23 2130 B m
Volatile Organic Compounds and F1 PHCs	1	N/A	2023/06/14	CAM SOP-00230	EPA 8260C m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following “Alberta Environment’s Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003”. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
(4) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(5) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your C.O.C. #: 712696

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/14
Report #: R7716151
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3G5381
Received: 2023/06/06, 16:46

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633
==========
This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3G5381
Report Date: 2023/07/14

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: WM

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WAS207		WAS208		WAS209		
Sampling Date		2023/06/05 11:30		2023/06/05 11:30		2023/06/05 11:30		
COC Number		712696		712696		712696		
	UNITS	MW03-OB-18	RDL	MW03-BR-18	RDL	MW01-OB1-18	RDL	QC Batch
Calculated Parameters								
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	360	1.0	330	1.0	580	1.0	8714995
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.6	1.0	2.9	1.0	1.3	1.0	8714995
Hardness (CaCO3)	mg/L	390	1.0	300	1.0	1500	1.0	8714994
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	<1.0	1.0	<1.0	1.0	8714995
Field Measurements								
Field Temperature	Celsius	9.4	N/A	9.1	N/A	12.9	N/A	ONSITE
Field Measured pH	pH	7.01		7.74		6.83		ONSITE
Inorganics								
Acidity	mg/L	32	5.0	11	5.0	110	5.0	8727971
Total Ammonia-N	mg/L	0.066	0.050	0.71 (1)	0.050	0.82	0.050	8720009
Conductivity	mS/cm	0.683	0.001	0.597	0.001	2.40	0.001	8716646
Free Cyanide (CN)	ug/L	5.2 (2)	2.0	4.7 (2)	2.0	5.4 (2)	2.0	8740194
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	<0.00050	0.00050	0.00100	0.00050	8737672
Total Dissolved Solids	mg/L	420	10	380	10	1920	10	8718009
Fluoride (F-)	mg/L	0.36	0.10	0.21	0.10	<0.10	0.10	8716664
Total Kjeldahl Nitrogen (TKN)	mg/L	<0.10	0.10	0.64 (1)	0.10	1.0	0.10	8720054
pH	pH	7.69		7.98		7.38		8716659
Total Phosphorus (P)	mg/L	0.26	0.0050	0.069	0.0010	0.89	0.010	8730517
Total Suspended Solids	mg/L	140	1	26	1	7200	5	8717995
Dissolved Sulphate (SO4)	mg/L	20	1.0	<1.0	1.0	920	5.0	8716535
Turbidity	NTU	33	0.1	12	0.1	67	0.1	8716488
Alkalinity (Total as CaCO3)	mg/L	360	1.0	330	1.0	580	1.0	8716663
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	<1.0	1.0	1.3	1.0	8716523
Nitrite (N)	mg/L	<0.010	0.010	<0.010	0.010	<0.010	0.010	8716494
Nitrate (N)	mg/L	<0.10	0.10	<0.10	0.10	<0.10	0.10	8716494
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	<0.10	0.10	<0.10	0.10	8716494

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) TKN < NH4: Both values fall within acceptable RPD limits for duplicates and are likely equivalent.
(2) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3G5381
Report Date: 2023/07/14

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: WM

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WAS209			WAS210			WAS211		
Sampling Date		2023/06/05 11:30			2023/06/05 13:36			2023/06/05 03:02		
COC Number		712696			712696			712696		
	UNITS	MW01-OB1-18 Lab-Dup	RDL	QC Batch	MW01-OB2-18	RDL	QC Batch	MW02-OB-18	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L				450	1.0	8714995	160	1.0	8714995
Carb. Alkalinity (calc. as CaCO3)	mg/L				1.6	1.0	8714995	<1.0	1.0	8714995
Hardness (CaCO3)	mg/L				1500	1.0	8714994	2300	1.0	8714994
Hydrox. Alkalinity (calc. as CaCO3)	mg/L				<1.0	1.0	8714995	<1.0	1.0	8714995
Field Measurements										
Field Temperature	Celsius				10.3	N/A	ONSITE	13.3	N/A	ONSITE
Field Measured pH	pH				6.89		ONSITE	6.99		ONSITE
Inorganics										
Acidity	mg/L				65	5.0	8727971	31	5.0	8727971
Total Ammonia-N	mg/L				1.1	0.050	8720009	2.2	0.050	8720009
Conductivity	mS/cm				2.93	0.001	8716646	3.43	0.001	8716646
Free Cyanide (CN)	ug/L				4.4 (1)	2.0	8740194	4.4 (1)	2.0	8740194
Strong Acid Dissoc. Cyanide (CN)	mg/L				0.00229 (2)	0.00050	8741264	0.328	0.0050	8741265
Total Dissolved Solids	mg/L				2540	10	8718009	3470	10	8718009
Fluoride (F-)	mg/L				0.23	0.10	8716664	0.18	0.10	8716664
Total Kjeldahl Nitrogen (TKN)	mg/L				1.5	0.10	8720054	3.1	0.10	8720054
pH	pH				7.57		8716659	7.18		8716659
Total Phosphorus (P)	mg/L				0.65	0.0050	8730517	5.2 (3)	0.10	8730517
Total Suspended Solids	mg/L				220	1	8717995	8100	5	8717995
Dissolved Sulphate (SO4)	mg/L	930	5.0	8716535	1300	5.0	8716535	2300	10	8752585
Turbidity	NTU				18	0.1	8716488	55	0.1	8716488
Alkalinity (Total as CaCO3)	mg/L				450	1.0	8716663	160	1.0	8751723
Dissolved Chloride (Cl-)	mg/L	1.4	1.0	8716523	2.7	1.0	8716523	3.1	1.0	8752573
Nitrite (N)	mg/L				0.104	0.010	8716494	0.014	0.010	8716494
Nitrate (N)	mg/L				1.00	0.10	8716494	<0.10	0.10	8716494

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.
(3) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3G5381
Report Date: 2023/07/14

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: WM

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WAS209			WAS210			WAS211		
Sampling Date		2023/06/05 11:30			2023/06/05 13:36			2023/06/05 03:02		
COC Number		712696			712696			712696		
	UNITS	MW01-OB1-18 Lab-Dup	RDL	QC Batch	MW01-OB2-18	RDL	QC Batch	MW02-OB-18	RDL	QC Batch
Nitrate + Nitrite (N)	mg/L				1.11	0.10	8716494	<0.10	0.10	8716494

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3G5381
Report Date: 2023/07/14

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: WM

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WAS211			WAS212			WAS212		
Sampling Date		2023/06/05 03:02			2023/06/05 04:08			2023/06/05 04:08		
COC Number		712696			712696			712696		
	UNITS	MW02-OB-18 Lab-Dup	RDL	QC Batch	M1 Pond	RDL	QC Batch	M1 Pond Lab-Dup	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L				420	1.0	8714995			
Carb. Alkalinity (calc. as CaCO3)	mg/L				1.6	1.0	8714995			
Hardness (CaCO3)	mg/L				470	1.0	8714994			
Hydrox. Alkalinity (calc. as CaCO3)	mg/L				<1.0	1.0	8714995			
Field Measurements										
Field Temperature	Celsius				14.6	N/A	ONSITE			
Field Measured pH	pH				7.02		ONSITE			
Inorganics										
Acidity	mg/L				32	5.0	8727971			
Total Ammonia-N	mg/L				0.10	0.050	8720009			
Conductivity	mS/cm				0.885	0.001	8716646			
Free Cyanide (CN)	ug/L				5.2 (1)	2.0	8740194			
Strong Acid Dissoc. Cyanide (CN)	mg/L				<0.00050	0.00050	8737672			
Total Dissolved Solids	mg/L				560	10	8718009			
Fluoride (F-)	mg/L				<0.10	0.10	8716664			
Total Kjeldahl Nitrogen (TKN)	mg/L				0.25	0.10	8720054			
pH	pH				7.61		8716659			
Total Phosphorus (P)	mg/L				0.010	0.0010	8730517			
Total Suspended Solids	mg/L				30	1	8717995			
Dissolved Sulphate (SO4)	mg/L	2300	10	8752585	3.1	1.0	8716535			
Turbidity	NTU				15	0.1	8716488			
Alkalinity (Total as CaCO3)	mg/L				420	1.0	8716663			
Dissolved Chloride (Cl-)	mg/L	3.8	1.0	8752573	4.5	1.0	8716523			
Nitrite (N)	mg/L				<0.010	0.010	8716494	<0.010	0.010	8716494
Nitrate (N)	mg/L				<0.10	0.10	8716494	<0.10	0.10	8716494
Nitrate + Nitrite (N)	mg/L				<0.10	0.10	8716494	<0.10	0.10	8716494

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3G5381
Report Date: 2023/07/14

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: WM

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WAS213		WAS214			WAS214		
Sampling Date		2023/06/05 08:00		2023/06/05 08:00			2023/06/05 08:00		
COC Number		712696		712696			712696		
	UNITS	Trip Blank	QC Batch	Duplicate 4	RDL	QC Batch	Duplicate 4 Lab-Dup	RDL	QC Batch
Calculated Parameters									
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	8714995	320	1.0	8714995			
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	8714995	3.3	1.0	8714995			
Hardness (CaCO3)	mg/L	<1.0	8714994	300	1.0	8714994			
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	8714995	<1.0	1.0	8714995			
Inorganics									
Acidity	mg/L	<5.0	8727971	10	5.0	8727971			
Total Ammonia-N	mg/L	<0.050	8724887	0.71 (1)	0.050	8720009			
Conductivity	mS/cm	0.002	8716646	0.593	0.001	8716646	0.595	0.001	8716646
Free Cyanide (CN)	ug/L	<2.0 (2)	8740887	5.2 (2)	2.0	8740887			
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	8761029	<0.00050	0.00050	8741265			
Total Dissolved Solids	mg/L	<10	8719379	380	10	8718009			
Fluoride (F-)	mg/L	<0.10	8716664	0.22	0.10	8716664	0.22	0.10	8716664
Total Kjeldahl Nitrogen (TKN)	mg/L	<0.10	8720054	0.59 (1)	0.10	8720054			
pH	pH	5.78	8716659	8.03		8716659	8.00		8716659
Total Phosphorus (P)	mg/L	<0.0010	8730517	0.070	0.0010	8730517			
Total Suspended Solids	mg/L	<1	8717995	17	1	8717995	19	1	8717995
Dissolved Sulphate (SO4)	mg/L	<1.0	8716535	<1.0	1.0	8716535			
Turbidity	NTU	<0.1	8716488	15	0.1	8716488			
Alkalinity (Total as CaCO3)	mg/L	<1.0	8716663	320	1.0	8716663	330	1.0	8716663
Dissolved Chloride (Cl-)	mg/L	<1.0	8716523	<1.0	1.0	8716523			
Nitrite (N)	mg/L	<0.010	8716494	<0.010	0.010	8716494			
Nitrate (N)	mg/L	<0.10	8716494	<0.10	0.10	8716494			
Nitrate + Nitrite (N)	mg/L	<0.10	8716494	<0.10	0.10	8716494			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(1) TKN < NH4: Both values fall within acceptable RPD limits for duplicates and are likely equivalent.
(2) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WAS207			WAS207			WAS208		
Sampling Date		2023/06/05 11:30			2023/06/05 11:30			2023/06/05 11:30		
COC Number		712696			712696			712696		
	UNITS	MW03-OB-18	RDL	QC Batch	MW03-OB-18 Lab-Dup	RDL	QC Batch	MW03-BR-18	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0009	0.0005	8724636	0.0008	0.0005	8724636	0.0013	0.0005	8724636
. Aluminum (Al)	mg/L	0.147	0.0005	8721678				0.0820	0.0005	8721678
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8724636	<0.0001	0.0001	8724636	<0.0001	0.0001	8724636
. Antimony (Sb)	mg/L	<0.0001	0.0001	8721678				<0.0001	0.0001	8721678
Dissolved Arsenic (As)	mg/L	0.0004	0.0001	8724636	0.0004	0.0001	8724636	0.0916	0.0001	8724636
. Arsenic (As)	mg/L	0.0018	0.0001	8721678				0.0909	0.0005	8721678
Dissolved Barium (Ba)	mg/L	0.0347	0.0002	8724636	0.0351	0.0002	8724636	0.0940	0.0002	8724636
. Barium (Ba)	mg/L	0.0465	0.0002	8721678				0.0951	0.0002	8721678
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8724636	<0.00005	0.00005	8724636	<0.00005	0.00005	8724636
. Beryllium (Be)	mg/L	<0.00005	0.00005	8721678				<0.00005	0.00005	8721678
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8724636	<0.0001	0.0001	8724636	<0.0001	0.0001	8724636
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8721678				<0.0001	0.0001	8721678
Dissolved Boron (B)	mg/L	0.010	0.001	8724636	0.010	0.001	8724636	0.041	0.001	8724636
. Boron (B)	mg/L	0.011	0.001	8721678				0.040	0.001	8721678
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8724636	<0.00001	0.00001	8724636	<0.00001	0.00001	8724636
. Cadmium (Cd)	mg/L	0.000011	0.000005	8721678				<0.000005	0.000005	8721678
Dissolved Calcium (Ca)	mg/L	116	0.1	8724636	114	0.1	8724636	71.1	0.1	8724636
. Calcium (Ca)	mg/L	133	0.1	8721678				76.7	0.1	8721678
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	8724636	<0.00002	0.00002	8724636	0.00024	0.00002	8724636
. Cesium (Cs)	mg/L	0.00002	0.00002	8721678				0.00025	0.00002	8721678
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8724636	<0.0005	0.0005	8724636	<0.0005	0.0005	8724636
. Chromium (Cr)	mg/L	<0.0005	0.0005	8721678				<0.0005	0.0005	8721678
Dissolved Cobalt (Co)	mg/L	<0.00005	0.00005	8724636	<0.00005	0.00005	8724636	<0.00005	0.00005	8724636
. Cobalt (Co)	mg/L	0.00013	0.00005	8721678				0.00014	0.00005	8721678
Dissolved Copper (Cu)	mg/L	0.0012	0.0001	8724636	0.0012	0.0001	8724636	0.0016	0.0001	8724636
. Copper (Cu)	mg/L	0.0006	0.0001	8721678				0.0003	0.0001	8721678
Dissolved Iron (Fe)	mg/L	1.09	0.005	8724636	1.08	0.005	8724636	2.10	0.005	8724636
. Iron (Fe)	mg/L	7.82	0.005	8721678				2.73	0.005	8721678
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8724636	<0.00005	0.00005	8724636	<0.00005	0.00005	8724636
. Lead (Pb)	mg/L	0.00038	0.00005	8721678				0.00049	0.00005	8721678

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WAS207			WAS207			WAS208		
Sampling Date		2023/06/05 11:30			2023/06/05 11:30			2023/06/05 11:30		
COC Number		712696			712696			712696		
	UNITS	MW03-OB-18	RDL	QC Batch	MW03-OB-18 Lab-Dup	RDL	QC Batch	MW03-BR-18	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0067	0.0005	8724636	0.0067	0.0005	8724636	0.0097	0.0005	8724636
. Lithium (Li)	mg/L	0.0072	0.0005	8721678				0.0099	0.0005	8721678
Dissolved Magnesium (Mg)	mg/L	23.6	0.005	8724636	23.5	0.005	8724636	29.4	0.005	8724636
. Magnesium (Mg)	mg/L	27.5	0.005	8721678				31.0	0.005	8721678
Dissolved Manganese (Mn)	mg/L	0.0551	0.0002	8724636	0.0548	0.0002	8724636	0.0401	0.0002	8724636
. Manganese (Mn)	mg/L	0.0740	0.0002	8721678				0.0452	0.0002	8721678
Mercury (Hg)	ug/L	<0.01	0.01	8720072				<0.01	0.01	8720072
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8720059				<0.01	0.01	8720059
Dissolved Molybdenum (Mo)	mg/L	0.00067	0.00005	8724636	0.00070	0.00005	8724636	0.00106	0.00005	8724636
. Molybdenum (Mo)	mg/L	0.00063	0.00005	8721678				0.00100	0.00005	8721678
Dissolved Nickel (Ni)	mg/L	<0.0001	0.0001	8724636	<0.0001	0.0001	8724636	0.0002	0.0001	8724636
. Nickel (Ni)	mg/L	0.0003	0.0001	8721678				0.0005	0.0001	8721678
Dissolved Phosphorus (P)	mg/L	0.017	0.005	8724636	0.017	0.005	8724636	0.054	0.005	8724636
. Phosphorus (P)	mg/L	0.340	0.005	8721678				0.070	0.005	8721678
Dissolved Potassium (K)	mg/L	1.82	0.02	8724636	1.80	0.02	8724636	4.61	0.02	8724636
. Potassium (K)	mg/L	2.01	0.02	8721678				4.95	0.02	8721678
Dissolved Rubidium (Rb)	mg/L	0.00138	0.00002	8724636	0.00136	0.00002	8724636	0.00124	0.00002	8724636
. Rubidium (Rb)	mg/L	0.00162	0.00002	8721678				0.00132	0.00002	8721678
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8724636	<0.0002	0.0002	8724636	<0.0002	0.0002	8724636
. Selenium (Se)	mg/L	<0.00005	0.00005	8721678				0.00008	0.00005	8721678
Dissolved Silicon (Si)	mg/L	6.81	0.025	8724636	6.78	0.025	8724636	6.93	0.025	8724636
. Silicon (Si)	mg/L	8.08	0.025	8721678				7.72	0.025	8721678
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8724636	<0.00001	0.00001	8724636	<0.00001	0.00001	8724636
. Silver (Ag)	mg/L	<0.00001	0.00001	8721678				<0.00001	0.00001	8721678
Dissolved Sodium (Na)	mg/L	3.88	0.01	8724636	3.85	0.01	8724636	13.7	0.01	8724636
. Sodium (Na)	mg/L	4.29	0.01	8721678				14.6	0.01	8721678
Dissolved Strontium (Sr)	mg/L	0.120	0.0001	8724636	0.119	0.0001	8724636	0.559	0.0001	8724636
. Strontium (Sr)	mg/L	0.126	0.0001	8721678				0.567	0.0001	8721678
Dissolved Sulphur (S)	mg/L	7.6	0.5	8744626				<0.5	0.5	8744626
Total Sulphur (S)	mg/L	7.4	0.5	8744374				<0.5	0.5	8744374
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8724636	<0.0001	0.0001	8724636	<0.0001	0.0001	8724636

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3G5381
Report Date: 2023/07/14

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: WM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WAS207			WAS207			WAS208		
Sampling Date		2023/06/05 11:30			2023/06/05 11:30			2023/06/05 11:30		
COC Number		712696			712696			712696		
	UNITS	MW03-OB-18	RDL	QC Batch	MW03-OB-18 Lab-Dup	RDL	QC Batch	MW03-BR-18	RDL	QC Batch
. Tellurium (Te)	mg/L	<0.0001	0.0001	8721678				<0.0001	0.0001	8721678
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8724636	<0.000005	0.000005	8724636	<0.000005	0.000005	8724636
. Thallium (Tl)	mg/L	<0.000005	0.000005	8721678				<0.000005	0.000005	8721678
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8724636	<0.0001	0.0001	8724636	<0.0001	0.0001	8724636
. Tin (Sn)	mg/L	<0.0001	0.0001	8721678				<0.0001	0.0001	8721678
Dissolved Titanium (Ti)	mg/L	0.0005	0.0005	8724636	<0.0005	0.0005	8724636	<0.0005	0.0005	8724636
. Titanium (Ti)	mg/L	0.0102	0.0005	8721678				0.0025	0.0005	8721678
Dissolved Tungsten (W)	mg/L	<0.0001	0.0001	8724636	<0.0001	0.0001	8724636	0.0003	0.0001	8724636
. Tungsten (W)	mg/L	<0.0001	0.0001	8721678				0.0003	0.0001	8721678
Dissolved Uranium (U)	mg/L	0.00001	0.00001	8724636	0.00001	0.00001	8724636	0.00029	0.00001	8724636
. Uranium (U)	mg/L	0.00003	0.00001	8721678				0.00031	0.00001	8721678
Dissolved Vanadium (V)	mg/L	<0.00005	0.00005	8724636	<0.00005	0.00005	8724636	<0.00005	0.00005	8724636
. Vanadium (V)	mg/L	0.00061	0.00005	8721678				0.00035	0.00005	8721678
Dissolved Zinc (Zn)	mg/L	0.0011	0.0005	8724636	0.0010	0.0005	8724636	0.0029	0.0005	8724636
. Zinc (Zn)	mg/L	0.0036	0.0005	8721678				0.0034	0.0005	8721678
Dissolved Zirconium (Zr)	mg/L	0.0002	0.0001	8724636	0.0002	0.0001	8724636	0.0001	0.0001	8724636
. Zirconium (Zr)	mg/L	0.0016	0.0001	8721678				0.0005	0.0001	8721678

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WAS208			WAS209		WAS210		
Sampling Date		2023/06/05 11:30			2023/06/05 11:30		2023/06/05 13:36		
COC Number		712696			712696		712696		
	UNITS	MW03-BR-18 Lab-Dup	RDL	QC Batch	MW01-OB1-18	RDL	MW01-OB2-18	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	mg/L				0.0030	0.0025	<0.0025	0.0025	8724636
. Aluminum (Al)	mg/L				2.01	0.025	0.0265	0.0025	8721678
Dissolved Antimony (Sb)	mg/L				<0.0005	0.0005	<0.0005	0.0005	8724636
. Antimony (Sb)	mg/L				<0.0005	0.0005	0.0008	0.0005	8721678
Dissolved Arsenic (As)	mg/L				1.01	0.005	0.0498	0.0005	8724636
. Arsenic (As)	mg/L				1.52	0.005	8.81	0.01	8721678
Dissolved Barium (Ba)	mg/L				0.018	0.001	0.013	0.001	8724636
. Barium (Ba)	mg/L				0.041	0.001	0.069	0.001	8721678
Dissolved Beryllium (Be)	mg/L				<0.00025	0.00025	<0.00025	0.00025	8724636
. Beryllium (Be)	mg/L				<0.00025	0.00025	<0.00025	0.00025	8721678
Dissolved Bismuth (Bi)	mg/L				<0.0005	0.0005	<0.0005	0.0005	8724636
. Bismuth (Bi)	mg/L				<0.0005	0.0005	<0.0005	0.0005	8721678
Dissolved Boron (B)	mg/L				0.026	0.005	0.026	0.005	8724636
. Boron (B)	mg/L				0.032	0.005	0.029	0.005	8721678
Dissolved Cadmium (Cd)	mg/L				<0.00005	0.00005	<0.00005	0.00005	8724636
. Cadmium (Cd)	mg/L				0.000102	0.000025	<0.000025	0.000025	8721678
Dissolved Calcium (Ca)	mg/L				299	0.2	291	0.2	8724636
. Calcium (Ca)	mg/L				353	1	305	1	8721678
Dissolved Cesium (Cs)	mg/L				0.0002	0.0001	0.0002	0.0001	8724636
. Cesium (Cs)	mg/L				0.0006	0.0001	0.0002	0.0001	8721678
Dissolved Chromium (Cr)	mg/L				<0.0025	0.0025	<0.0025	0.0025	8724636
. Chromium (Cr)	mg/L				0.0146	0.0025	<0.0025	0.0025	8721678
Dissolved Cobalt (Co)	mg/L				<0.00025	0.00025	<0.00025	0.00025	8724636
. Cobalt (Co)	mg/L				0.00205	0.00025	<0.00025	0.00025	8721678
Dissolved Copper (Cu)	mg/L				<0.0005	0.0005	0.0005	0.0005	8724636
. Copper (Cu)	mg/L				0.0333	0.0005	0.0014	0.0005	8721678
Dissolved Iron (Fe)	mg/L				14.4	0.025	0.051	0.025	8724636
. Iron (Fe)	mg/L				43.3	0.025	172	0.25	8721678
Dissolved Lead (Pb)	mg/L				<0.00025	0.00025	<0.00025	0.00025	8724636
. Lead (Pb)	mg/L				0.00511	0.00025	0.00063	0.00025	8721678

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WAS208			WAS209		WAS210		
Sampling Date		2023/06/05 11:30			2023/06/05 11:30		2023/06/05 13:36		
COC Number		712696			712696		712696		
	UNITS	MW03-BR-18 Lab-Dup	RDL	QC Batch	MW01-OB1-18	RDL	MW01-OB2-18	RDL	QC Batch
Dissolved Lithium (Li)	mg/L				0.0111	0.0025	0.110	0.0025	8724636
. Lithium (Li)	mg/L				0.0142	0.0025	0.111	0.0025	8721678
Dissolved Magnesium (Mg)	mg/L				190	0.025	194	0.025	8724636
. Magnesium (Mg)	mg/L				215	0.25	209	0.25	8721678
Dissolved Manganese (Mn)	mg/L				0.078	0.001	0.243	0.001	8724636
. Manganese (Mn)	mg/L				0.458	0.001	0.320	0.001	8721678
Mercury (Hg)	ug/L				<0.01	0.01	<0.01	0.01	8720072
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8720059	<0.01	0.01	<0.01	0.01	8720059
Dissolved Molybdenum (Mo)	mg/L				0.00290	0.00025	0.00359	0.00025	8724636
. Molybdenum (Mo)	mg/L				0.00169	0.00025	0.00522	0.00025	8721678
Dissolved Nickel (Ni)	mg/L				<0.0005	0.0005	<0.0005	0.0005	8724636
. Nickel (Ni)	mg/L				0.0059	0.0005	0.0005	0.0005	8721678
Dissolved Phosphorus (P)	mg/L				<0.025	0.025	0.027	0.025	8724636
. Phosphorus (P)	mg/L				0.913	0.025	0.062	0.025	8721678
Dissolved Potassium (K)	mg/L				9.7	0.1	12.3	0.1	8724636
. Potassium (K)	mg/L				11.0	0.1	13.9	0.1	8721678
Dissolved Rubidium (Rb)	mg/L				0.0103	0.0001	0.0153	0.0001	8724636
. Rubidium (Rb)	mg/L				0.0123	0.0001	0.0152	0.0001	8721678
Dissolved Selenium (Se)	mg/L				<0.001	0.001	<0.001	0.001	8724636
. Selenium (Se)	mg/L				<0.00025	0.00025	<0.00025	0.00025	8721678
Dissolved Silicon (Si)	mg/L				10.4	0.025	8.47	0.025	8724636
. Silicon (Si)	mg/L				15.1	0.025	19.8	0.025	8721678
Dissolved Silver (Ag)	mg/L				<0.00005	0.00005	<0.00005	0.00005	8724636
. Silver (Ag)	mg/L				<0.00005	0.00005	<0.00005	0.00005	8721678
Dissolved Sodium (Na)	mg/L				3.59	0.05	171	0.05	8724636
. Sodium (Na)	mg/L				3.88	0.05	198	0.05	8721678
Dissolved Strontium (Sr)	mg/L				0.998	0.0005	1.35	0.0005	8724636
. Strontium (Sr)	mg/L				1.04	0.0005	1.55	0.0005	8721678
Dissolved Sulphur (S)	mg/L				340	0.5	490	5	8744626
Total Sulphur (S)	mg/L				350	0.5	540	5	8744374
Dissolved Tellurium (Te)	mg/L				<0.0005	0.0005	<0.0005	0.0005	8724636

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WAS208			WAS209		WAS210		
Sampling Date		2023/06/05 11:30			2023/06/05 11:30		2023/06/05 13:36		
COC Number		712696			712696		712696		
	UNITS	MW03-BR-18 Lab-Dup	RDL	QC Batch	MW01-OB1-18	RDL	MW01-OB2-18	RDL	QC Batch
. Tellurium (Te)	mg/L				<0.0005	0.0005	<0.0005	0.0005	8721678
Dissolved Thallium (Tl)	mg/L				<0.000025	0.000025	<0.000025	0.000025	8724636
. Thallium (Tl)	mg/L				0.000028	0.000025	<0.000025	0.000025	8721678
Dissolved Tin (Sn)	mg/L				<0.0005	0.0005	<0.0005	0.0005	8724636
. Tin (Sn)	mg/L				<0.0005	0.0005	<0.0005	0.0005	8721678
Dissolved Titanium (Ti)	mg/L				<0.0025	0.0025	<0.0025	0.0025	8724636
. Titanium (Ti)	mg/L				0.0518	0.0025	<0.0025	0.0025	8721678
Dissolved Tungsten (W)	mg/L				0.0067	0.0005	<0.0005	0.0005	8724636
. Tungsten (W)	mg/L				0.0057	0.0005	0.0043	0.0005	8721678
Dissolved Uranium (U)	mg/L				0.00243	0.00005	0.00851	0.00005	8724636
. Uranium (U)	mg/L				0.00245	0.00005	0.00946	0.00005	8721678
Dissolved Vanadium (V)	mg/L				<0.00025	0.00025	<0.00025	0.00025	8724636
. Vanadium (V)	mg/L				0.00636	0.00025	0.00073	0.00025	8721678
Dissolved Zinc (Zn)	mg/L				<0.0025	0.0025	0.0037	0.0025	8724636
. Zinc (Zn)	mg/L				0.0142	0.0025	0.0168	0.0025	8721678
Dissolved Zirconium (Zr)	mg/L				0.0006	0.0005	<0.0005	0.0005	8724636
. Zirconium (Zr)	mg/L				0.0012	0.0005	0.0043	0.0005	8721678

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WAS210			WAS211			WAS212		
Sampling Date		2023/06/05 13:36			2023/06/05 03:02			2023/06/05 04:08		
COC Number		712696			712696			712696		
	UNITS	MW01-OB2-18 Lab-Dup	RDL	QC Batch	MW02-OB-18	RDL	QC Batch	M1 Pond	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L				<0.05	0.05	8724636	0.0111	0.0005	8743119
. Aluminum (Al)	mg/L							0.0965	0.0005	8721678
Dissolved Antimony (Sb)	mg/L				<0.01	0.01	8724636	0.0002	0.0001	8743119
. Antimony (Sb)	mg/L							0.0002	0.0001	8721678
Dissolved Arsenic (As)	mg/L				16.8	0.05	8724636	0.0221	0.0001	8743119
. Arsenic (As)	mg/L							0.0258	0.0001	8721678
Dissolved Barium (Ba)	mg/L				0.02	0.02	8724636	0.0369	0.0002	8743119
. Barium (Ba)	mg/L							0.0378	0.0002	8721678
Dissolved Beryllium (Be)	mg/L				<0.005	0.005	8724636	<0.00005	0.00005	8743119
. Beryllium (Be)	mg/L							<0.00005	0.00005	8721678
Dissolved Bismuth (Bi)	mg/L				<0.01	0.01	8724636	<0.0001	0.0001	8743119
. Bismuth (Bi)	mg/L							<0.0001	0.0001	8721678
Dissolved Boron (B)	mg/L				1.7	0.1	8724636	0.011	0.001	8743119
. Boron (B)	mg/L							0.012	0.001	8721678
Dissolved Cadmium (Cd)	mg/L				<0.001	0.001	8724636	<0.00001	0.00001	8743119
. Cadmium (Cd)	mg/L							0.000006	0.000005	8721678
Dissolved Calcium (Ca)	mg/L				592	2	8724636	138	0.1	8743119
. Calcium (Ca)	mg/L							147	0.1	8721678
Dissolved Cesium (Cs)	mg/L				<0.002	0.002	8724636	0.00003	0.00002	8743119
. Cesium (Cs)	mg/L							0.00003	0.00002	8721678
Dissolved Chromium (Cr)	mg/L				<0.05	0.05	8724636	<0.0005	0.0005	8743119
. Chromium (Cr)	mg/L							<0.0005	0.0005	8721678
Dissolved Cobalt (Co)	mg/L				0.011	0.005	8724636	0.00985	0.00005	8743119
. Cobalt (Co)	mg/L							0.00979	0.00005	8721678
Dissolved Copper (Cu)	mg/L				<0.01	0.01	8724636	0.0005	0.0001	8743119
. Copper (Cu)	mg/L							0.0011	0.0001	8721678
Dissolved Iron (Fe)	mg/L				0.9	0.5	8724636	2.67	0.005	8743119
. Iron (Fe)	mg/L							2.89	0.005	8721678
Dissolved Lead (Pb)	mg/L				<0.005	0.005	8724636	<0.00005	0.00005	8743119
. Lead (Pb)	mg/L							0.00015	0.00005	8721678

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WAS210			WAS211			WAS212		
Sampling Date		2023/06/05 13:36			2023/06/05 03:02			2023/06/05 04:08		
COC Number		712696			712696			712696		
	UNITS	MW01-OB2-18 Lab-Dup	RDL	QC Batch	MW02-OB-18	RDL	QC Batch	M1 Pond	RDL	QC Batch
Dissolved Lithium (Li)	mg/L				0.12	0.05	8724636	0.0016	0.0005	8743119
. Lithium (Li)	mg/L							0.0017	0.0005	8721678
Dissolved Magnesium (Mg)	mg/L				209	0.5	8724636	30.0	0.005	8743119
. Magnesium (Mg)	mg/L							31.7	0.005	8721678
Dissolved Manganese (Mn)	mg/L				0.61	0.02	8724636	2.72	0.001	8743119
. Manganese (Mn)	mg/L							2.75	0.001	8721678
Mercury (Hg)	mg/L				<0.010	0.010	8727694			
Mercury (Hg)	ug/L							<0.01	0.01	8725497
Dissolved Mercury (Hg)	ug/L				<0.01	0.01	8720059	<0.01	0.01	8720059
Dissolved Molybdenum (Mo)	mg/L				0.017	0.005	8724636	0.00170	0.00005	8743119
. Molybdenum (Mo)	mg/L							0.00166	0.00005	8721678
Dissolved Nickel (Ni)	mg/L				0.02	0.01	8724636	0.0060	0.0001	8743119
. Nickel (Ni)	mg/L							0.0063	0.0001	8721678
Dissolved Phosphorus (P)	mg/L				<0.5	0.5	8724636	0.006	0.005	8743119
. Phosphorus (P)	mg/L							0.019	0.005	8721678
Dissolved Potassium (K)	mg/L				31	2	8724636	2.24	0.02	8743119
. Potassium (K)	mg/L							2.49	0.02	8721678
Dissolved Rubidium (Rb)	mg/L				0.007	0.002	8724636	0.00192	0.00002	8743119
. Rubidium (Rb)	mg/L							0.00207	0.00002	8721678
Dissolved Selenium (Se)	mg/L				<0.02	0.02	8724636	<0.0002	0.0002	8743119
. Selenium (Se)	mg/L							0.00034	0.00005	8721678
Dissolved Silicon (Si)	mg/L				5.7	0.5	8724636	6.98	0.025	8743119
. Silicon (Si)	mg/L							7.82	0.025	8721678
Dissolved Silver (Ag)	mg/L				<0.001	0.001	8724636	<0.00001	0.00001	8743119
. Silver (Ag)	mg/L							<0.00001	0.00001	8721678
Dissolved Sodium (Na)	mg/L				86	1	8724636	12.8	0.01	8743119
. Sodium (Na)	mg/L							13.9	0.01	8721678
Dissolved Strontium (Sr)	mg/L				1.57	0.01	8724636	0.291	0.0001	8743119
. Strontium (Sr)	mg/L							0.305	0.0001	8721678
Dissolved Sulphur (S)	mg/L	480	5	8744626	800	5	8744626	6.4	0.5	8720610
Total Sulphur (S)	mg/L				870	5	8744374	6.6	0.5	8719490

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WAS210			WAS211			WAS212		
Sampling Date		2023/06/05 13:36			2023/06/05 03:02			2023/06/05 04:08		
COC Number		712696			712696			712696		
	UNITS	MW01-OB2-18 Lab-Dup	RDL	QC Batch	MW02-OB-18	RDL	QC Batch	M1 Pond	RDL	QC Batch
Dissolved Tellurium (Te)	mg/L				<0.01	0.01	8724636	<0.0001	0.0001	8743119
. Tellurium (Te)	mg/L							<0.0001	0.0001	8721678
Dissolved Thallium (Tl)	mg/L				<0.0005	0.0005	8724636	0.000006	0.000005	8743119
. Thallium (Tl)	mg/L							0.000019	0.000005	8721678
Dissolved Thorium (Th)	mg/L							<0.0002	0.0002	8743119
. Thorium (Th)	mg/L							<0.0002	0.0002	8721678
Dissolved Tin (Sn)	mg/L				<0.01	0.01	8724636	<0.0001	0.0001	8743119
. Tin (Sn)	mg/L							<0.0001	0.0001	8721678
Dissolved Titanium (Ti)	mg/L				<0.05	0.05	8724636	0.0009	0.0005	8743119
. Titanium (Ti)	mg/L							0.0038	0.0005	8721678
Dissolved Tungsten (W)	mg/L				<0.01	0.01	8724636	0.0002	0.0001	8743119
. Tungsten (W)	mg/L							0.0002	0.0001	8721678
Dissolved Uranium (U)	mg/L				0.007	0.001	8724636	0.00155	0.00001	8743119
. Uranium (U)	mg/L							0.00137	0.00001	8721678
Dissolved Vanadium (V)	mg/L				<0.005	0.005	8724636	0.00090	0.00005	8743119
. Vanadium (V)	mg/L							0.00112	0.00005	8721678
Dissolved Zinc (Zn)	mg/L				<0.05	0.05	8724636	0.0007	0.0005	8743119
. Zinc (Zn)	mg/L							0.0011	0.0005	8721678
Dissolved Zirconium (Zr)	mg/L				<0.01	0.01	8724636	0.0024	0.0001	8743119
. Zirconium (Zr)	mg/L							0.0025	0.0001	8721678
Total Aluminum (Al)	ug/L				140000	49	8774853			
Total Antimony (Sb)	ug/L				74	5.0	8774853			
Total Arsenic (As)	ug/L				56000	100	8774853			
Total Barium (Ba)	ug/L				1100	20	8774853			
Total Beryllium (Be)	ug/L				4.5	4.0	8774853			
Total Bismuth (Bi)	ug/L				<10	10	8774853			
Total Boron (B)	ug/L				1900	100	8774853			
Total Cadmium (Cd)	ug/L				5.3	0.90	8774853			
Total Calcium (Ca)	ug/L				1300000	2000	8774853			
Total Chromium (Cr)	ug/L				490	50	8774853			
Total Cobalt (Co)	ug/L				260	5.0	8774853			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3G5381
Report Date: 2023/07/14

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: WM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WAS210			WAS211			WAS212		
Sampling Date		2023/06/05 13:36			2023/06/05 03:02			2023/06/05 04:08		
COC Number		712696			712696			712696		
	UNITS	MW01-OB2-18 Lab-Dup	RDL	QC Batch	MW02-OB-18	RDL	QC Batch	M1 Pond	RDL	QC Batch
Total Copper (Cu)	ug/L				880	9.0	8774853			
Total Iron (Fe)	ug/L				1400000	10000	8774853			
Total Lead (Pb)	ug/L				370	5.0	8774853			
Total Lithium (Li)	ug/L				230	50	8774853			
Total Magnesium (Mg)	ug/L				470000	500	8774853			
Total Manganese (Mn)	ug/L				14000	20	8774853			
Total Molybdenum (Mo)	ug/L				25	5.0	8774853			
Total Nickel (Ni)	ug/L				610	10	8774853			
Total Potassium (K)	ug/L				47000	2000	8774853			
Total Selenium (Se)	ug/L				<20	20	8774853			
Total Silicon (Si)	ug/L				170000	500	8774853			
Total Silver (Ag)	ug/L				2.5	0.90	8774853			
Total Sodium (Na)	ug/L				84000	1000	8774853			
Total Strontium (Sr)	ug/L				2900	10	8774853			
Total Tellurium (Te)	ug/L				<10	10	8774853			
Total Thallium (Tl)	ug/L				1.4	0.50	8774853			
Total Tin (Sn)	ug/L				<10	10	8774853			
Total Titanium (Ti)	ug/L				2900	50	8774853			
Total Tungsten (W)	ug/L				99	10	8774853			
Total Uranium (U)	ug/L				12	1.0	8774853			
Total Vanadium (V)	ug/L				300	5.0	8774853			
Total Zinc (Zn)	ug/L				1700	50	8774853			
Total Zirconium (Zr)	ug/L				49	10	8774853			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WAS212			WAS213			WAS214		
Sampling Date		2023/06/05 04:08			2023/06/05 08:00			2023/06/05 08:00		
COC Number		712696			712696			712696		
	UNITS	M1 Pond Lab-Dup	RDL	QC Batch	Trip Blank	RDL	QC Batch	Duplicate 4	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0109	0.0005	8743119	0.0013	0.0005	8786351	0.0009	0.0005	8724636
. Aluminum (Al)	mg/L				0.0035	0.0005	8721678	0.115	0.0005	8721678
Dissolved Antimony (Sb)	mg/L	0.0002	0.0001	8743119	<0.0001	0.0001	8786351	<0.0001	0.0001	8724636
. Antimony (Sb)	mg/L				<0.0001	0.0001	8721678	<0.0001	0.0001	8721678
Dissolved Arsenic (As)	mg/L	0.0226	0.0001	8743119	<0.0001	0.0001	8786351	0.0877	0.0001	8724636
. Arsenic (As)	mg/L				<0.0001	0.0001	8721678	0.0878	0.0005	8721678
Dissolved Barium (Ba)	mg/L	0.0370	0.0002	8743119	<0.0002	0.0002	8786351	0.0928	0.0002	8724636
. Barium (Ba)	mg/L				<0.0002	0.0002	8721678	0.0935	0.0002	8721678
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8743119	<0.00005	0.00005	8786351	<0.00005	0.00005	8724636
. Beryllium (Be)	mg/L				<0.00005	0.00005	8721678	<0.00005	0.00005	8721678
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8743119	<0.0001	0.0001	8786351	<0.0001	0.0001	8724636
. Bismuth (Bi)	mg/L				<0.0001	0.0001	8721678	<0.0001	0.0001	8721678
Dissolved Boron (B)	mg/L	0.011	0.001	8743119	<0.001	0.001	8786351	0.038	0.001	8724636
. Boron (B)	mg/L				<0.001	0.001	8721678	0.039	0.001	8721678
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8743119	<0.00001	0.00001	8786351	<0.00001	0.00001	8724636
. Cadmium (Cd)	mg/L				<0.000005	0.000005	8721678	<0.000005	0.000005	8721678
Dissolved Calcium (Ca)	mg/L	135	0.1	8743119	<0.02	0.02	8786351	74.1	0.1	8724636
. Calcium (Ca)	mg/L				<0.02	0.02	8721678	74.6	0.1	8721678
Dissolved Cesium (Cs)	mg/L	0.00003	0.00002	8743119	<0.00002	0.00002	8786351	0.00024	0.00002	8724636
. Cesium (Cs)	mg/L				<0.00002	0.00002	8721678	0.00026	0.00002	8721678
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8743119	<0.0005	0.0005	8786351	<0.0005	0.0005	8724636
. Chromium (Cr)	mg/L				<0.0005	0.0005	8721678	<0.0005	0.0005	8721678
Dissolved Cobalt (Co)	mg/L	0.0100	0.00005	8743119	<0.00005	0.00005	8786351	<0.00005	0.00005	8724636
. Cobalt (Co)	mg/L				<0.00005	0.00005	8721678	0.00021	0.00005	8721678
Dissolved Copper (Cu)	mg/L	0.0005	0.0001	8743119	<0.0001	0.0001	8786351	<0.0001	0.0001	8724636
. Copper (Cu)	mg/L				<0.0001	0.0001	8721678	0.0002	0.0001	8721678
Dissolved Iron (Fe)	mg/L	2.73	0.005	8743119	<0.005	0.005	8786351	1.95	0.005	8724636
. Iron (Fe)	mg/L				<0.005	0.005	8721678	3.04	0.005	8721678
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8743119	<0.00005	0.00005	8786351	<0.00005	0.00005	8724636
. Lead (Pb)	mg/L				<0.00005	0.00005	8721678	0.00021	0.00005	8721678

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WAS212			WAS213			WAS214		
Sampling Date		2023/06/05 04:08			2023/06/05 08:00			2023/06/05 08:00		
COC Number		712696			712696			712696		
	UNITS	M1 Pond Lab-Dup	RDL	QC Batch	Trip Blank	RDL	QC Batch	Duplicate 4	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0017	0.0005	8743119	<0.0005	0.0005	8786351	0.0095	0.0005	8724636
. Lithium (Li)	mg/L				<0.0005	0.0005	8721678	0.0100	0.0005	8721678
Dissolved Magnesium (Mg)	mg/L	30.5	0.005	8743119	<0.005	0.005	8786351	27.7	0.005	8724636
. Magnesium (Mg)	mg/L				<0.005	0.005	8721678	30.1	0.005	8721678
Dissolved Manganese (Mn)	mg/L	2.65	0.001	8743119	<0.0002	0.0002	8786351	0.0385	0.0002	8724636
. Manganese (Mn)	mg/L				<0.0002	0.0002	8721678	0.0468	0.0002	8721678
Mercury (Hg)	ug/L				<0.01	0.01	8720072	<0.01	0.01	8720072
Dissolved Mercury (Hg)	ug/L				<0.01	0.01	8720059	<0.01	0.01	8720059
Dissolved Molybdenum (Mo)	mg/L	0.00170	0.00005	8743119	<0.00005	0.00005	8786351	0.00102	0.00005	8724636
. Molybdenum (Mo)	mg/L				<0.00005	0.00005	8721678	0.00095	0.00005	8721678
Dissolved Nickel (Ni)	mg/L	0.0061	0.0001	8743119	<0.0001	0.0001	8786351	<0.0001	0.0001	8724636
. Nickel (Ni)	mg/L				<0.0001	0.0001	8721678	0.0007	0.0001	8721678
Dissolved Phosphorus (P)	mg/L	0.007	0.005	8743119	<0.005	0.005	8786351	0.043	0.005	8724636
. Phosphorus (P)	mg/L				<0.005	0.005	8721678	0.069	0.005	8721678
Dissolved Potassium (K)	mg/L	2.26	0.02	8743119	<0.02	0.02	8786351	4.35	0.02	8724636
. Potassium (K)	mg/L				<0.02	0.02	8721678	4.68	0.02	8721678
Dissolved Rubidium (Rb)	mg/L	0.00199	0.00002	8743119	<0.00002	0.00002	8786351	0.00121	0.00002	8724636
. Rubidium (Rb)	mg/L				<0.00002	0.00002	8721678	0.00135	0.00002	8721678
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8743119	<0.0002	0.0002	8786351	<0.0002	0.0002	8724636
. Selenium (Se)	mg/L				<0.00005	0.00005	8721678	0.00007	0.00005	8721678
Dissolved Silicon (Si)	mg/L	6.87	0.025	8743119	<0.005	0.005	8786351	7.18	0.025	8724636
. Silicon (Si)	mg/L				<0.005	0.005	8721678	7.68	0.025	8721678
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8743119	<0.00001	0.00001	8786351	<0.00001	0.00001	8724636
. Silver (Ag)	mg/L				<0.00001	0.00001	8721678	<0.00001	0.00001	8721678
Dissolved Sodium (Na)	mg/L	12.9	0.01	8743119	0.01	0.01	8786351	12.7	0.01	8724636
. Sodium (Na)	mg/L				<0.01	0.01	8721678	13.7	0.01	8721678
Dissolved Strontium (Sr)	mg/L	0.301	0.0001	8743119	<0.0001	0.0001	8786351	0.555	0.0001	8724636
. Strontium (Sr)	mg/L				<0.0001	0.0001	8721678	0.563	0.0001	8721678
Dissolved Sulphur (S)	mg/L	6.6	0.5	8720610	<0.5	0.5	8744626	<0.5	0.5	8744626
Total Sulphur (S)	mg/L				<0.5	0.5	8744374	<0.5	0.5	8744374
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8743119	<0.0001	0.0001	8786351	<0.0001	0.0001	8724636

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3G5381
Report Date: 2023/07/14

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: WM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WAS212			WAS213			WAS214		
Sampling Date		2023/06/05 04:08			2023/06/05 08:00			2023/06/05 08:00		
COC Number		712696			712696			712696		
	UNITS	M1 Pond Lab-Dup	RDL	QC Batch	Trip Blank	RDL	QC Batch	Duplicate 4	RDL	QC Batch
. Tellurium (Te)	mg/L				<0.0001	0.0001	8721678	<0.0001	0.0001	8721678
Dissolved Thallium (Tl)	mg/L	0.000006	0.000005	8743119	<0.000005	0.000005	8786351	<0.000005	0.000005	8724636
. Thallium (Tl)	mg/L				<0.000005	0.000005	8721678	<0.000005	0.000005	8721678
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8743119						
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8743119	<0.0001	0.0001	8786351	<0.0001	0.0001	8724636
. Tin (Sn)	mg/L				<0.0001	0.0001	8721678	<0.0001	0.0001	8721678
Dissolved Titanium (Ti)	mg/L	0.0009	0.0005	8743119	<0.0005	0.0005	8786351	<0.0005	0.0005	8724636
. Titanium (Ti)	mg/L				<0.0005	0.0005	8721678	0.0032	0.0005	8721678
Dissolved Tungsten (W)	mg/L	0.0002	0.0001	8743119	<0.0001	0.0001	8786351	0.0003	0.0001	8724636
. Tungsten (W)	mg/L				<0.0001	0.0001	8721678	0.0003	0.0001	8721678
Dissolved Uranium (U)	mg/L	0.00155	0.00001	8743119	<0.00001	0.00001	8786351	0.00028	0.00001	8724636
. Uranium (U)	mg/L				<0.00001	0.00001	8721678	0.00032	0.00001	8721678
Dissolved Vanadium (V)	mg/L	0.00093	0.00005	8743119	<0.00005	0.00005	8786351	<0.00005	0.00005	8724636
. Vanadium (V)	mg/L				<0.00005	0.00005	8721678	0.00051	0.00005	8721678
Dissolved Zinc (Zn)	mg/L	0.0008	0.0005	8743119	<0.0005	0.0005	8786351	0.0006	0.0005	8724636
. Zinc (Zn)	mg/L				<0.0005	0.0005	8721678	0.0033	0.0005	8721678
Dissolved Zirconium (Zr)	mg/L	0.0024	0.0001	8743119	<0.0001	0.0001	8786351	0.0001	0.0001	8724636
. Zirconium (Zr)	mg/L				<0.0001	0.0001	8721678	0.0006	0.0001	8721678

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VOLATILE ORGANICS BY GC/MS (WATER)

Bureau Veritas ID		WAS212		
Sampling Date		2023/06/05 04:08		
COC Number		712696		
	UNITS	M1 Pond	RDL	QC Batch
Volatile Organics				
Benzene	ug/L	<0.17	0.17	8719038
Chloroform	ug/L	<0.20	0.20	8719038
1,2-Dichlorobenzene	ug/L	<0.50	0.50	8719038
1,4-Dichlorobenzene	ug/L	<0.50	0.50	8719038
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	8719038
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	8719038
Ethylbenzene	ug/L	<0.20	0.20	8719038
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	8719038
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	8719038
Tetrachloroethylene	ug/L	<0.20	0.20	8719038
Toluene	ug/L	0.24	0.20	8719038
Trichloroethylene	ug/L	<0.20	0.20	8719038
p+m-Xylene	ug/L	<0.20	0.20	8719038
o-Xylene	ug/L	<0.20	0.20	8719038
Total Xylenes	ug/L	<0.20	0.20	8719038
F1 (C6-C10)	ug/L	<25	25	8719038
F1 (C6-C10) - BTEX	ug/L	<25	25	8719038
Surrogate Recovery (%)				
4-Bromofluorobenzene	%	99		8719038
D4-1,2-Dichloroethane	%	102		8719038
D8-Toluene	%	99		8719038

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		WAS212		
Sampling Date		2023/06/05 04:08		
COC Number		712696		
	UNITS	M1 Pond	RDL	QC Batch
F2-F4 Hydrocarbons				
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	8718693
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	8718693
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	8718693
Reached Baseline at C50	ug/L	Yes		8718693
Surrogate Recovery (%)				
o-Terphenyl	%	96		8718693

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WAS207
Sample ID: MW03-OB-18
Matrix: Water

Collected: 2023/06/05
Shipped:
Received: 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8727971	N/A	2023/06/15	Brent Boudreau
Alkalinity	AT	8716663	N/A	2023/06/12	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8714995	N/A	2023/06/13	Automated Statchk
Chloride by Automated Colourimetry	KONE	8716523	N/A	2023/06/13	Alina Dobreanu
Conductivity	AT	8716646	N/A	2023/06/12	Kien Tran
Fluoride	ISE	8716664	2023/06/09	2023/06/12	Kien Tran
Hardness (calculated as CaCO3)		8714994	N/A	2023/06/15	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8720059	2023/06/12	2023/06/12	Japneet Gill
Mercury (low level)	CV/AA	8720072	2023/06/12	2023/06/12	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8744626	2023/06/22	2023/06/23	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8724636	N/A	2023/06/15	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8721678	N/A	2023/06/13	Nan Raykha
Total Metals Analysis by ICP	ICP	8744374	2023/06/22	2023/06/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8740194	N/A	2023/06/13	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8737672	2023/06/14	2023/06/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8730517	2023/06/13	2023/06/15	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8720009	N/A	2023/06/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8716494	N/A	2023/06/12	Chandra Nandlal
pH	AT	8716659	2023/06/09	2023/06/12	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/08	Sattyajita Bastola
Sulphate by Automated Turbidimetry	KONE	8716535	N/A	2023/06/13	Alina Dobreanu
Total Dissolved Solids	BAL	8718009	2023/06/10	2023/06/12	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/06/08	Sattyajita Bastola
Total Kjeldahl Nitrogen in Water	SKAL	8720054	2023/06/12	2023/06/13	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8717995	2023/06/10	2023/06/12	Tina Teng
Turbidity	AT	8716488	N/A	2023/06/09	Kien Tran

Bureau Veritas ID: WAS207 Dup
Sample ID: MW03-OB-18
Matrix: Water

Collected: 2023/06/05
Shipped:
Received: 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals by ICPMS (low level)	ICP1/MS	8724636	N/A	2023/06/15	Prempal Bhatti

Bureau Veritas ID: WAS208
Sample ID: MW03-BR-18
Matrix: Water

Collected: 2023/06/05
Shipped:
Received: 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8727971	N/A	2023/06/15	Brent Boudreau
Alkalinity	AT	8716663	N/A	2023/06/12	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8714995	N/A	2023/06/13	Automated Statchk
Chloride by Automated Colourimetry	KONE	8716523	N/A	2023/06/13	Alina Dobreanu
Conductivity	AT	8716646	N/A	2023/06/12	Kien Tran
Fluoride	ISE	8716664	2023/06/09	2023/06/12	Kien Tran

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WAS208 **Collected:** 2023/06/05
Sample ID: MW03-BR-18 **Shipped:**
Matrix: Water **Received:** 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hardness (calculated as CaCO3)		8714994	N/A	2023/06/15	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8720059	2023/06/12	2023/06/12	Japneet Gill
Mercury (low level)	CV/AA	8720072	2023/06/12	2023/06/12	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8744626	2023/06/22	2023/06/23	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8724636	N/A	2023/06/15	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8721678	N/A	2023/06/13	Nan Raykha
Total Metals Analysis by ICP	ICP	8744374	2023/06/22	2023/06/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8740194	N/A	2023/06/13	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8737672	2023/06/14	2023/06/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8730517	2023/06/13	2023/06/14	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8720009	N/A	2023/06/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8716494	N/A	2023/06/12	Chandra Nandlal
pH	AT	8716659	2023/06/09	2023/06/12	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/08	Sattyajita Bastola
Sulphate by Automated Turbidimetry	KONE	8716535	N/A	2023/06/13	Alina Dobreanu
Total Dissolved Solids	BAL	8718009	2023/06/10	2023/06/12	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/06/08	Sattyajita Bastola
Total Kjeldahl Nitrogen in Water	SKAL	8720054	2023/06/12	2023/06/13	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8717995	2023/06/10	2023/06/12	Tina Teng
Turbidity	AT	8716488	N/A	2023/06/09	Kien Tran

Bureau Veritas ID: WAS208 Dup **Collected:** 2023/06/05
Sample ID: MW03-BR-18 **Shipped:**
Matrix: Water **Received:** 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Mercury (low level)	CV/AA	8720059	2023/06/12	2023/06/12	Japneet Gill

Bureau Veritas ID: WAS209 **Collected:** 2023/06/05
Sample ID: MW01-OB1-18 **Shipped:**
Matrix: Water **Received:** 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8727971	N/A	2023/06/15	Brent Boudreau
Alkalinity	AT	8716663	N/A	2023/06/12	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8714995	N/A	2023/06/13	Automated Statchk
Chloride by Automated Colourimetry	KONE	8716523	N/A	2023/06/13	Alina Dobreanu
Conductivity	AT	8716646	N/A	2023/06/12	Kien Tran
Fluoride	ISE	8716664	2023/06/09	2023/06/12	Kien Tran
Hardness (calculated as CaCO3)		8714994	N/A	2023/06/15	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8720059	2023/06/12	2023/06/12	Japneet Gill
Mercury (low level)	CV/AA	8720072	2023/06/12	2023/06/12	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8744626	2023/06/22	2023/06/23	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8724636	N/A	2023/06/15	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8721678	N/A	2023/06/13	Nan Raykha

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WAS209 **Collected:** 2023/06/05
Sample ID: MW01-OB1-18 **Shipped:**
Matrix: Water **Received:** 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals Analysis by ICP	ICP	8744374	2023/06/22	2023/06/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8740194	N/A	2023/06/13	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8737672	2023/06/14	2023/06/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8730517	2023/06/13	2023/06/14	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8720009	N/A	2023/06/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8716494	N/A	2023/06/12	Chandra Nandlal
pH	AT	8716659	2023/06/09	2023/06/12	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/08	Sattyajita Bastola
Sulphate by Automated Turbidimetry	KONE	8716535	N/A	2023/06/13	Alina Dobreanu
Total Dissolved Solids	BAL	8718009	2023/06/10	2023/06/12	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/06/08	Sattyajita Bastola
Total Kjeldahl Nitrogen in Water	SKAL	8720054	2023/06/12	2023/06/13	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8717995	2023/06/10	2023/06/12	Tina Teng
Turbidity	AT	8716488	N/A	2023/06/09	Kien Tran

Bureau Veritas ID: WAS209 Dup **Collected:** 2023/06/05
Sample ID: MW01-OB1-18 **Shipped:**
Matrix: Water **Received:** 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	8716523	N/A	2023/06/13	Alina Dobreanu
Sulphate by Automated Turbidimetry	KONE	8716535	N/A	2023/06/13	Alina Dobreanu

Bureau Veritas ID: WAS210 **Collected:** 2023/06/05
Sample ID: MW01-OB2-18 **Shipped:**
Matrix: Water **Received:** 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8727971	N/A	2023/06/15	Brent Boudreau
Alkalinity	AT	8716663	N/A	2023/06/12	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8714995	N/A	2023/06/13	Automated Statchk
Chloride by Automated Colourimetry	KONE	8716523	N/A	2023/06/13	Alina Dobreanu
Conductivity	AT	8716646	N/A	2023/06/12	Kien Tran
Fluoride	ISE	8716664	2023/06/09	2023/06/12	Kien Tran
Hardness (calculated as CaCO3)		8714994	N/A	2023/06/15	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8720059	2023/06/12	2023/06/12	Japneet Gill
Mercury (low level)	CV/AA	8720072	2023/06/12	2023/06/12	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8744626	2023/06/22	2023/06/23	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8724636	N/A	2023/06/15	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8721678	N/A	2023/06/13	Nan Raykha
Total Metals Analysis by ICP	ICP	8744374	2023/06/22	2023/06/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8740194	N/A	2023/06/13	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8741264	2023/06/14	2023/06/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8730517	2023/06/13	2023/06/15	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8720009	N/A	2023/06/13	Prabhjot Kaur

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WAS210 **Collected:** 2023/06/05
Sample ID: MW01-OB2-18 **Shipped:**
Matrix: Water **Received:** 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrate & Nitrite as Nitrogen in Water	LACH	8716494	N/A	2023/06/12	Chandra Nandlal
pH	AT	8716659	2023/06/09	2023/06/12	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/08	Sattyajita Bastola
Sulphate by Automated Turbidimetry	KONE	8716535	N/A	2023/06/13	Alina Dobreanu
Total Dissolved Solids	BAL	8718009	2023/06/10	2023/06/12	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/06/08	Sattyajita Bastola
Total Kjeldahl Nitrogen in Water	SKAL	8720054	2023/06/12	2023/06/13	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8717995	2023/06/10	2023/06/12	Tina Teng
Turbidity	AT	8716488	N/A	2023/06/09	Kien Tran

Bureau Veritas ID: WAS210 Dup **Collected:** 2023/06/05
Sample ID: MW01-OB2-18 **Shipped:**
Matrix: Water **Received:** 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals Analysis by ICP	ICP	8744626	2023/06/22	2023/06/23	Suban Kanapathippllai

Bureau Veritas ID: WAS211 **Collected:** 2023/06/05
Sample ID: MW02-OB-18 **Shipped:**
Matrix: Water **Received:** 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8727971	N/A	2023/06/15	Brent Boudreau
Alkalinity	AT	8751723	N/A	2023/06/26	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8714995	N/A	2023/06/13	Automated Statchk
Chloride by Automated Colourimetry	KONE	8752573	N/A	2023/06/27	Massarat Jan
Conductivity	AT	8716646	N/A	2023/06/12	Kien Tran
Fluoride	ISE	8716664	2023/06/09	2023/06/12	Kien Tran
Hardness (calculated as CaCO3)		8714994	N/A	2023/06/15	Automated Statchk
Mercury in Water by CVAA	CV/AA	8727694	2023/06/15	2023/06/15	Japneet Gill
Dissolved Mercury (low level)	CV/AA	8720059	2023/06/12	2023/06/12	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8744626	2023/06/22	2023/06/23	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8724636	N/A	2023/06/15	Prempal Bhatti
Total Metals Analysis by ICPMS	ICP/MS	8774853	2023/07/07	2023/07/10	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8744374	2023/06/22	2023/06/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8740194	N/A	2023/06/13	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8741265	2023/06/14	2023/06/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8730517	2023/06/13	2023/06/14	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8720009	N/A	2023/06/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8716494	N/A	2023/06/12	Chandra Nandlal
pH	AT	8716659	2023/06/09	2023/06/12	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/08	Sattyajita Bastola
Sulphate by Automated Turbidimetry	KONE	8752585	N/A	2023/06/27	Massarat Jan
Total Dissolved Solids	BAL	8718009	2023/06/10	2023/06/12	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/06/08	Sattyajita Bastola

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3G5381
Report Date: 2023/07/14

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: WM

TEST SUMMARY

Bureau Veritas ID: WAS211
Sample ID: MW02-OB-18
Matrix: Water

Collected: 2023/06/05
Shipped:
Received: 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Kjeldahl Nitrogen in Water	SKAL	8720054	2023/06/12	2023/06/13	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8717995	2023/06/10	2023/06/12	Tina Teng
Turbidity	AT	8716488	N/A	2023/06/09	Kien Tran

Bureau Veritas ID: WAS211 Dup
Sample ID: MW02-OB-18
Matrix: Water

Collected: 2023/06/05
Shipped:
Received: 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	8752573	N/A	2023/06/27	Massarat Jan
Sulphate by Automated Turbidimetry	KONE	8752585	N/A	2023/06/27	Massarat Jan

Bureau Veritas ID: WAS212
Sample ID: M1 Pond
Matrix: Water

Collected: 2023/06/05
Shipped:
Received: 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8727971	N/A	2023/06/15	Brent Boudreau
Alkalinity	AT	8716663	N/A	2023/06/12	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8714995	N/A	2023/06/13	Automated Statchk
Chloride by Automated Colourimetry	KONE	8716523	N/A	2023/06/13	Alina Dobreanu
Conductivity	AT	8716646	N/A	2023/06/12	Kien Tran
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8718693	2023/06/11	2023/06/11	Emir Danisman
Fluoride	ISE	8716664	2023/06/09	2023/06/12	Kien Tran
Hardness (calculated as CaCO3)		8714994	N/A	2023/06/22	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8720059	2023/06/12	2023/06/12	Japneet Gill
Mercury (low level)	CV/AA	8725497	2023/06/14	2023/06/14	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8720610	2023/06/12	2023/06/13	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8743119	N/A	2023/06/22	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8721678	N/A	2023/06/13	Nan Raykha
Total Metals Analysis by ICP	ICP	8719490	2023/06/12	2023/06/12	Suban Kanapathippllai
Cyanide (Free)	SPEC	8740194	N/A	2023/06/13	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8737672	2023/06/14	2023/06/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8730517	2023/06/13	2023/06/14	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8720009	N/A	2023/06/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8716494	N/A	2023/06/12	Chandra Nandlal
pH	AT	8716659	2023/06/09	2023/06/12	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/08	Sattyajita Bastola
Sulphate by Automated Turbidimetry	KONE	8716535	N/A	2023/06/13	Alina Dobreanu
Total Dissolved Solids	BAL	8718009	2023/06/10	2023/06/12	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/06/08	Sattyajita Bastola
Total Kjeldahl Nitrogen in Water	SKAL	8720054	2023/06/12	2023/06/13	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8717995	2023/06/10	2023/06/12	Tina Teng
Turbidity	AT	8716488	N/A	2023/06/09	Kien Tran
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8719038	N/A	2023/06/14	Xueming Jiang

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WAS212 Dup
Sample ID: M1 Pond
Matrix: Water

Collected: 2023/06/05
Shipped:
Received: 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals Analysis by ICP	ICP	8720610	2023/06/12	2023/06/13	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8743119	N/A	2023/06/22	Prempal Bhatti
Nitrate & Nitrite as Nitrogen in Water	LACH	8716494	N/A	2023/06/12	Chandra Nandlal

Bureau Veritas ID: WAS213
Sample ID: Trip Blank
Matrix: Water

Collected: 2023/06/05
Shipped:
Received: 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8727971	N/A	2023/06/15	Brent Boudreau
Alkalinity	AT	8716663	N/A	2023/06/12	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8714995	N/A	2023/06/13	Automated Statchk
Chloride by Automated Colourimetry	KONE	8716523	N/A	2023/06/13	Alina Dobreanu
Conductivity	AT	8716646	N/A	2023/06/12	Kien Tran
Fluoride	ISE	8716664	2023/06/09	2023/06/12	Kien Tran
Hardness (calculated as CaCO3)		8714994	N/A	2023/06/15	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8720059	2023/06/12	2023/06/12	Japneet Gill
Mercury (low level)	CV/AA	8720072	2023/06/12	2023/06/12	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8744626	2023/06/22	2023/06/23	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8786351	N/A	2023/07/13	Nan Raykha
Metals in Water by ICPMS (low level)	ICP1/MS	8721678	N/A	2023/06/13	Nan Raykha
Total Metals Analysis by ICP	ICP	8744374	2023/06/22	2023/06/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8740887	N/A	2023/06/15	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8761029	2023/06/28	2023/06/28	Ming Dong
Total Phosphorus Low Level Total	KONE	8730517	2023/06/13	2023/06/14	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8724887	N/A	2023/06/14	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8716494	N/A	2023/06/12	Chandra Nandlal
pH	AT	8716659	2023/06/09	2023/06/12	Kien Tran
Sulphate by Automated Turbidimetry	KONE	8716535	N/A	2023/06/13	Alina Dobreanu
Total Dissolved Solids	BAL	8719379	2023/06/12	2023/06/13	Tina Teng
Total Kjeldahl Nitrogen in Water	SKAL	8720054	2023/06/12	2023/06/13	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8717995	2023/06/10	2023/06/12	Tina Teng
Turbidity	AT	8716488	N/A	2023/06/09	Kien Tran

Bureau Veritas ID: WAS214
Sample ID: Duplicate 4
Matrix: Water

Collected: 2023/06/05
Shipped:
Received: 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8727971	N/A	2023/06/15	Brent Boudreau
Alkalinity	AT	8716663	N/A	2023/06/12	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8714995	N/A	2023/06/13	Automated Statchk
Chloride by Automated Colourimetry	KONE	8716523	N/A	2023/06/13	Alina Dobreanu
Conductivity	AT	8716646	N/A	2023/06/12	Kien Tran
Fluoride	ISE	8716664	2023/06/09	2023/06/12	Kien Tran

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3G5381
Report Date: 2023/07/14

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: WM

TEST SUMMARY

Bureau Veritas ID: WAS214
Sample ID: Duplicate 4
Matrix: Water

Collected: 2023/06/05
Shipped:
Received: 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hardness (calculated as CaCO3)		8714994	N/A	2023/06/15	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8720059	2023/06/12	2023/06/12	Japneet Gill
Mercury (low level)	CV/AA	8720072	2023/06/12	2023/06/12	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8744626	2023/06/22	2023/06/23	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8724636	N/A	2023/06/15	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8721678	N/A	2023/06/13	Nan Raykha
Total Metals Analysis by ICP	ICP	8744374	2023/06/22	2023/06/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8740887	N/A	2023/06/15	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8741265	2023/06/14	2023/06/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8730517	2023/06/13	2023/06/14	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8720009	N/A	2023/06/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8716494	N/A	2023/06/12	Chandra Nandlal
pH	AT	8716659	2023/06/09	2023/06/12	Kien Tran
Sulphate by Automated Turbidimetry	KONE	8716535	N/A	2023/06/13	Alina Dobreanu
Total Dissolved Solids	BAL	8718009	2023/06/10	2023/06/12	Shaneil Hall
Total Kjeldahl Nitrogen in Water	SKAL	8720054	2023/06/12	2023/06/13	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8717995	2023/06/10	2023/06/12	Tina Teng
Turbidity	AT	8716488	N/A	2023/06/09	Kien Tran

Bureau Veritas ID: WAS214 Dup
Sample ID: Duplicate 4
Matrix: Water

Collected: 2023/06/05
Shipped:
Received: 2023/06/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8716663	N/A	2023/06/12	Kien Tran
Conductivity	AT	8716646	N/A	2023/06/12	Kien Tran
Fluoride	ISE	8716664	2023/06/09	2023/06/12	Kien Tran
pH	AT	8716659	2023/06/09	2023/06/12	Kien Tran
Low Level Total Suspended Solids	BAL	8717995	2023/06/10	2023/06/12	Tina Teng

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	9.0°C
Package 2	7.0°C
Package 3	7.3°C

Mercury analysis run for M1 POND from plastic bottle with client consent due to broken bottle upon receipt.

Sample WAS207 [MW03-OB-18] : TKN < Ammonia: Both values fall within the method uncertainty for duplicates and are likely equivalent.
Acidity sample contained headspace.

Sample WAS208 [MW03-BR-18] : TKN < Ammonia: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample WAS209 [MW01-OB1-18] : "Metals Analysis: Preserved sample contained visible sediment. Results may be biased high due to analytes leaching from sediment."

Metal Analysis:Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Metals Analysis: Due to the sample matrix, the sample required dilution. Detection limits were adjusted accordingly.

Sample WAS210 [MW01-OB2-18] : Metal Analysis:Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Metals Analysis: Due to the sample matrix, the sample required dilution. Detection limits were adjusted accordingly.

Sample WAS211 [MW02-OB-18] : "Metals Analysis: Preserved sample contained visible sediment. Results may be biased high due to analytes leaching from sediment."

Metal Analysis:Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Metals Analysis: Due to the sample matrix, the sample required dilution. Detection limits were adjusted accordingly.

Metal Analysis:Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Sample WAS212 [M1 Pond] : Acidity sample contained headspace.

Sample WAS213 [Trip Blank] : Metals Analysis: Trip blank was proofed in the lab prior to sampling with an Aluminum value above the reported RDL (=2x RDL of 4.9 ug/L) for this analysis. The reported aluminum value for this sample trip blank falls within the acceptance criteria used at the time when the trip blank was proofed and prepared.
Acidity sample contained headspace.

Metals Analysis: Due to the sample matrix, the sample required dilution. Detection limits were adjusted accordingly.
Sample was analyzed past method specified hold time for Cyanide (total). Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised.

Sample WAS214 [Duplicate 4] : TKN < Ammonia: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8718693	o-Terphenyl	2023/06/11	103	60 - 130	97	60 - 130	98	%				
8719038	4-Bromofluorobenzene	2023/06/14	100	70 - 130	98	70 - 130	98	%				
8719038	D4-1,2-Dichloroethane	2023/06/14	101	70 - 130	100	70 - 130	100	%				
8719038	D8-Toluene	2023/06/14	101	70 - 130	103	70 - 130	102	%				
8716488	Turbidity	2023/06/09			98	80 - 120	<0.1	NTU	9.2	20		
8716494	Nitrate (N)	2023/06/12	93	80 - 120	97	80 - 120	<0.10	mg/L	NC	20		
8716494	Nitrite (N)	2023/06/12	97	80 - 120	101	80 - 120	<0.010	mg/L	NC	20		
8716523	Dissolved Chloride (Cl-)	2023/06/13	96	80 - 120	96	80 - 120	<1.0	mg/L	1.9	20		
8716535	Dissolved Sulphate (SO4)	2023/06/13	NC	75 - 125	95	80 - 120	<1.0	mg/L	0.44	20		
8716646	Conductivity	2023/06/12			100	85 - 115	<0.001	mS/cm	0.34	10		
8716659	pH	2023/06/12			102	98 - 103			0.46	N/A		
8716663	Alkalinity (Total as CaCO3)	2023/06/12			95	85 - 115	<1.0	mg/L	0.43	20		
8716664	Fluoride (F-)	2023/06/12	93	80 - 120	94	80 - 120	<0.10	mg/L	0.92	20		
8717995	Total Suspended Solids	2023/06/12			99	85 - 115	<1	mg/L	12	20		
8718009	Total Dissolved Solids	2023/06/12			98	90 - 110	<10	mg/L	5.1	20		
8718693	F2 (C10-C16 Hydrocarbons)	2023/06/11	112	60 - 130	101	60 - 130	<100	ug/L	NC	30		
8718693	F3 (C16-C34 Hydrocarbons)	2023/06/11	118	60 - 130	111	60 - 130	<200	ug/L	NC	30		
8718693	F4 (C34-C50 Hydrocarbons)	2023/06/11	119	60 - 130	109	60 - 130	<200	ug/L	NC	30		
8719038	1,1,2,2-Tetrachloroethane	2023/06/14	91	70 - 130	103	70 - 130	<0.50	ug/L	NC	30		
8719038	1,2-Dichlorobenzene	2023/06/14	82	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
8719038	1,4-Dichlorobenzene	2023/06/14	94	70 - 130	108	70 - 130	<0.50	ug/L	NC	30		
8719038	Benzene	2023/06/14	80	70 - 130	94	70 - 130	<0.17	ug/L	NC	30		
8719038	Chloroform	2023/06/14	85	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
8719038	cis-1,2-Dichloroethylene	2023/06/14	86	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
8719038	Ethylbenzene	2023/06/14	79	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
8719038	F1 (C6-C10) - BTEX	2023/06/14					<25	ug/L	NC	30		
8719038	F1 (C6-C10)	2023/06/14	72	60 - 140	85	60 - 140	<25	ug/L	NC	30		
8719038	Methylene Chloride(Dichloromethane)	2023/06/14	84	70 - 130	96	70 - 130	<2.0	ug/L	NC	30		
8719038	o-Xylene	2023/06/14	80	70 - 130	94	70 - 130	<0.20	ug/L	0	30		
8719038	p+m-Xylene	2023/06/14	83	70 - 130	97	70 - 130	<0.20	ug/L	0.75	30		
8719038	Tetrachloroethylene	2023/06/14	78	70 - 130	93	70 - 130	<0.20	ug/L	NC	30		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8719038	Toluene	2023/06/14	82	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
8719038	Total Xylenes	2023/06/14					<0.20	ug/L	0.54	30		
8719038	trans-1,3-Dichloropropene	2023/06/14	78	70 - 130	82	70 - 130	<0.40	ug/L	NC	30		
8719038	Trichloroethylene	2023/06/14	81	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
8719379	Total Dissolved Solids	2023/06/13			97	90 - 110	<10	mg/L	1.5	20		
8719490	Total Sulphur (S)	2023/06/12	NC	80 - 120	100	80 - 120	<0.5	mg/L				
8720009	Total Ammonia-N	2023/06/13	104	75 - 125	103	80 - 120	<0.050	mg/L	14	20		
8720054	Total Kjeldahl Nitrogen (TKN)	2023/06/13	NC	80 - 120	98	80 - 120	<0.10	mg/L	1.6	20	100	80 - 120
8720059	Dissolved Mercury (Hg)	2023/06/12	100	75 - 125	99	80 - 120	<0.01	ug/L	NC	20		
8720072	Mercury (Hg)	2023/06/12	101	75 - 125	104	80 - 120	<0.01	ug/L	NC	20		
8720610	Dissolved Sulphur (S)	2023/06/13	NC	80 - 120	95	80 - 120	<0.5	mg/L	3.8	25		
8721678	. Aluminum (Al)	2023/06/13	132 (1)	80 - 120	102	80 - 120	<0.0005	mg/L	2.1	20		
8721678	. Antimony (Sb)	2023/06/13	114	80 - 120	101	80 - 120	<0.0001	mg/L	2.4	20		
8721678	. Arsenic (As)	2023/06/13	101	80 - 120	98	80 - 120	<0.0001	mg/L	0.72	20		
8721678	. Barium (Ba)	2023/06/13	105	80 - 120	102	80 - 120	<0.0002	mg/L	0.20	20		
8721678	. Beryllium (Be)	2023/06/13	101	80 - 120	102	80 - 120	<0.00005	mg/L	NC	20		
8721678	. Bismuth (Bi)	2023/06/13	84	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8721678	. Boron (B)	2023/06/13	NC	80 - 120	105	80 - 120	<0.001	mg/L	6.7	20		
8721678	. Cadmium (Cd)	2023/06/13	99	80 - 120	97	80 - 120	<0.000005	mg/L	NC	20		
8721678	. Calcium (Ca)	2023/06/13	NC	80 - 120	101	80 - 120	<0.02	mg/L	4.3	20		
8721678	. Cesium (Cs)	2023/06/13	99	80 - 120	98	80 - 120	<0.00002	mg/L	NC	N/A		
8721678	. Chromium (Cr)	2023/06/13	101	80 - 120	100	80 - 120	<0.0005	mg/L	NC	20		
8721678	. Cobalt (Co)	2023/06/13	95	80 - 120	97	80 - 120	<0.00005	mg/L	0.28	20		
8721678	. Copper (Cu)	2023/06/13	105	80 - 120	99	80 - 120	<0.0001	mg/L	0.29	20		
8721678	. Iron (Fe)	2023/06/13	101	80 - 120	102	80 - 120	<0.005	mg/L	0.84	20		
8721678	. Lead (Pb)	2023/06/13	90	80 - 120	98	80 - 120	<0.00005	mg/L	NC	20		
8721678	. Lithium (Li)	2023/06/13	108	80 - 120	107	80 - 120	<0.0005	mg/L	1.4	20		
8721678	. Magnesium (Mg)	2023/06/13	NC	80 - 120	99	80 - 120	<0.005	mg/L	2.1	20		
8721678	. Manganese (Mn)	2023/06/13	105	80 - 120	101	80 - 120	<0.0002	mg/L	0.95	20		
8721678	. Molybdenum (Mo)	2023/06/13	115	80 - 120	102	80 - 120	<0.00005	mg/L	0.20	20		
8721678	. Nickel (Ni)	2023/06/13	94	80 - 120	98	80 - 120	<0.0001	mg/L	1.6	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8721678	. Phosphorus (P)	2023/06/13	129 (1)	80 - 120	107	80 - 120	<0.005	mg/L	NC	20		
8721678	. Potassium (K)	2023/06/13	NC	80 - 120	101	80 - 120	<0.02	mg/L	1.5	20		
8721678	. Rubidium (Rb)	2023/06/13	106	80 - 120	100	80 - 120	<0.00002	mg/L	0.35	N/A		
8721678	. Selenium (Se)	2023/06/13	105	80 - 120	101	80 - 120	<0.00005	mg/L	0	20		
8721678	. Silicon (Si)	2023/06/13	NC	80 - 120	101	80 - 120	<0.005	mg/L	2.9	20		
8721678	. Silver (Ag)	2023/06/13	82	80 - 120	99	80 - 120	<0.00001	mg/L	NC	20		
8721678	. Sodium (Na)	2023/06/13	NC	80 - 120	100	80 - 120	<0.01	mg/L	0.28	20		
8721678	. Strontium (Sr)	2023/06/13	NC	80 - 120	97	80 - 120	<0.0001	mg/L	2.4	20		
8721678	. Tellurium (Te)	2023/06/13	109	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8721678	. Thallium (Tl)	2023/06/13	92	80 - 120	100	80 - 120	<0.000005	mg/L	NC	20		
8721678	. Thorium (Th)	2023/06/13	99	80 - 120	103	80 - 120	<0.0002	mg/L	NC	20		
8721678	. Tin (Sn)	2023/06/13	113	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8721678	. Titanium (Ti)	2023/06/13	117	80 - 120	101	80 - 120	<0.0005	mg/L	NC	20		
8721678	. Tungsten (W)	2023/06/13	102	80 - 120	102	80 - 120	<0.0001	mg/L	2.8	20		
8721678	. Uranium (U)	2023/06/13	95	80 - 120	100	80 - 120	<0.00001	mg/L	1.4	20		
8721678	. Vanadium (V)	2023/06/13	111	80 - 120	103	80 - 120	<0.00005	mg/L	1.3	20		
8721678	. Zinc (Zn)	2023/06/13	87	80 - 120	99	80 - 120	<0.0005	mg/L	2.3	20		
8721678	. Zirconium (Zr)	2023/06/13	124 (1)	80 - 120	104	80 - 120	<0.0001	mg/L	NC	20		
8724636	Dissolved Aluminum (Al)	2023/06/15	100	80 - 120	103	80 - 120	<0.0005	mg/L	14	20		
8724636	Dissolved Antimony (Sb)	2023/06/15	103	80 - 120	107	80 - 120	<0.0001	mg/L	NC	20		
8724636	Dissolved Arsenic (As)	2023/06/15	101	80 - 120	101	80 - 120	<0.0001	mg/L	0.23	20		
8724636	Dissolved Barium (Ba)	2023/06/15	98	80 - 120	102	80 - 120	<0.0002	mg/L	1.0	20		
8724636	Dissolved Beryllium (Be)	2023/06/15	96	80 - 120	99	80 - 120	<0.00005	mg/L	NC	20		
8724636	Dissolved Bismuth (Bi)	2023/06/15	65 (2)	80 - 120	98	80 - 120	<0.0001	mg/L	NC	20		
8724636	Dissolved Boron (B)	2023/06/15	97	80 - 120	102	80 - 120	<0.001	mg/L	0.46	20		
8724636	Dissolved Cadmium (Cd)	2023/06/15	101	80 - 120	100	80 - 120	<0.00001	mg/L	NC	20		
8724636	Dissolved Calcium (Ca)	2023/06/15	NC	80 - 120	102	80 - 120	<0.02	mg/L	1.0	20		
8724636	Dissolved Cesium (Cs)	2023/06/15	101	80 - 120	106	80 - 120	<0.00002	mg/L	NC	N/A		
8724636	Dissolved Chromium (Cr)	2023/06/15	96	80 - 120	100	80 - 120	<0.0005	mg/L	NC	20		
8724636	Dissolved Cobalt (Co)	2023/06/15	93	80 - 120	100	80 - 120	<0.00005	mg/L	NC	20		
8724636	Dissolved Copper (Cu)	2023/06/15	97	80 - 120	101	80 - 120	<0.0001	mg/L	1.1	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8724636	Dissolved Iron (Fe)	2023/06/15	98	80 - 120	103	80 - 120	<0.005	mg/L	0.31	20		
8724636	Dissolved Lead (Pb)	2023/06/15	92	80 - 120	98	80 - 120	<0.00005	mg/L	NC	20		
8724636	Dissolved Lithium (Li)	2023/06/15	101	80 - 120	103	80 - 120	<0.0005	mg/L	0.39	20		
8724636	Dissolved Magnesium (Mg)	2023/06/15	NC	80 - 120	101	80 - 120	<0.005	mg/L	0.54	20		
8724636	Dissolved Manganese (Mn)	2023/06/15	NC	80 - 120	101	80 - 120	<0.0002	mg/L	0.66	20		
8724636	Dissolved Molybdenum (Mo)	2023/06/15	106	80 - 120	105	80 - 120	<0.00005	mg/L	4.0	20		
8724636	Dissolved Nickel (Ni)	2023/06/15	91	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8724636	Dissolved Phosphorus (P)	2023/06/15	107	80 - 120	97	80 - 120	<0.005	mg/L	3.3	20		
8724636	Dissolved Potassium (K)	2023/06/15	101	80 - 120	104	80 - 120	<0.02	mg/L	0.89	20		
8724636	Dissolved Rubidium (Rb)	2023/06/15	101	80 - 120	104	80 - 120	<0.00002	mg/L	NC	N/A		
8724636	Dissolved Selenium (Se)	2023/06/15	102	80 - 120	103	80 - 120	<0.0002	mg/L	NC	20		
8724636	Dissolved Silicon (Si)	2023/06/15	NC	80 - 120	100	80 - 120	<0.005	mg/L	0.39	20		
8724636	Dissolved Silver (Ag)	2023/06/15	102	80 - 120	105	80 - 120	<0.00001	mg/L	NC	20		
8724636	Dissolved Sodium (Na)	2023/06/15	NC	80 - 120	102	80 - 120	<0.01	mg/L	0.72	20		
8724636	Dissolved Strontium (Sr)	2023/06/15	NC	80 - 120	102	80 - 120	<0.0001	mg/L	0.82	20		
8724636	Dissolved Tellurium (Te)	2023/06/15	102	80 - 120	102	80 - 120	<0.0001	mg/L	NC	20		
8724636	Dissolved Thallium (Tl)	2023/06/15	96	80 - 120	101	80 - 120	<0.000005	mg/L	NC	20		
8724636	Dissolved Tin (Sn)	2023/06/15	105	80 - 120	104	80 - 120	<0.0001	mg/L	NC	20		
8724636	Dissolved Titanium (Ti)	2023/06/15	99	80 - 120	102	80 - 120	<0.0005	mg/L	6.6	20		
8724636	Dissolved Tungsten (W)	2023/06/15	99	80 - 120	102	80 - 120	<0.0001	mg/L	NC	20		
8724636	Dissolved Uranium (U)	2023/06/15	95	80 - 120	99	80 - 120	<0.00001	mg/L	8.0	20		
8724636	Dissolved Vanadium (V)	2023/06/15	99	80 - 120	102	80 - 120	<0.00005	mg/L	NC	20		
8724636	Dissolved Zinc (Zn)	2023/06/15	93	80 - 120	99	80 - 120	<0.0005	mg/L	4.7	20		
8724636	Dissolved Zirconium (Zr)	2023/06/15	111	80 - 120	108	80 - 120	<0.0001	mg/L	2.8	20		
8724887	Total Ammonia-N	2023/06/14	108	75 - 125	104	80 - 120	<0.050	mg/L	1.1	20		
8725497	Mercury (Hg)	2023/06/14	103	75 - 125	104	80 - 120	<0.01	ug/L	NC	20		
8727694	Mercury (Hg)	2023/06/15	101	75 - 125	103	80 - 120	<0.00010	mg/L	NC	20		
8727971	Acidity	2023/06/15	88	80 - 120	101	80 - 120	<5.0	mg/L	5.4	25		
8730517	Total Phosphorus (P)	2023/06/14	94	80 - 120	94	80 - 120	<0.0010	mg/L			82	80 - 120
8737672	Strong Acid Dissoc. Cyanide (CN)	2023/06/14	98	80 - 120	97	80 - 120	<0.00050	mg/L				
8740194	Free Cyanide (CN)	2023/06/13	81	80 - 120	94	80 - 120	<2.0	ug/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8740887	Free Cyanide (CN)	2023/06/15	88	80 - 120	96	80 - 120	<2.0	ug/L				
8741264	Strong Acid Dissoc. Cyanide (CN)	2023/06/14	93	80 - 120	101	80 - 120	<0.00050	mg/L				
8741265	Strong Acid Dissoc. Cyanide (CN)	2023/06/14	97	80 - 120	101	80 - 120	<0.00050	mg/L				
8743119	Dissolved Aluminum (Al)	2023/06/22	96	80 - 120	96	80 - 120	<0.0005	mg/L	1.7	20		
8743119	Dissolved Antimony (Sb)	2023/06/22	105	80 - 120	107	80 - 120	<0.0001	mg/L	1.5	20		
8743119	Dissolved Arsenic (As)	2023/06/22	96	80 - 120	99	80 - 120	<0.0001	mg/L	2.1	20		
8743119	Dissolved Barium (Ba)	2023/06/22	95	80 - 120	97	80 - 120	<0.0002	mg/L	0.33	20		
8743119	Dissolved Beryllium (Be)	2023/06/22	99	80 - 120	94	80 - 120	<0.00005	mg/L	NC	20		
8743119	Dissolved Bismuth (Bi)	2023/06/22	74 (2)	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8743119	Dissolved Boron (B)	2023/06/22	97	80 - 120	96	80 - 120	<0.001	mg/L	0.91	20		
8743119	Dissolved Cadmium (Cd)	2023/06/22	99	80 - 120	97	80 - 120	<0.00001	mg/L	NC	20		
8743119	Dissolved Calcium (Ca)	2023/06/22	NC	80 - 120	99	80 - 120	<0.02	mg/L	2.3	20		
8743119	Dissolved Cesium (Cs)	2023/06/22	98	80 - 120	99	80 - 120	<0.00002	mg/L	NC	N/A		
8743119	Dissolved Chromium (Cr)	2023/06/22	96	80 - 120	98	80 - 120	<0.0005	mg/L	NC	20		
8743119	Dissolved Cobalt (Co)	2023/06/22	93	80 - 120	99	80 - 120	<0.00005	mg/L	1.6	20		
8743119	Dissolved Copper (Cu)	2023/06/22	96	80 - 120	97	80 - 120	<0.0001	mg/L	0	20		
8743119	Dissolved Iron (Fe)	2023/06/22	NC	80 - 120	101	80 - 120	<0.005	mg/L	2.2	20		
8743119	Dissolved Lead (Pb)	2023/06/22	96	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8743119	Dissolved Lithium (Li)	2023/06/22	105	80 - 120	102	80 - 120	<0.0005	mg/L	0.97	20		
8743119	Dissolved Magnesium (Mg)	2023/06/22	NC	80 - 120	99	80 - 120	<0.005	mg/L	1.6	20		
8743119	Dissolved Manganese (Mn)	2023/06/22	NC	80 - 120	98	80 - 120	<0.0002	mg/L	2.5	20		
8743119	Dissolved Molybdenum (Mo)	2023/06/22	106	80 - 120	102	80 - 120	<0.00005	mg/L	0.12	20		
8743119	Dissolved Nickel (Ni)	2023/06/22	92	80 - 120	98	80 - 120	<0.0001	mg/L	1.2	20		
8743119	Dissolved Phosphorus (P)	2023/06/22	108	80 - 120	90	80 - 120	<0.005	mg/L	18	20		
8743119	Dissolved Potassium (K)	2023/06/22	97	80 - 120	101	80 - 120	<0.02	mg/L	0.59	20		
8743119	Dissolved Rubidium (Rb)	2023/06/22	100	80 - 120	102	80 - 120	<0.00002	mg/L	3.3	N/A		
8743119	Dissolved Selenium (Se)	2023/06/22	94	80 - 120	101	80 - 120	<0.0002	mg/L	NC	20		
8743119	Dissolved Silicon (Si)	2023/06/22	NC	80 - 120	97	80 - 120	<0.005	mg/L	1.5	20		
8743119	Dissolved Silver (Ag)	2023/06/22	83	80 - 120	99	80 - 120	<0.00001	mg/L	NC	20		
8743119	Dissolved Sodium (Na)	2023/06/22	NC	80 - 120	99	80 - 120	<0.01	mg/L	0.74	20		
8743119	Dissolved Strontium (Sr)	2023/06/22	NC	80 - 120	100	80 - 120	<0.0001	mg/L	3.4	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8743119	Dissolved Tellurium (Te)	2023/06/22	90	80 - 120	98	80 - 120	<0.0001	mg/L	NC	20		
8743119	Dissolved Thallium (Tl)	2023/06/22	98	80 - 120	100	80 - 120	<0.000005	mg/L	0	20		
8743119	Dissolved Thorium (Th)	2023/06/22	97	80 - 120	98	80 - 120	<0.0002	mg/L	NC	20		
8743119	Dissolved Tin (Sn)	2023/06/22	103	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8743119	Dissolved Titanium (Ti)	2023/06/22	99	80 - 120	98	80 - 120	<0.0005	mg/L	3.1	20		
8743119	Dissolved Tungsten (W)	2023/06/22	105	80 - 120	102	80 - 120	<0.0001	mg/L	0.47	20		
8743119	Dissolved Uranium (U)	2023/06/22	101	80 - 120	98	80 - 120	<0.00001	mg/L	0.13	20		
8743119	Dissolved Vanadium (V)	2023/06/22	99	80 - 120	99	80 - 120	<0.00005	mg/L	2.9	20		
8743119	Dissolved Zinc (Zn)	2023/06/22	93	80 - 120	98	80 - 120	<0.0005	mg/L	3.9	20		
8743119	Dissolved Zirconium (Zr)	2023/06/22	110	80 - 120	101	80 - 120	<0.0001	mg/L	0.21	20		
8744374	Total Sulphur (S)	2023/06/22	NC	80 - 120	99	80 - 120	<0.5	mg/L	0.33	25		
8744626	Dissolved Sulphur (S)	2023/06/23	NC	80 - 120	101	80 - 120	<0.5	mg/L	3.2	25		
8751723	Alkalinity (Total as CaCO3)	2023/06/26			95	85 - 115	<1.0	mg/L	NC	20		
8752573	Dissolved Chloride (Cl-)	2023/06/27	110	80 - 120	97	80 - 120	<1.0	mg/L	19	20		
8752585	Dissolved Sulphate (SO4)	2023/06/27	NC	75 - 125	104	80 - 120	<1.0	mg/L	0.70	20		
8761029	Strong Acid Dissoc. Cyanide (CN)	2023/06/28	88	80 - 120	98	80 - 120	<0.00050	mg/L				
8774853	Total Aluminum (Al)	2023/07/10	99	80 - 120	97	80 - 120	<4.9	ug/L	7.6	20		
8774853	Total Antimony (Sb)	2023/07/10	110	80 - 120	107	80 - 120	<0.50	ug/L	NC	20		
8774853	Total Arsenic (As)	2023/07/10	103	80 - 120	102	80 - 120	<1.0	ug/L	1.9	20		
8774853	Total Barium (Ba)	2023/07/10	98	80 - 120	98	80 - 120	<2.0	ug/L	7.0	20		
8774853	Total Beryllium (Be)	2023/07/10	97	80 - 120	96	80 - 120	<0.40	ug/L	NC	20		
8774853	Total Bismuth (Bi)	2023/07/10	95	80 - 120	95	80 - 120	<1.0	ug/L	NC	20		
8774853	Total Boron (B)	2023/07/10	98	80 - 120	97	80 - 120	<10	ug/L	2.8	20		
8774853	Total Cadmium (Cd)	2023/07/10	99	80 - 120	98	80 - 120	<0.090	ug/L	NC	20		
8774853	Total Calcium (Ca)	2023/07/10	NC	80 - 120	98	80 - 120	<200	ug/L	5.5	20		
8774853	Total Chromium (Cr)	2023/07/10	99	80 - 120	98	80 - 120	<5.0	ug/L	NC	20		
8774853	Total Cobalt (Co)	2023/07/10	99	80 - 120	99	80 - 120	<0.50	ug/L	NC	20		
8774853	Total Copper (Cu)	2023/07/10	102	80 - 120	100	80 - 120	<0.90	ug/L	18	20		
8774853	Total Iron (Fe)	2023/07/10	100	80 - 120	100	80 - 120	<100	ug/L	NC	20		
8774853	Total Lead (Pb)	2023/07/10	98	80 - 120	99	80 - 120	<0.50	ug/L	NC	20		
8774853	Total Lithium (Li)	2023/07/10	102	80 - 120	101	80 - 120	<5.0	ug/L	4.6	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8774853	Total Magnesium (Mg)	2023/07/10	100	80 - 120	98	80 - 120	<50	ug/L	3.5	20		
8774853	Total Manganese (Mn)	2023/07/10	97	80 - 120	96	80 - 120	<2.0	ug/L	3.9	20		
8774853	Total Molybdenum (Mo)	2023/07/10	105	80 - 120	102	80 - 120	<0.50	ug/L	0.060	20		
8774853	Total Nickel (Ni)	2023/07/10	98	80 - 120	98	80 - 120	<1.0	ug/L	19	20		
8774853	Total Potassium (K)	2023/07/10	101	80 - 120	99	80 - 120	<200	ug/L	4.7	20		
8774853	Total Selenium (Se)	2023/07/10	105	80 - 120	104	80 - 120	<2.0	ug/L	3.1	20		
8774853	Total Silicon (Si)	2023/07/10	98	80 - 120	96	80 - 120	<50	ug/L	4.3	20		
8774853	Total Silver (Ag)	2023/07/10	99	80 - 120	99	80 - 120	<0.090	ug/L	NC	20		
8774853	Total Sodium (Na)	2023/07/10	NC	80 - 120	100	80 - 120	<100	ug/L	4.3	20		
8774853	Total Strontium (Sr)	2023/07/10	98	80 - 120	97	80 - 120	<1.0	ug/L	3.4	20		
8774853	Total Tellurium (Te)	2023/07/10	98	80 - 120	98	80 - 120	<1.0	ug/L	NC	20		
8774853	Total Thallium (Tl)	2023/07/10	99	80 - 120	99	80 - 120	<0.050	ug/L	NC	20		
8774853	Total Tin (Sn)	2023/07/10	100	80 - 120	98	80 - 120	<1.0	ug/L	NC	20		
8774853	Total Titanium (Ti)	2023/07/10	95	80 - 120	96	80 - 120	<5.0	ug/L	NC	20		
8774853	Total Tungsten (W)	2023/07/10	102	80 - 120	102	80 - 120	<1.0	ug/L	0.63	20		
8774853	Total Uranium (U)	2023/07/10	100	80 - 120	99	80 - 120	<0.10	ug/L	NC	20		
8774853	Total Vanadium (V)	2023/07/10	100	80 - 120	99	80 - 120	<0.50	ug/L	5.9	20		
8774853	Total Zinc (Zn)	2023/07/10	101	80 - 120	102	80 - 120	<5.0	ug/L	20	20		
8774853	Total Zirconium (Zr)	2023/07/10	105	80 - 120	103	80 - 120	<1.0	ug/L	NC	20		
8786351	Dissolved Aluminum (Al)	2023/07/13	105	80 - 120	101	80 - 120	<0.0005	mg/L	2.0	20		
8786351	Dissolved Antimony (Sb)	2023/07/13	108	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8786351	Dissolved Arsenic (As)	2023/07/13	108	80 - 120	101	80 - 120	<0.0001	mg/L	0.092	20		
8786351	Dissolved Barium (Ba)	2023/07/13	102	80 - 120	98	80 - 120	<0.0002	mg/L	2.1	20		
8786351	Dissolved Beryllium (Be)	2023/07/13	112	80 - 120	107	80 - 120	<0.00005	mg/L	NC	20		
8786351	Dissolved Bismuth (Bi)	2023/07/13	93	80 - 120	96	80 - 120	<0.0001	mg/L	NC	20		
8786351	Dissolved Boron (B)	2023/07/13	110	80 - 120	107	80 - 120	<0.001	mg/L	2.6	20		
8786351	Dissolved Cadmium (Cd)	2023/07/13	105	80 - 120	97	80 - 120	<0.00001	mg/L	NC	20		
8786351	Dissolved Calcium (Ca)	2023/07/13	NC	80 - 120	103	80 - 120	<0.02	mg/L	0.74	20		
8786351	Dissolved Cesium (Cs)	2023/07/13	98	80 - 120	94	80 - 120	<0.00002	mg/L	NC	N/A		
8786351	Dissolved Chromium (Cr)	2023/07/13	101	80 - 120	98	80 - 120	<0.0005	mg/L	NC	20		
8786351	Dissolved Cobalt (Co)	2023/07/13	102	80 - 120	101	80 - 120	<0.00005	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8786351	Dissolved Copper (Cu)	2023/07/13	109	80 - 120	104	80 - 120	<0.0001	mg/L	0.24	20		
8786351	Dissolved Iron (Fe)	2023/07/13	104	80 - 120	102	80 - 120	<0.005	mg/L	1.2	20		
8786351	Dissolved Lead (Pb)	2023/07/13	102	80 - 120	99	80 - 120	<0.00005	mg/L	NC	20		
8786351	Dissolved Lithium (Li)	2023/07/13	108	80 - 120	103	80 - 120	<0.0005	mg/L	7.4	20		
8786351	Dissolved Magnesium (Mg)	2023/07/13	NC	80 - 120	100	80 - 120	<0.005	mg/L	1.7	20		
8786351	Dissolved Manganese (Mn)	2023/07/13	101	80 - 120	98	80 - 120	<0.0002	mg/L	2.1	20		
8786351	Dissolved Molybdenum (Mo)	2023/07/13	112	80 - 120	103	80 - 120	<0.00005	mg/L	4.4	20		
8786351	Dissolved Nickel (Ni)	2023/07/13	100	80 - 120	99	80 - 120	<0.0001	mg/L	2.4	20		
8786351	Dissolved Phosphorus (P)	2023/07/13	118	80 - 120	96	80 - 120	<0.005	mg/L	NC	20		
8786351	Dissolved Potassium (K)	2023/07/13	108	80 - 120	103	80 - 120	<0.02	mg/L	2.3	20		
8786351	Dissolved Rubidium (Rb)	2023/07/13	105	80 - 120	101	80 - 120	<0.00002	mg/L	NC	N/A		
8786351	Dissolved Selenium (Se)	2023/07/13	114	80 - 120	104	80 - 120	<0.0002	mg/L	NC	20		
8786351	Dissolved Silicon (Si)	2023/07/13	101	80 - 120	99	80 - 120	<0.005	mg/L	1.6	20		
8786351	Dissolved Silver (Ag)	2023/07/13	98	80 - 120	102	80 - 120	<0.00001	mg/L	NC	20		
8786351	Dissolved Sodium (Na)	2023/07/13	103	80 - 120	101	80 - 120	<0.01	mg/L	2.3	20		
8786351	Dissolved Strontium (Sr)	2023/07/13	99	80 - 120	97	80 - 120	<0.0001	mg/L	2.2	20		
8786351	Dissolved Tellurium (Te)	2023/07/13	107	80 - 120	95	80 - 120	<0.0001	mg/L	NC	20		
8786351	Dissolved Thallium (Tl)	2023/07/13	103	80 - 120	101	80 - 120	<0.000005	mg/L	NC	20		
8786351	Dissolved Tin (Sn)	2023/07/13	105	80 - 120	98	80 - 120	<0.0001	mg/L	NC	20		
8786351	Dissolved Titanium (Ti)	2023/07/13	102	80 - 120	99	80 - 120	<0.0005	mg/L	NC	20		
8786351	Dissolved Tungsten (W)	2023/07/13	109	80 - 120	104	80 - 120	<0.0001	mg/L	NC	20		
8786351	Dissolved Uranium (U)	2023/07/13	104	80 - 120	99	80 - 120	<0.00001	mg/L	5.2	20		
8786351	Dissolved Vanadium (V)	2023/07/13	104	80 - 120	100	80 - 120	<0.00005	mg/L	0.38	20		
8786351	Dissolved Zinc (Zn)	2023/07/13	104	80 - 120	99	80 - 120	<0.0005	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8786351	Dissolved Zirconium (Zr)	2023/07/13	108	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

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

(2) Matrix spike exceedes acceptance limits. Probable matrix interference.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Anastassia Hamanov, Scientific Specialist

<original signed by>

Cristina Carriere, Senior Scientific Specialist

<original signed by>

Mike MacGillivray, Scientific Specialist (Inorganics)

<original signed by>

Sandy Yuan, M.Sc., QP, Scientific Specialist

<original signed by>

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your C.O.C. #: 714670

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/06/26
Report #: R7689045
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3H0991
Received: 2023/06/12, 09:47

Sample Matrix: Ground Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	7	N/A	2023/06/16	ATL SOP-00205	SM 23 2310B
Alkalinity	7	N/A	2023/06/15	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	7	N/A	2023/06/16	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	7	N/A	2023/06/19	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	7	N/A	2023/06/15	CAM SOP-00414	SM 23 2510 m
Fluoride	7	2023/06/14	2023/06/15	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	7	N/A	2023/06/15	CAM SOP 00102/00408/00447	SM 2340 B
Dissolved Mercury (low level)	7	2023/06/14	2023/06/14	CAM SOP-00453	EPA 7470 m
Mercury (low level)	7	2023/06/14	2023/06/14	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	7	2023/06/19	2023/06/19	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	7	N/A	2023/06/15	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	7	N/A	2023/06/19	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	7	2023/06/16	2023/06/19	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	7	N/A	2023/06/22	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	7	2023/06/19	2023/06/19	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	3	2023/06/19	2023/06/21	AB SOP-00024	SM 24 4500-P A,B,F m
Total Phosphorus Low Level Total (2)	4	2023/06/20	2023/06/21	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	7	N/A	2023/06/19	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (3)	7	N/A	2023/06/14	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	7	2023/06/14	2023/06/15	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (4)	1	N/A	2023/06/13		Field pH Meter
Sulphate by Automated Turbidimetry	7	N/A	2023/06/19	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	7	2023/06/15	2023/06/16	CAM SOP-00428	SM 23 2540C m
Field Temperature (4)	1	N/A	2023/06/13		Field Thermometer
Total Kjeldahl Nitrogen in Water	7	2023/06/15	2023/06/16	CAM SOP-00938	OMOE E3516 m
Low Level Total Suspended Solids	7	2023/06/15	2023/06/16	CAM SOP-00428	SM 23 2540D m
Turbidity	7	N/A	2023/06/14	CAM SOP-00417	SM 23 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your C.O.C. #: 714670

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/06/26
Report #: R7689045
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3H0991
Received: 2023/06/12, 09:47

(3) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(4) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C3H0991
Report Date: 2023/06/26

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: M.F

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WBX434			WBX434			WBX435		
Sampling Date		2023/06/08 11:51			2023/06/08 11:51			2023/06/08 13:21		
COC Number		714670			714670			714670		
	UNITS	MW18-BR-21	RDL	QC Batch	MW18-BR-21 Lab-Dup	RDL	QC Batch	MW19-OB-21	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	74	1.0	8721776				320	1.0	8721776
Carb. Alkalinity (calc. as CaCO3)	mg/L	24	1.0	8721776				2.4	1.0	8721776
Hardness (CaCO3)	mg/L	82	1.0	8721777				120	1.0	8721777
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	1.7	1.0	8721776				<1.0	1.0	8721776
Field Measurements										
Field Temperature	Celsius	8.5	N/A	ONSITE						
Field Measured pH	pH	10.29		ONSITE						
Inorganics										
Acidity	mg/L	<5.0	5.0	8730648	<5.0	5.0	8730648	17	5.0	8730648
Total Ammonia-N	mg/L	<0.050	0.050	8731905				0.20	0.050	8731905
Conductivity	mS/cm	0.258	0.001	8726012				0.911	0.001	8726012
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	8749466				<2.0 (1)	2.0	8749466
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8740659				0.0104	0.00050	8740659
Total Dissolved Solids	mg/L	200	10	8725259	180	10	8725259	485	10	8725259
Fluoride (F-)	mg/L	0.28	0.10	8726017				0.25	0.10	8726017
Total Kjeldahl Nitrogen (TKN)	mg/L	0.26	0.10	8728678				0.33	0.10	8728678
pH	pH	9.53		8725994				7.91		8725994
Total Phosphorus (P)	mg/L	0.15	0.0010	8743254				0.46	0.0050	8744052
Total Suspended Solids	mg/L	390	5	8726134				660	3	8725922
Dissolved Sulphate (SO4)	mg/L	23	1.0	8725825				50	1.0	8725825
Turbidity	NTU	30	0.1	8725003				17	0.1	8725003
Alkalinity (Total as CaCO3)	mg/L	99	1.0	8726004				320	1.0	8726004
Dissolved Chloride (Cl-)	mg/L	2.3	1.0	8725830				55	1.0	8725830
Nitrite (N)	mg/L	<0.010	0.010	8725251				<0.010	0.010	8725251
Nitrate (N)	mg/L	<0.10	0.10	8725251				<0.10	0.10	8725251
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8725251				<0.10	0.10	8725251

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3H0991
Report Date: 2023/06/26

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: M.F

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WBX436			WBX437			WBX437		
Sampling Date		2023/06/08 13:42			2023/06/08 11:21			2023/06/08 11:21		
COC Number		714670			714670			714670		
	UNITS	MW19-BR-21	RDL	QC Batch	MW3-OB-13	RDL	QC Batch	MW3-OB-13 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	230	1.0	8721776	420	1.0	8721776			
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.1	1.0	8721776	2.5	1.0	8721776			
Hardness (CaCO3)	mg/L	420	1.0	8721777	410	1.0	8721777			
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8721776	<1.0	1.0	8721776			
Inorganics										
Acidity	mg/L	15	5.0	8730648	25	5.0	8730648			
Total Ammonia-N	mg/L	0.90	0.050	8731905	0.46	0.050	8731905	0.48	0.050	8731905
Conductivity	mS/cm	0.927	0.001	8726012	0.782	0.001	8726012			
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	8749466	<2.0 (1)	2.0	8749466			
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.00102	0.00050	8740659	0.00085	0.00050	8740659			
Total Dissolved Solids	mg/L	640	10	8725259	430	10	8725259			
Fluoride (F-)	mg/L	0.26	0.10	8726017	0.42	0.10	8726017			
Total Kjeldahl Nitrogen (TKN)	mg/L	0.93	0.10	8728678	0.58	0.10	8728678			
pH	pH	7.70		8725994	7.80		8725994			
Total Phosphorus (P)	mg/L	0.24	0.0010	8743254	0.047	0.0010	8744052			
Total Suspended Solids	mg/L	120	1	8726134	560	3	8726134			
Dissolved Sulphate (SO4)	mg/L	19	1.0	8725825	5.5	1.0	8725825			
Turbidity	NTU	31	0.1	8725003	12	0.1	8725003			
Alkalinity (Total as CaCO3)	mg/L	230	1.0	8726004	420	1.0	8726004			
Dissolved Chloride (Cl-)	mg/L	96	1.0	8725830	<1.0	1.0	8725830			
Nitrite (N)	mg/L	<0.010	0.010	8725251	<0.010	0.010	8725251			
Nitrate (N)	mg/L	<0.10	0.10	8725251	<0.10	0.10	8725251			
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8725251	<0.10	0.10	8725251			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3H0991
Report Date: 2023/06/26

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: M.F

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WBX438			WBX438			WBX439		
Sampling Date		2023/06/08 12:09			2023/06/08 12:09			2023/06/08 13:40		
COC Number		714670			714670			714670		
	UNITS	MW3-BR-13	RDL	QC Batch	MW3-BR-13 Lab-Dup	RDL	QC Batch	MW6-OB-13	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	420	1.0	8721776				300	1.0	8721776
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.6	1.0	8721776				<1.0	1.0	8721776
Hardness (CaCO3)	mg/L	550	1.0	8721777				210	1.0	8721777
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8721776				<1.0	1.0	8721776
Inorganics										
Acidity	mg/L	91	5.0	8730648				40	5.0	8730648
Total Ammonia-N	mg/L	0.61	0.050	8731905				0.15	0.050	8731905
Conductivity	mS/cm	0.905	0.001	8726012	0.908	0.001	8726012	0.954	0.001	8726012
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	8749466				<2.0 (1)	2.0	8749466
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8740659				<0.00050	0.00050	8740659
Total Dissolved Solids	mg/L	550	10	8725259				440	10	8725259
Fluoride (F-)	mg/L	0.35	0.10	8726017	0.35	0.10	8726017	<0.10	0.10	8726017
Total Kjeldahl Nitrogen (TKN)	mg/L	0.98	0.10	8728678				0.54	0.10	8728678
pH	pH	7.61		8725994	7.66		8725994	7.45		8725994
Total Phosphorus (P)	mg/L	0.079	0.0010	8743254				0.19	0.0010	8744052
Total Suspended Solids	mg/L	34	1	8726134				290	3	8726134
Dissolved Sulphate (SO4)	mg/L	63	1.0	8725825				15	1.0	8725825
Turbidity	NTU	53	0.1	8725003	55	0.1	8725003	36	0.1	8725003
Alkalinity (Total as CaCO3)	mg/L	420	1.0	8726004	430	1.0	8726004	300	1.0	8726004
Dissolved Chloride (Cl-)	mg/L	7.3	1.0	8725830				100	1.0	8725830
Nitrite (N)	mg/L	<0.010	0.010	8725251				<0.010	0.010	8725251
Nitrate (N)	mg/L	<0.10	0.10	8725251				<0.10	0.10	8725251
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8725251				<0.10	0.10	8725251

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3H0991
Report Date: 2023/06/26

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: M.F

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WBX440		
Sampling Date		2023/06/08 08:00		
COC Number		714670		
	UNITS	DOUP #5	RDL	QC Batch
Calculated Parameters				
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	390	1.0	8721776
Carb. Alkalinity (calc. as CaCO3)	mg/L	3.3	1.0	8721776
Hardness (CaCO3)	mg/L	400	1.0	8721777
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8721776
Inorganics				
Acidity	mg/L	16	5.0	8730648
Total Ammonia-N	mg/L	0.75	0.050	8731984
Conductivity	mS/cm	0.764	0.001	8726012
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	8749466
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8740659
Total Dissolved Solids	mg/L	395	10	8725259
Fluoride (F-)	mg/L	0.40	0.10	8726017
Total Kjeldahl Nitrogen (TKN)	mg/L	1.3	0.10	8728678
pH	pH	7.95		8725994
Total Phosphorus (P)	mg/L	1.1 (2)	0.010	8743254
Total Suspended Solids	mg/L	230	2	8726134
Dissolved Sulphate (SO4)	mg/L	22	1.0	8725825
Turbidity	NTU	15	0.1	8725003
Alkalinity (Total as CaCO3)	mg/L	400	1.0	8726004
Dissolved Chloride (Cl-)	mg/L	3.1	1.0	8725830
Nitrite (N)	mg/L	<0.010	0.010	8725251
Nitrate (N)	mg/L	<0.10	0.10	8725251
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8725251

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

(2) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Matrix Spike exceeds acceptance limits due to matrix interference. Reanalysis yields similar results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WBX434			WBX434			WBX435		
Sampling Date		2023/06/08 11:51			2023/06/08 11:51			2023/06/08 13:21		
COC Number		714670			714670			714670		
	UNITS	MW18-BR-21	RDL	QC Batch	MW18-BR-21 Lab-Dup	RDL	QC Batch	MW19-OB-21	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0155	0.0005	8724636				0.0055	0.0005	8724636
. Aluminum (Al)	mg/L	2.75	0.0025	8724629	2.79	0.0025	8724629	1.75	0.0005	8724629
Dissolved Antimony (Sb)	mg/L	0.0012	0.0001	8724636				0.0001	0.0001	8724636
. Antimony (Sb)	mg/L	0.0016	0.0001	8724629	0.0016	0.0001	8724629	0.0002	0.0001	8724629
Dissolved Arsenic (As)	mg/L	0.0712	0.0001	8724636				0.626	0.001	8724636
. Arsenic (As)	mg/L	0.106	0.0005	8724629	0.107	0.0005	8724629	0.770	0.001	8724629
Dissolved Barium (Ba)	mg/L	0.0273	0.0002	8724636				0.0102	0.0002	8724636
. Barium (Ba)	mg/L	0.0613	0.0002	8724629	0.0607	0.0002	8724629	0.0255	0.0002	8724629
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8724636				<0.00005	0.00005	8724636
. Beryllium (Be)	mg/L	0.00009	0.00005	8724629	0.00009	0.00005	8724629	0.00011	0.00005	8724629
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8724636				<0.0001	0.0001	8724636
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8724629	0.0001	0.0001	8724629	<0.0001	0.0001	8724629
Dissolved Boron (B)	mg/L	0.015	0.001	8724636				0.021	0.001	8724636
. Boron (B)	mg/L	0.015	0.001	8724629	0.015	0.001	8724629	0.024	0.001	8724629
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8724636				<0.00001	0.00001	8724636
. Cadmium (Cd)	mg/L	0.000503	0.000005	8724629	0.000494	0.000005	8724629	0.000166	0.000005	8724629
Dissolved Calcium (Ca)	mg/L	24.9	0.04	8724636				32.8	0.02	8724636
. Calcium (Ca)	mg/L	48.0	0.04	8724629	47.0	0.04	8724629	99.4	0.1	8724629
Dissolved Cesium (Cs)	mg/L	0.00004	0.00002	8724636				<0.00002	0.00002	8724636
. Cesium (Cs)	mg/L	0.00235	0.00002	8724629	0.00232	0.00002	8724629	0.00030	0.00002	8724629
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8724636				<0.0005	0.0005	8724636
. Chromium (Cr)	mg/L	0.0065	0.0005	8724629	0.0064	0.0005	8724629	0.0112	0.0005	8724629
Dissolved Cobalt (Co)	mg/L	0.00012	0.00005	8724636				0.00220	0.00005	8724636
. Cobalt (Co)	mg/L	0.0240	0.00005	8724629	0.0240	0.00005	8724629	0.00966	0.00005	8724629
Dissolved Copper (Cu)	mg/L	0.0013	0.0001	8724636				0.0058	0.0001	8724636
. Copper (Cu)	mg/L	0.0413	0.0001	8724629	0.0413	0.0001	8724629	0.210	0.0001	8724629
Dissolved Iron (Fe)	mg/L	0.014	0.005	8724636				0.192	0.005	8724636
. Iron (Fe)	mg/L	6.45	0.005	8724629	6.54	0.005	8724629	6.23	0.005	8724629
Dissolved Lead (Pb)	mg/L	0.00068	0.00005	8724636				<0.00005	0.00005	8724636
. Lead (Pb)	mg/L	0.0607	0.00005	8724629	0.0604	0.00005	8724629	0.00619	0.00005	8724629
Dissolved Lithium (Li)	mg/L	0.0061	0.0005	8724636				0.0019	0.0005	8724636

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WBX434			WBX434			WBX435		
Sampling Date		2023/06/08 11:51			2023/06/08 11:51			2023/06/08 13:21		
COC Number		714670			714670			714670		
	UNITS	MW18-BR-21	RDL	QC Batch	MW18-BR-21 Lab-Dup	RDL	QC Batch	MW19-OB-21	RDL	QC Batch
. Lithium (Li)	mg/L	0.0079	0.0005	8724629	0.0078	0.0005	8724629	0.0048	0.0005	8724629
Dissolved Magnesium (Mg)	mg/L	4.77	0.005	8724636				9.49	0.005	8724636
. Magnesium (Mg)	mg/L	7.59	0.005	8724629	7.57	0.005	8724629	27.7	0.005	8724629
Dissolved Manganese (Mn)	mg/L	0.0223	0.0002	8724636				0.361	0.0002	8724636
. Manganese (Mn)	mg/L	0.191	0.0002	8724629	0.191	0.0002	8724629	0.544	0.0002	8724629
Mercury (Hg)	ug/L	<0.01	0.01	8725497				0.48	0.01	8725497
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8725603				0.05	0.01	8725603
Dissolved Molybdenum (Mo)	mg/L	0.00356	0.00005	8724636				0.00298	0.00005	8724636
. Molybdenum (Mo)	mg/L	0.00247	0.00005	8724629	0.00241	0.00005	8724629	0.00137	0.00005	8724629
Dissolved Nickel (Ni)	mg/L	0.0005	0.0001	8724636				0.0025	0.0001	8724636
. Nickel (Ni)	mg/L	0.0323	0.0001	8724629	0.0329	0.0001	8724629	0.0129	0.0001	8724629
Dissolved Phosphorus (P)	mg/L	<0.005	0.005	8724636				0.008	0.005	8724636
. Phosphorus (P)	mg/L	0.111	0.005	8724629	0.113	0.005	8724629	0.353	0.005	8724629
Dissolved Potassium (K)	mg/L	7.16	0.02	8724636				5.70	0.02	8724636
. Potassium (K)	mg/L	6.67	0.02	8724629	6.72	0.02	8724629	5.87	0.02	8724629
Dissolved Rubidium (Rb)	mg/L	0.00229	0.00002	8724636				0.00012	0.00002	8724636
. Rubidium (Rb)	mg/L	0.00302	0.00002	8724629	0.00297	0.00002	8724629	0.00254	0.00002	8724629
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8724636				<0.0002	0.0002	8724636
. Selenium (Se)	mg/L	0.00007	0.00005	8724629	0.00007	0.00005	8724629	0.00010	0.00005	8724629
Dissolved Silicon (Si)	mg/L	7.57	0.025	8724636				5.09	0.025	8724636
. Silicon (Si)	mg/L	12.3	0.025	8724629	13.0	0.025	8724629	7.60	0.025	8724629
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8724636				<0.00001	0.00001	8724636
. Silver (Ag)	mg/L	0.00001	0.00001	8724629	0.00001	0.00001	8724629	0.00003	0.00001	8724629
Dissolved Sodium (Na)	mg/L	30.7	0.01	8724636				163	0.05	8724636
. Sodium (Na)	mg/L	28.3	0.01	8724629	28.5	0.01	8724629	158	0.05	8724629
Dissolved Strontium (Sr)	mg/L	0.526	0.0001	8724636				0.146	0.0001	8724636
. Strontium (Sr)	mg/L	0.767	0.0001	8724629	0.768	0.0001	8724629	0.182	0.0001	8724629
Dissolved Sulphur (S)	mg/L	6.9	0.5	8735632				14	0.5	8735632
Total Sulphur (S)	mg/L	7.6	0.5	8730752				14	0.5	8730752
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8724636				<0.0001	0.0001	8724636
. Tellurium (Te)	mg/L	<0.0001	0.0001	8724629	<0.0001	0.0001	8724629	<0.0001	0.0001	8724629
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8724636				0.000015	0.000005	8724636

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WBX434			WBX434			WBX435		
Sampling Date		2023/06/08 11:51			2023/06/08 11:51			2023/06/08 13:21		
COC Number		714670			714670			714670		
	UNITS	MW18-BR-21	RDL	QC Batch	MW18-BR-21 Lab-Dup	RDL	QC Batch	MW19-OB-21	RDL	QC Batch
. Thallium (Tl)	mg/L	0.000065	0.000005	8724629	0.000065	0.000005	8724629	0.000193	0.000005	8724629
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8724636				<0.0002	0.0002	8724636
. Thorium (Th)	mg/L	0.0005	0.0002	8724629	0.0005	0.0002	8724629	0.0017	0.0002	8724629
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8724636				<0.0001	0.0001	8724636
. Tin (Sn)	mg/L	0.0006	0.0001	8724629	0.0006	0.0001	8724629	0.0001	0.0001	8724629
Dissolved Titanium (Ti)	mg/L	0.0006	0.0005	8724636				<0.0005	0.0005	8724636
. Titanium (Ti)	mg/L	0.0105	0.0005	8724629	0.0093	0.0005	8724629	0.0929	0.0025	8724629
Dissolved Tungsten (W)	mg/L	0.0059	0.0001	8724636				<0.0001	0.0001	8724636
. Tungsten (W)	mg/L	0.0068	0.0001	8724629	0.0068	0.0001	8724629	<0.0001	0.0001	8724629
Dissolved Uranium (U)	mg/L	0.00111	0.00001	8724636				0.00018	0.00001	8724636
. Uranium (U)	mg/L	0.00180	0.00001	8724629	0.00180	0.00001	8724629	0.00037	0.00001	8724629
Dissolved Vanadium (V)	mg/L	0.00426	0.00005	8724636				0.00053	0.00005	8724636
. Vanadium (V)	mg/L	0.0101	0.00005	8724629	0.0102	0.00005	8724629	0.00795	0.00005	8724629
Dissolved Zinc (Zn)	mg/L	0.483	0.0005	8724636				0.0010	0.0005	8724636
. Zinc (Zn)	mg/L	7.80	0.0025	8724629	7.85	0.0025	8724629	0.0204	0.0005	8724629
Dissolved Zirconium (Zr)	mg/L	0.0025	0.0001	8724636				0.0020	0.0001	8724636
. Zirconium (Zr)	mg/L	0.0074	0.0001	8724629	0.0075	0.0001	8724629	0.0057	0.0001	8724629

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WBX436			WBX436			WBX437		
Sampling Date		2023/06/08 13:42			2023/06/08 13:42			2023/06/08 11:21		
COC Number		714670			714670			714670		
	UNITS	MW19-BR-21	RDL	QC Batch	MW19-BR-21 Lab-Dup	RDL	QC Batch	MW3-OB-13	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0083	0.0005	8724636				0.0041	0.0005	8724636
. Aluminum (Al)	mg/L	3.48	0.0025	8724629				0.167	0.0005	8724629
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8724636				<0.0001	0.0001	8724636
. Antimony (Sb)	mg/L	0.0003	0.0001	8724629				<0.0001	0.0001	8724629
Dissolved Arsenic (As)	mg/L	0.0371	0.0001	8724636				0.0035	0.0001	8724636
. Arsenic (As)	mg/L	0.0520	0.0001	8724629				0.0035	0.0001	8724629
Dissolved Barium (Ba)	mg/L	0.142	0.0002	8724636				0.0864	0.0002	8724636
. Barium (Ba)	mg/L	0.166	0.0002	8724629				0.0848	0.0002	8724629
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8724636				<0.00005	0.00005	8724636
. Beryllium (Be)	mg/L	0.00009	0.00005	8724629				<0.00005	0.00005	8724629
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8724636				<0.0001	0.0001	8724636
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8724629				<0.0001	0.0001	8724629
Dissolved Boron (B)	mg/L	0.033	0.001	8724636				0.037	0.001	8724636
. Boron (B)	mg/L	0.032	0.001	8724629				0.036	0.001	8724629
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8724636				<0.00001	0.00001	8724636
. Cadmium (Cd)	mg/L	0.000041	0.000005	8724629				0.000008	0.000005	8724629
Dissolved Calcium (Ca)	mg/L	106	0.1	8724636				97.6	0.1	8724636
. Calcium (Ca)	mg/L	112	0.1	8724629				104	0.1	8724629
Dissolved Cesium (Cs)	mg/L	0.00111	0.00002	8724636				<0.00002	0.00002	8724636
. Cesium (Cs)	mg/L	0.00126	0.00002	8724629				0.00003	0.00002	8724629
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8724636				<0.0005	0.0005	8724636
. Chromium (Cr)	mg/L	0.0121	0.0005	8724629				0.0010	0.0005	8724629
Dissolved Cobalt (Co)	mg/L	0.00122	0.00005	8724636				0.00039	0.00005	8724636
. Cobalt (Co)	mg/L	0.00258	0.00005	8724629				0.00050	0.00005	8724629
Dissolved Copper (Cu)	mg/L	0.0002	0.0001	8724636				0.0010	0.0001	8724636
. Copper (Cu)	mg/L	0.0055	0.0001	8724629				0.0009	0.0001	8724629
Dissolved Iron (Fe)	mg/L	5.98	0.005	8724636				0.771	0.005	8724636
. Iron (Fe)	mg/L	13.8	0.025	8724629				1.24	0.005	8724629
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8724636				<0.00005	0.00005	8724636
. Lead (Pb)	mg/L	0.00370	0.00005	8724629				0.00033	0.00005	8724629
Dissolved Lithium (Li)	mg/L	0.0084	0.0005	8724636				0.0083	0.0005	8724636

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WBX436			WBX436			WBX437		
Sampling Date		2023/06/08 13:42			2023/06/08 13:42			2023/06/08 11:21		
COC Number		714670			714670			714670		
	UNITS	MW19-BR-21	RDL	QC Batch	MW19-BR-21 Lab-Dup	RDL	QC Batch	MW3-OB-13	RDL	QC Batch
. Lithium (Li)	mg/L	0.0120	0.0005	8724629				0.0084	0.0005	8724629
Dissolved Magnesium (Mg)	mg/L	38.5	0.025	8724636				39.5	0.005	8724636
. Magnesium (Mg)	mg/L	40.6	0.025	8724629				39.8	0.025	8724629
Dissolved Manganese (Mn)	mg/L	0.552	0.0002	8724636				0.0886	0.0002	8724636
. Manganese (Mn)	mg/L	0.716	0.0002	8724629				0.0953	0.0002	8724629
Mercury (Hg)	ug/L	<0.01	0.01	8725497				<0.01	0.01	8725497
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8725603				<0.01	0.01	8725603
Dissolved Molybdenum (Mo)	mg/L	0.00250	0.00005	8724636				0.00185	0.00005	8724636
. Molybdenum (Mo)	mg/L	0.00199	0.00005	8724629				0.00163	0.00005	8724629
Dissolved Nickel (Ni)	mg/L	0.0018	0.0001	8724636				0.0010	0.0001	8724636
. Nickel (Ni)	mg/L	0.0084	0.0001	8724629				0.0014	0.0001	8724629
Dissolved Phosphorus (P)	mg/L	0.007	0.005	8724636				0.019	0.005	8724636
. Phosphorus (P)	mg/L	0.253	0.005	8724629				0.044	0.005	8724629
Dissolved Potassium (K)	mg/L	5.34	0.02	8724636				4.63	0.02	8724636
. Potassium (K)	mg/L	5.14	0.02	8724629				4.55	0.02	8724629
Dissolved Rubidium (Rb)	mg/L	0.00398	0.00002	8724636				0.00193	0.00002	8724636
. Rubidium (Rb)	mg/L	0.00443	0.00002	8724629				0.00212	0.00002	8724629
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8724636				<0.0002	0.0002	8724636
. Selenium (Se)	mg/L	<0.00005	0.00005	8724629				<0.00005	0.00005	8724629
Dissolved Silicon (Si)	mg/L	7.22	0.025	8724636				7.87	0.025	8724636
. Silicon (Si)	mg/L	10.6	0.025	8724629				7.94	0.025	8724629
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8724636				<0.00001	0.00001	8724636
. Silver (Ag)	mg/L	<0.00001	0.00001	8724629				<0.00001	0.00001	8724629
Dissolved Sodium (Na)	mg/L	15.0	0.01	8724636				16.8	0.01	8724636
. Sodium (Na)	mg/L	14.3	0.01	8724629				17.1	0.01	8724629
Dissolved Strontium (Sr)	mg/L	1.08	0.0001	8724636				0.578	0.0001	8724636
. Strontium (Sr)	mg/L	1.12	0.0001	8724629				0.585	0.0001	8724629
Dissolved Sulphur (S)	mg/L	10	0.5	8735632	10	0.5	8735632	6.8	0.5	8735632
Total Sulphur (S)	mg/L	11	0.5	8730752				6.1	0.5	8730752
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8724636				<0.0001	0.0001	8724636
. Tellurium (Te)	mg/L	<0.0001	0.0001	8724629				<0.0001	0.0001	8724629
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8724636				<0.000005	0.000005	8724636

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WBX436			WBX436			WBX437		
Sampling Date		2023/06/08 13:42			2023/06/08 13:42			2023/06/08 11:21		
COC Number		714670			714670			714670		
	UNITS	MW19-BR-21	RDL	QC Batch	MW19-BR-21 Lab-Dup	RDL	QC Batch	MW3-OB-13	RDL	QC Batch
. Thallium (Tl)	mg/L	0.000017	0.000005	8724629				<0.000005	0.000005	8724629
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8724636				<0.0002	0.0002	8724636
. Thorium (Th)	mg/L	0.0007	0.0002	8724629				<0.0002	0.0002	8724629
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8724636				<0.0001	0.0001	8724636
. Tin (Sn)	mg/L	0.0009	0.0001	8724629				<0.0001	0.0001	8724629
Dissolved Titanium (Ti)	mg/L	0.0005	0.0005	8724636				0.0006	0.0005	8724636
. Titanium (Ti)	mg/L	0.0130	0.0005	8724629				0.0119	0.0005	8724629
Dissolved Tungsten (W)	mg/L	0.0058	0.0001	8724636				<0.0001	0.0001	8724636
. Tungsten (W)	mg/L	0.0058	0.0001	8724629				<0.0001	0.0001	8724629
Dissolved Uranium (U)	mg/L	0.00102	0.00001	8724636				0.00041	0.00001	8724636
. Uranium (U)	mg/L	0.00141	0.00001	8724629				0.00042	0.00001	8724629
Dissolved Vanadium (V)	mg/L	0.00006	0.00005	8724636				0.00007	0.00005	8724636
. Vanadium (V)	mg/L	0.00534	0.00005	8724629				0.00059	0.00005	8724629
Dissolved Zinc (Zn)	mg/L	0.0045	0.0005	8724636				0.0026	0.0005	8724636
. Zinc (Zn)	mg/L	0.488	0.0005	8724629				0.0060	0.0005	8724629
Dissolved Zirconium (Zr)	mg/L	0.0001	0.0001	8724636				0.0002	0.0001	8724636
. Zirconium (Zr)	mg/L	0.0015	0.0001	8724629				0.0005	0.0001	8724629

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WBX437			WBX438		WBX439		
Sampling Date		2023/06/08 11:21			2023/06/08 12:09		2023/06/08 13:40		
COC Number		714670			714670		714670		
	UNITS	MW3-OB-13 Lab-Dup	RDL	QC Batch	MW3-BR-13	RDL	MW6-OB-13	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	mg/L				0.0042	0.0005	0.0678	0.0005	8724636
. Aluminum (Al)	mg/L				0.0431	0.0005	1.65	0.0005	8724629
Dissolved Antimony (Sb)	mg/L				<0.0001	0.0001	<0.0001	0.0001	8724636
. Antimony (Sb)	mg/L				<0.0001	0.0001	0.0002	0.0001	8724629
Dissolved Arsenic (As)	mg/L				0.0271	0.0001	0.0110	0.0001	8724636
. Arsenic (As)	mg/L				0.0247	0.0001	0.0155	0.0001	8724629
Dissolved Barium (Ba)	mg/L				0.394	0.0002	0.0566	0.0002	8724636
. Barium (Ba)	mg/L				0.345	0.0002	0.0818	0.0002	8724629
Dissolved Beryllium (Be)	mg/L				<0.00005	0.00005	<0.00005	0.00005	8724636
. Beryllium (Be)	mg/L				<0.00005	0.00005	0.00035	0.00005	8724629
Dissolved Bismuth (Bi)	mg/L				<0.0001	0.0001	<0.0001	0.0001	8724636
. Bismuth (Bi)	mg/L				<0.0001	0.0001	<0.0001	0.0001	8724629
Dissolved Boron (B)	mg/L				0.020	0.001	0.004	0.001	8724636
. Boron (B)	mg/L				0.021	0.001	0.005	0.001	8724629
Dissolved Cadmium (Cd)	mg/L				<0.00001	0.00001	0.00001	0.00001	8724636
. Cadmium (Cd)	mg/L				<0.000005	0.000005	0.000123	0.000005	8724629
Dissolved Calcium (Ca)	mg/L				174	0.1	66.3	0.1	8724636
. Calcium (Ca)	mg/L				165	0.1	80.2	0.1	8724629
Dissolved Cesium (Cs)	mg/L				0.00096	0.00002	<0.00002	0.00002	8724636
. Cesium (Cs)	mg/L				0.00083	0.00002	0.00016	0.00002	8724629
Dissolved Chromium (Cr)	mg/L				0.0006	0.0005	0.0016	0.0005	8724636
. Chromium (Cr)	mg/L				0.0007	0.0005	0.0046	0.0005	8724629
Dissolved Cobalt (Co)	mg/L				0.00056	0.00005	0.00307	0.00005	8724636
. Cobalt (Co)	mg/L				0.00081	0.00005	0.00525	0.00005	8724629
Dissolved Copper (Cu)	mg/L				0.0002	0.0001	0.0004	0.0001	8724636
. Copper (Cu)	mg/L				0.0002	0.0001	0.0075	0.0001	8724629
Dissolved Iron (Fe)	mg/L				14.1	0.025	9.48	0.005	8724636
. Iron (Fe)	mg/L				12.9	0.025	13.0	0.025	8724629
Dissolved Lead (Pb)	mg/L				<0.00005	0.00005	0.00013	0.00005	8724636
. Lead (Pb)	mg/L				0.00021	0.00005	0.0109	0.00005	8724629
Dissolved Lithium (Li)	mg/L				0.0125	0.0005	0.0013	0.0005	8724636

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WBX437			WBX438		WBX439		
Sampling Date		2023/06/08 11:21			2023/06/08 12:09		2023/06/08 13:40		
COC Number		714670			714670		714670		
	UNITS	MW3-OB-13 Lab-Dup	RDL	QC Batch	MW3-BR-13	RDL	MW6-OB-13	RDL	QC Batch
. Lithium (Li)	mg/L				0.0127	0.0005	0.0035	0.0005	8724629
Dissolved Magnesium (Mg)	mg/L				27.8	0.005	9.75	0.005	8724636
. Magnesium (Mg)	mg/L				29.4	0.005	13.4	0.005	8724629
Dissolved Manganese (Mn)	mg/L				0.532	0.0002	1.56	0.001	8724636
. Manganese (Mn)	mg/L				0.558	0.0002	1.56	0.001	8724629
Mercury (Hg)	ug/L	<0.01	0.01	8725497	<0.01	0.01	0.01	0.01	8725497
Dissolved Mercury (Hg)	ug/L				<0.01	0.01	<0.01	0.01	8725603
Dissolved Molybdenum (Mo)	mg/L				0.00025	0.00005	0.00088	0.00005	8724636
. Molybdenum (Mo)	mg/L				0.00035	0.00005	0.00026	0.00005	8724629
Dissolved Nickel (Ni)	mg/L				0.0004	0.0001	0.0010	0.0001	8724636
. Nickel (Ni)	mg/L				0.0006	0.0001	0.0043	0.0001	8724629
Dissolved Phosphorus (P)	mg/L				0.088	0.005	0.006	0.005	8724636
. Phosphorus (P)	mg/L				0.082	0.005	0.121	0.005	8724629
Dissolved Potassium (K)	mg/L				2.96	0.02	1.20	0.02	8724636
. Potassium (K)	mg/L				2.98	0.02	1.48	0.02	8724629
Dissolved Rubidium (Rb)	mg/L				0.00184	0.00002	0.00080	0.00002	8724636
. Rubidium (Rb)	mg/L				0.00184	0.00002	0.00278	0.00002	8724629
Dissolved Selenium (Se)	mg/L				<0.0002	0.0002	<0.0002	0.0002	8724636
. Selenium (Se)	mg/L				0.00005	0.00005	0.00007	0.00005	8724629
Dissolved Silicon (Si)	mg/L				11.8	0.025	4.55	0.005	8724636
. Silicon (Si)	mg/L				11.3	0.025	6.32	0.025	8724629
Dissolved Silver (Ag)	mg/L				<0.00001	0.00001	<0.00001	0.00001	8724636
. Silver (Ag)	mg/L				<0.00001	0.00001	<0.00001	0.00001	8724629
Dissolved Sodium (Na)	mg/L				11.6	0.01	72.5	0.05	8724636
. Sodium (Na)	mg/L				13.2	0.01	74.2	0.05	8724629
Dissolved Strontium (Sr)	mg/L				0.535	0.0001	0.143	0.0001	8724636
. Strontium (Sr)	mg/L				0.548	0.0001	0.185	0.0001	8724629
Dissolved Sulphur (S)	mg/L				13	0.5	3.5	0.5	8735632
Total Sulphur (S)	mg/L				16	0.5	4.0	0.5	8730752
Dissolved Tellurium (Te)	mg/L				<0.0001	0.0001	<0.0001	0.0001	8724636
. Tellurium (Te)	mg/L				<0.0001	0.0001	<0.0001	0.0001	8724629
Dissolved Thallium (Tl)	mg/L				<0.000005	0.000005	0.000007	0.000005	8724636

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WBX437			WBX438		WBX439		
Sampling Date		2023/06/08 11:21			2023/06/08 12:09		2023/06/08 13:40		
COC Number		714670			714670		714670		
	UNITS	MW3-OB-13 Lab-Dup	RDL	QC Batch	MW3-BR-13	RDL	MW6-OB-13	RDL	QC Batch
. Thallium (Tl)	mg/L				<0.000005	0.000005	0.000043	0.000005	8724629
Dissolved Thorium (Th)	mg/L				<0.0002	0.0002	0.0003	0.0002	8724636
. Thorium (Th)	mg/L				<0.0002	0.0002	0.0020	0.0002	8724629
Dissolved Tin (Sn)	mg/L				<0.0001	0.0001	0.0001	0.0001	8724636
. Tin (Sn)	mg/L				<0.0001	0.0001	<0.0001	0.0001	8724629
Dissolved Titanium (Ti)	mg/L				0.0011	0.0005	0.0030	0.0005	8724636
. Titanium (Ti)	mg/L				0.0029	0.0005	0.0352	0.0005	8724629
Dissolved Tungsten (W)	mg/L				0.0028	0.0001	<0.0001	0.0001	8724636
. Tungsten (W)	mg/L				0.0037	0.0001	<0.0001	0.0001	8724629
Dissolved Uranium (U)	mg/L				0.00052	0.00001	0.00102	0.00001	8724636
. Uranium (U)	mg/L				0.00056	0.00001	0.00287	0.00001	8724629
Dissolved Vanadium (V)	mg/L				0.00084	0.00005	0.00566	0.00005	8724636
. Vanadium (V)	mg/L				0.00090	0.00005	0.0157	0.00005	8724629
Dissolved Zinc (Zn)	mg/L				0.0006	0.0005	0.0019	0.0005	8724636
. Zinc (Zn)	mg/L				0.0013	0.0005	0.0198	0.0005	8724629
Dissolved Zirconium (Zr)	mg/L				0.0084	0.0001	0.0012	0.0001	8724636
. Zirconium (Zr)	mg/L				0.0077	0.0001	0.0039	0.0001	8724629

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WBX440		
Sampling Date		2023/06/08 08:00		
COC Number		714670		
	UNITS	DOUP #5	RDL	QC Batch
Metals				
Dissolved Aluminum (Al)	mg/L	0.0087	0.0005	8724636
. Aluminum (Al)	mg/L	2.82	0.0025	8724629
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8724636
. Antimony (Sb)	mg/L	0.0001	0.0001	8724629
Dissolved Arsenic (As)	mg/L	0.0033	0.0001	8724636
. Arsenic (As)	mg/L	0.0050	0.0001	8724629
Dissolved Barium (Ba)	mg/L	0.0860	0.0002	8724636
. Barium (Ba)	mg/L	0.120	0.0002	8724629
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8724636
. Beryllium (Be)	mg/L	0.00018	0.00005	8724629
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8724636
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8724629
Dissolved Boron (B)	mg/L	0.036	0.001	8724636
. Boron (B)	mg/L	0.043	0.001	8724629
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8724636
. Cadmium (Cd)	mg/L	0.000073	0.000005	8724629
Dissolved Calcium (Ca)	mg/L	96.9	0.1	8724636
. Calcium (Ca)	mg/L	265	0.2	8724629
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	8724636
. Cesium (Cs)	mg/L	0.00031	0.00002	8724629
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8724636
. Chromium (Cr)	mg/L	0.0112	0.0005	8724629
Dissolved Cobalt (Co)	mg/L	0.00034	0.00005	8724636
. Cobalt (Co)	mg/L	0.00330	0.00005	8724629
Dissolved Copper (Cu)	mg/L	<0.0001	0.0001	8724636
. Copper (Cu)	mg/L	0.0047	0.0001	8724629
Dissolved Iron (Fe)	mg/L	0.890	0.005	8724636
. Iron (Fe)	mg/L	6.75	0.005	8724629
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8724636
. Lead (Pb)	mg/L	0.00402	0.00005	8724629
Dissolved Lithium (Li)	mg/L	0.0082	0.0005	8724636

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WBX440		
Sampling Date		2023/06/08 08:00		
COC Number		714670		
	UNITS	DOUP #5	RDL	QC Batch
. Lithium (Li)	mg/L	0.0148	0.0005	8724629
Dissolved Magnesium (Mg)	mg/L	39.0	0.005	8724636
. Magnesium (Mg)	mg/L	78.7	0.025	8724629
Dissolved Manganese (Mn)	mg/L	0.0834	0.0002	8724636
. Manganese (Mn)	mg/L	0.386	0.0002	8724629
Mercury (Hg)	ug/L	<0.01	0.01	8725497
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8725603
Dissolved Molybdenum (Mo)	mg/L	0.00172	0.00005	8724636
. Molybdenum (Mo)	mg/L	0.00068	0.00005	8724629
Dissolved Nickel (Ni)	mg/L	0.0009	0.0001	8724636
. Nickel (Ni)	mg/L	0.0085	0.0001	8724629
Dissolved Phosphorus (P)	mg/L	0.023	0.005	8724636
. Phosphorus (P)	mg/L	0.621	0.005	8724629
Dissolved Potassium (K)	mg/L	4.44	0.02	8724636
. Potassium (K)	mg/L	5.59	0.02	8724629
Dissolved Rubidium (Rb)	mg/L	0.00186	0.00002	8724636
. Rubidium (Rb)	mg/L	0.00835	0.00002	8724629
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8724636
. Selenium (Se)	mg/L	<0.00005	0.00005	8724629
Dissolved Silicon (Si)	mg/L	7.87	0.025	8724636
. Silicon (Si)	mg/L	12.1	0.025	8724629
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8724636
. Silver (Ag)	mg/L	<0.00001	0.00001	8724629
Dissolved Sodium (Na)	mg/L	16.0	0.01	8724636
. Sodium (Na)	mg/L	16.7	0.01	8724629
Dissolved Strontium (Sr)	mg/L	0.592	0.0001	8724636
. Strontium (Sr)	mg/L	0.703	0.0001	8724629
Dissolved Sulphur (S)	mg/L	6.5	0.5	8735632
Total Sulphur (S)	mg/L	9.7	0.5	8730752
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8724636
. Tellurium (Te)	mg/L	<0.0001	0.0001	8724629
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8724636

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WBX440		
Sampling Date		2023/06/08 08:00		
COC Number		714670		
	UNITS	DOUP #5	RDL	QC Batch
. Thallium (Tl)	mg/L	0.000053	0.000005	8724629
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8724636
. Thorium (Th)	mg/L	0.0012	0.0002	8724629
Dissolved Tin (Sn)	mg/L	0.0001	0.0001	8724636
. Tin (Sn)	mg/L	0.0001	0.0001	8724629
Dissolved Titanium (Ti)	mg/L	0.0012	0.0005	8724636
. Titanium (Ti)	mg/L	0.113	0.0025	8724629
Dissolved Tungsten (W)	mg/L	<0.0001	0.0001	8724636
. Tungsten (W)	mg/L	<0.0001	0.0001	8724629
Dissolved Uranium (U)	mg/L	0.00038	0.00001	8724636
. Uranium (U)	mg/L	0.00109	0.00001	8724629
Dissolved Vanadium (V)	mg/L	0.00010	0.00005	8724636
. Vanadium (V)	mg/L	0.0104	0.00005	8724629
Dissolved Zinc (Zn)	mg/L	0.0016	0.0005	8724636
. Zinc (Zn)	mg/L	0.0215	0.0005	8724629
Dissolved Zirconium (Zr)	mg/L	0.0002	0.0001	8724636
. Zirconium (Zr)	mg/L	0.0019	0.0001	8724629

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3H0991
Report Date: 2023/06/26

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: M.F

TEST SUMMARY

Bureau Veritas ID: WBX434
Sample ID: MW18-BR-21
Matrix: Ground Water

Collected: 2023/06/08
Shipped:
Received: 2023/06/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8730648	N/A	2023/06/16	Brent Boudreau
Alkalinity	AT	8726004	N/A	2023/06/15	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8721776	N/A	2023/06/16	Automated Statchk
Chloride by Automated Colourimetry	KONE	8725830	N/A	2023/06/19	Alina Dobreanu
Conductivity	AT	8726012	N/A	2023/06/15	Kien Tran
Fluoride	ISE	8726017	2023/06/14	2023/06/15	Kien Tran
Hardness (calculated as CaCO3)		8721777	N/A	2023/06/15	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8725603	2023/06/14	2023/06/14	Japneet Gill
Mercury (low level)	CV/AA	8725497	2023/06/14	2023/06/14	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8735632	2023/06/19	2023/06/19	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8724636	N/A	2023/06/15	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8724629	N/A	2023/06/19	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8730752	2023/06/16	2023/06/19	Suban Kanapathippllai
Cyanide (Free)	SPEC	8749466	N/A	2023/06/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8740659	2023/06/19	2023/06/19	Ming Dong
Total Phosphorus Low Level Total	KONE	8743254	2023/06/20	2023/06/21	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8731905	N/A	2023/06/19	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8725251	N/A	2023/06/14	Chandra Nandlal
pH	AT	8725994	2023/06/14	2023/06/15	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/13	Prabhjot Singh
Sulphate by Automated Turbidimetry	KONE	8725825	N/A	2023/06/19	Alina Dobreanu
Total Dissolved Solids	BAL	8725259	2023/06/15	2023/06/16	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/06/13	Prabhjot Singh
Total Kjeldahl Nitrogen in Water	SKAL	8728678	2023/06/15	2023/06/16	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8726134	2023/06/15	2023/06/16	Tina Teng
Turbidity	AT	8725003	N/A	2023/06/14	Gurparteek KAUR

Bureau Veritas ID: WBX434 Dup
Sample ID: MW18-BR-21
Matrix: Ground Water

Collected: 2023/06/08
Shipped:
Received: 2023/06/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8730648	N/A	2023/06/16	Brent Boudreau
Metals in Water by ICPMS (low level)	ICP1/MS	8724629	N/A	2023/06/19	Prempal Bhatti
Total Dissolved Solids	BAL	8725259	2023/06/15	2023/06/16	Tina Teng

Bureau Veritas ID: WBX435
Sample ID: MW19-OB-21
Matrix: Ground Water

Collected: 2023/06/08
Shipped:
Received: 2023/06/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8730648	N/A	2023/06/16	Brent Boudreau
Alkalinity	AT	8726004	N/A	2023/06/15	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8721776	N/A	2023/06/16	Automated Statchk
Chloride by Automated Colourimetry	KONE	8725830	N/A	2023/06/19	Alina Dobreanu

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WBX435
Sample ID: MW19-OB-21
Matrix: Ground Water

Collected: 2023/06/08
Shipped:
Received: 2023/06/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Conductivity	AT	8726012	N/A	2023/06/15	Kien Tran
Fluoride	ISE	8726017	2023/06/14	2023/06/15	Kien Tran
Hardness (calculated as CaCO3)		8721777	N/A	2023/06/15	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8725603	2023/06/14	2023/06/14	Japneet Gill
Mercury (low level)	CV/AA	8725497	2023/06/14	2023/06/14	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8735632	2023/06/19	2023/06/19	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8724636	N/A	2023/06/15	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8724629	N/A	2023/06/19	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8730752	2023/06/16	2023/06/19	Suban Kanapathippllai
Cyanide (Free)	SPEC	8749466	N/A	2023/06/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8740659	2023/06/19	2023/06/19	Ming Dong
Total Phosphorus Low Level Total	KONE	8744052	2023/06/19	2023/06/21	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8731905	N/A	2023/06/19	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8725251	N/A	2023/06/14	Chandra Nandlal
pH	AT	8725994	2023/06/14	2023/06/15	Kien Tran
Sulphate by Automated Turbidimetry	KONE	8725825	N/A	2023/06/19	Alina Dobreanu
Total Dissolved Solids	BAL	8725259	2023/06/15	2023/06/16	Tina Teng
Total Kjeldahl Nitrogen in Water	SKAL	8728678	2023/06/15	2023/06/16	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8725922	2023/06/15	2023/06/16	Shaneil Hall
Turbidity	AT	8725003	N/A	2023/06/14	Gurparteek KAUR

Bureau Veritas ID: WBX436
Sample ID: MW19-BR-21
Matrix: Ground Water

Collected: 2023/06/08
Shipped:
Received: 2023/06/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8730648	N/A	2023/06/16	Brent Boudreau
Alkalinity	AT	8726004	N/A	2023/06/15	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8721776	N/A	2023/06/16	Automated Statchk
Chloride by Automated Colourimetry	KONE	8725830	N/A	2023/06/19	Alina Dobreanu
Conductivity	AT	8726012	N/A	2023/06/15	Kien Tran
Fluoride	ISE	8726017	2023/06/14	2023/06/15	Kien Tran
Hardness (calculated as CaCO3)		8721777	N/A	2023/06/15	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8725603	2023/06/14	2023/06/14	Japneet Gill
Mercury (low level)	CV/AA	8725497	2023/06/14	2023/06/14	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8735632	2023/06/19	2023/06/19	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8724636	N/A	2023/06/15	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8724629	N/A	2023/06/19	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8730752	2023/06/16	2023/06/19	Suban Kanapathippllai
Cyanide (Free)	SPEC	8749466	N/A	2023/06/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8740659	2023/06/19	2023/06/19	Ming Dong
Total Phosphorus Low Level Total	KONE	8743254	2023/06/20	2023/06/21	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8731905	N/A	2023/06/19	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8725251	N/A	2023/06/14	Chandra Nandlal
pH	AT	8725994	2023/06/14	2023/06/15	Kien Tran

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3H0991
Report Date: 2023/06/26

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: M.F

TEST SUMMARY

Bureau Veritas ID: WBX436
Sample ID: MW19-BR-21
Matrix: Ground Water

Collected: 2023/06/08
Shipped:
Received: 2023/06/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Sulphate by Automated Turbidimetry	KONE	8725825	N/A	2023/06/19	Alina Dobreanu
Total Dissolved Solids	BAL	8725259	2023/06/15	2023/06/16	Tina Teng
Total Kjeldahl Nitrogen in Water	SKAL	8728678	2023/06/15	2023/06/16	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8726134	2023/06/15	2023/06/16	Tina Teng
Turbidity	AT	8725003	N/A	2023/06/14	Gurparteek KAUR

Bureau Veritas ID: WBX436 Dup
Sample ID: MW19-BR-21
Matrix: Ground Water

Collected: 2023/06/08
Shipped:
Received: 2023/06/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals Analysis by ICP	ICP	8735632	2023/06/19	2023/06/19	Suban Kanapathippllai

Bureau Veritas ID: WBX437
Sample ID: MW3-OB-13
Matrix: Ground Water

Collected: 2023/06/08
Shipped:
Received: 2023/06/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8730648	N/A	2023/06/16	Brent Boudreau
Alkalinity	AT	8726004	N/A	2023/06/15	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8721776	N/A	2023/06/16	Automated Statchk
Chloride by Automated Colourimetry	KONE	8725830	N/A	2023/06/19	Alina Dobreanu
Conductivity	AT	8726012	N/A	2023/06/15	Kien Tran
Fluoride	ISE	8726017	2023/06/14	2023/06/15	Kien Tran
Hardness (calculated as CaCO3)		8721777	N/A	2023/06/15	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8725603	2023/06/14	2023/06/14	Japneet Gill
Mercury (low level)	CV/AA	8725497	2023/06/14	2023/06/14	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8735632	2023/06/19	2023/06/19	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8724636	N/A	2023/06/15	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8724629	N/A	2023/06/19	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8730752	2023/06/16	2023/06/19	Suban Kanapathippllai
Cyanide (Free)	SPEC	8749466	N/A	2023/06/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8740659	2023/06/19	2023/06/19	Ming Dong
Total Phosphorus Low Level Total	KONE	8744052	2023/06/19	2023/06/21	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8731905	N/A	2023/06/19	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8725251	N/A	2023/06/14	Chandra Nandlal
pH	AT	8725994	2023/06/14	2023/06/15	Kien Tran
Sulphate by Automated Turbidimetry	KONE	8725825	N/A	2023/06/19	Alina Dobreanu
Total Dissolved Solids	BAL	8725259	2023/06/15	2023/06/16	Tina Teng
Total Kjeldahl Nitrogen in Water	SKAL	8728678	2023/06/15	2023/06/16	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8726134	2023/06/15	2023/06/16	Tina Teng
Turbidity	AT	8725003	N/A	2023/06/14	Gurparteek KAUR

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WBX437 Dup
Sample ID: MW3-OB-13
Matrix: Ground Water

Collected: 2023/06/08
Shipped:
Received: 2023/06/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury (low level)	CV/AA	8725497	2023/06/14	2023/06/14	Japneet Gill
Total Ammonia-N	LACH/NH4	8731905	N/A	2023/06/19	Prabhjot Kaur

Bureau Veritas ID: WBX438
Sample ID: MW3-BR-13
Matrix: Ground Water

Collected: 2023/06/08
Shipped:
Received: 2023/06/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8730648	N/A	2023/06/16	Brent Boudreau
Alkalinity	AT	8726004	N/A	2023/06/15	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8721776	N/A	2023/06/16	Automated Statchk
Chloride by Automated Colourimetry	KONE	8725830	N/A	2023/06/19	Alina Dobreanu
Conductivity	AT	8726012	N/A	2023/06/15	Kien Tran
Fluoride	ISE	8726017	2023/06/14	2023/06/15	Kien Tran
Hardness (calculated as CaCO3)		8721777	N/A	2023/06/15	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8725603	2023/06/14	2023/06/14	Japneet Gill
Mercury (low level)	CV/AA	8725497	2023/06/14	2023/06/14	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8735632	2023/06/19	2023/06/19	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8724636	N/A	2023/06/15	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8724629	N/A	2023/06/19	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8730752	2023/06/16	2023/06/19	Suban Kanapathippllai
Cyanide (Free)	SPEC	8749466	N/A	2023/06/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8740659	2023/06/19	2023/06/19	Ming Dong
Total Phosphorus Low Level Total	KONE	8743254	2023/06/20	2023/06/21	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8731905	N/A	2023/06/19	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8725251	N/A	2023/06/14	Chandra Nandlal
pH	AT	8725994	2023/06/14	2023/06/15	Kien Tran
Sulphate by Automated Turbidimetry	KONE	8725825	N/A	2023/06/19	Alina Dobreanu
Total Dissolved Solids	BAL	8725259	2023/06/15	2023/06/16	Tina Teng
Total Kjeldahl Nitrogen in Water	SKAL	8728678	2023/06/15	2023/06/16	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8726134	2023/06/15	2023/06/16	Tina Teng
Turbidity	AT	8725003	N/A	2023/06/14	Gurparteek KAUR

Bureau Veritas ID: WBX438 Dup
Sample ID: MW3-BR-13
Matrix: Ground Water

Collected: 2023/06/08
Shipped:
Received: 2023/06/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8726004	N/A	2023/06/15	Kien Tran
Conductivity	AT	8726012	N/A	2023/06/15	Kien Tran
Fluoride	ISE	8726017	2023/06/14	2023/06/15	Kien Tran
pH	AT	8725994	2023/06/14	2023/06/15	Kien Tran
Turbidity	AT	8725003	N/A	2023/06/14	Gurparteek KAUR

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WBX439
Sample ID: MW6-OB-13
Matrix: Ground Water

Collected: 2023/06/08
Shipped:
Received: 2023/06/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8730648	N/A	2023/06/16	Brent Boudreau
Alkalinity	AT	8726004	N/A	2023/06/15	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8721776	N/A	2023/06/16	Automated Statchk
Chloride by Automated Colourimetry	KONE	8725830	N/A	2023/06/19	Alina Dobreanu
Conductivity	AT	8726012	N/A	2023/06/15	Kien Tran
Fluoride	ISE	8726017	2023/06/14	2023/06/15	Kien Tran
Hardness (calculated as CaCO3)		8721777	N/A	2023/06/15	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8725603	2023/06/14	2023/06/14	Japneet Gill
Mercury (low level)	CV/AA	8725497	2023/06/14	2023/06/14	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8735632	2023/06/19	2023/06/19	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8724636	N/A	2023/06/15	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8724629	N/A	2023/06/19	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8730752	2023/06/16	2023/06/19	Suban Kanapathippllai
Cyanide (Free)	SPEC	8749466	N/A	2023/06/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8740659	2023/06/19	2023/06/19	Ming Dong
Total Phosphorus Low Level Total	KONE	8744052	2023/06/19	2023/06/21	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8731905	N/A	2023/06/19	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8725251	N/A	2023/06/14	Chandra Nandlal
pH	AT	8725994	2023/06/14	2023/06/15	Kien Tran
Sulphate by Automated Turbidimetry	KONE	8725825	N/A	2023/06/19	Alina Dobreanu
Total Dissolved Solids	BAL	8725259	2023/06/15	2023/06/16	Tina Teng
Total Kjeldahl Nitrogen in Water	SKAL	8728678	2023/06/15	2023/06/16	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8726134	2023/06/15	2023/06/16	Tina Teng
Turbidity	AT	8725003	N/A	2023/06/14	Gurparteek KAUR

Bureau Veritas ID: WBX440
Sample ID: DOUP #5
Matrix: Ground Water

Collected: 2023/06/08
Shipped:
Received: 2023/06/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8730648	N/A	2023/06/16	Brent Boudreau
Alkalinity	AT	8726004	N/A	2023/06/15	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8721776	N/A	2023/06/16	Automated Statchk
Chloride by Automated Colourimetry	KONE	8725830	N/A	2023/06/19	Alina Dobreanu
Conductivity	AT	8726012	N/A	2023/06/15	Kien Tran
Fluoride	ISE	8726017	2023/06/14	2023/06/15	Kien Tran
Hardness (calculated as CaCO3)		8721777	N/A	2023/06/15	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8725603	2023/06/14	2023/06/14	Japneet Gill
Mercury (low level)	CV/AA	8725497	2023/06/14	2023/06/14	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8735632	2023/06/19	2023/06/19	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8724636	N/A	2023/06/15	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8724629	N/A	2023/06/19	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8730752	2023/06/16	2023/06/19	Suban Kanapathippllai
Cyanide (Free)	SPEC	8749466	N/A	2023/06/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8740659	2023/06/19	2023/06/19	Ming Dong

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3H0991
Report Date: 2023/06/26

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: M.F

TEST SUMMARY

Bureau Veritas ID: WBX440
Sample ID: DOUP #5
Matrix: Ground Water

Collected: 2023/06/08
Shipped:
Received: 2023/06/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Phosphorus Low Level Total	KONE	8743254	2023/06/20	2023/06/21	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8731984	N/A	2023/06/19	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8725251	N/A	2023/06/14	Chandra Nandlal
pH	AT	8725994	2023/06/14	2023/06/15	Kien Tran
Sulphate by Automated Turbidimetry	KONE	8725825	N/A	2023/06/19	Alina Dobreanu
Total Dissolved Solids	BAL	8725259	2023/06/15	2023/06/16	Tina Teng
Total Kjeldahl Nitrogen in Water	SKAL	8728678	2023/06/15	2023/06/16	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8726134	2023/06/15	2023/06/16	Tina Teng
Turbidity	AT	8725003	N/A	2023/06/14	Gurparteek KAUR

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	1.0°C
Package 2	1.0°C

Sample WBX436 [MW19-BR-21] : Acidity sample contained headspace.

Sample WBX437 [MW3-OB-13] : Acidity sample contained headspace.

Sample WBX438 [MW3-BR-13] : Acidity sample contained headspace.

Sample WBX439 [MW6-OB-13] : Acidity sample contained headspace.

Sample WBX440 [DOUP #5] : Acidity sample contained headspace.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3H0991
Report Date: 2023/06/26

QUALITY ASSURANCE REPORT

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: M.F

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8724629	. Aluminum (Al)	2023/06/19	NC	80 - 120	105	80 - 120	<0.0005	mg/L	1.4	20		
8724629	. Antimony (Sb)	2023/06/19	86	80 - 120	109	80 - 120	<0.0001	mg/L	2.5	20		
8724629	. Arsenic (As)	2023/06/19	NC	80 - 120	99	80 - 120	<0.0001	mg/L	1.2	20		
8724629	. Barium (Ba)	2023/06/19	NC	80 - 120	100	80 - 120	<0.0002	mg/L	0.92	20		
8724629	. Beryllium (Be)	2023/06/19	93	80 - 120	97	80 - 120	<0.00005	mg/L	3.4	20		
8724629	. Bismuth (Bi)	2023/06/19	68 (1)	80 - 120	97	80 - 120	<0.0001	mg/L	1.0	20		
8724629	. Boron (B)	2023/06/19	92	80 - 120	98	80 - 120	<0.001	mg/L	0.50	20		
8724629	. Cadmium (Cd)	2023/06/19	92	80 - 120	98	80 - 120	<0.000005	mg/L	1.8	20		
8724629	. Calcium (Ca)	2023/06/19	NC	80 - 120	102	80 - 120	<0.02	mg/L	2.2	20		
8724629	. Cesium (Cs)	2023/06/19	91	80 - 120	101	80 - 120	<0.00002	mg/L	NC	N/A		
8724629	. Chromium (Cr)	2023/06/19	89	80 - 120	100	80 - 120	<0.0005	mg/L	0.59	20		
8724629	. Cobalt (Co)	2023/06/19	88	80 - 120	100	80 - 120	<0.00005	mg/L	0.046	20		
8724629	. Copper (Cu)	2023/06/19	94	80 - 120	101	80 - 120	<0.0001	mg/L	0.097	20		
8724629	. Iron (Fe)	2023/06/19	NC	80 - 120	101	80 - 120	<0.005	mg/L	1.3	20		
8724629	. Lead (Pb)	2023/06/19	NC	80 - 120	96	80 - 120	<0.00005	mg/L	0.44	20		
8724629	. Lithium (Li)	2023/06/19	95	80 - 120	102	80 - 120	<0.0005	mg/L	0.89	20		
8724629	. Magnesium (Mg)	2023/06/19	NC	80 - 120	104	80 - 120	<0.005	mg/L	0.22	20		
8724629	. Manganese (Mn)	2023/06/19	NC	80 - 120	101	80 - 120	<0.0002	mg/L	0.37	20		
8724629	. Molybdenum (Mo)	2023/06/19	98	80 - 120	102	80 - 120	<0.00005	mg/L	2.6	20		
8724629	. Nickel (Ni)	2023/06/19	86	80 - 120	99	80 - 120	<0.0001	mg/L	1.7	20		
8724629	. Phosphorus (P)	2023/06/19	NC	80 - 120	103	80 - 120	<0.005	mg/L	1.5	20		
8724629	. Potassium (K)	2023/06/19	NC	80 - 120	102	80 - 120	<0.02	mg/L	0.75	20		
8724629	. Rubidium (Rb)	2023/06/19	92	80 - 120	100	80 - 120	<0.00002	mg/L	1.6	N/A		
8724629	. Selenium (Se)	2023/06/19	88	80 - 120	100	80 - 120	<0.00005	mg/L	8.6	20		
8724629	. Silicon (Si)	2023/06/19	NC	80 - 120	104	80 - 120	<0.005	mg/L	5.8	20		
8724629	. Silver (Ag)	2023/06/19	78 (1)	80 - 120	102	80 - 120	<0.00001	mg/L	15	20		
8724629	. Sodium (Na)	2023/06/19	NC	80 - 120	105	80 - 120	<0.01	mg/L	0.69	20		
8724629	. Strontium (Sr)	2023/06/19	NC	80 - 120	99	80 - 120	<0.0001	mg/L	0.061	20		
8724629	. Tellurium (Te)	2023/06/19	92	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8724629	. Thallium (Tl)	2023/06/19	88	80 - 120	97	80 - 120	<0.000005	mg/L	0	20		
8724629	. Thorium (Th)	2023/06/19	94	80 - 120	97	80 - 120	<0.0002	mg/L	3.7	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8724629	. Tin (Sn)	2023/06/19	97	80 - 120	102	80 - 120	<0.0001	mg/L	1.1	20		
8724629	. Titanium (Ti)	2023/06/19	88	80 - 120	103	80 - 120	<0.0005	mg/L	12	20		
8724629	. Tungsten (W)	2023/06/19	95	80 - 120	101	80 - 120	<0.0001	mg/L	0.029	20		
8724629	. Uranium (U)	2023/06/19	90	80 - 120	96	80 - 120	<0.00001	mg/L	0	20		
8724629	. Vanadium (V)	2023/06/19	92	80 - 120	101	80 - 120	<0.00005	mg/L	0.76	20		
8724629	. Zinc (Zn)	2023/06/19	NC	80 - 120	99	80 - 120	<0.0005	mg/L	0.62	20		
8724629	. Zirconium (Zr)	2023/06/19	108	80 - 120	107	80 - 120	<0.0001	mg/L	0.59	20		
8724636	Dissolved Aluminum (Al)	2023/06/15	100	80 - 120	103	80 - 120	<0.0005	mg/L	14	20		
8724636	Dissolved Antimony (Sb)	2023/06/15	103	80 - 120	107	80 - 120	<0.0001	mg/L	NC	20		
8724636	Dissolved Arsenic (As)	2023/06/15	101	80 - 120	101	80 - 120	<0.0001	mg/L	0.23	20		
8724636	Dissolved Barium (Ba)	2023/06/15	98	80 - 120	102	80 - 120	<0.0002	mg/L	1.0	20		
8724636	Dissolved Beryllium (Be)	2023/06/15	96	80 - 120	99	80 - 120	<0.00005	mg/L	NC	20		
8724636	Dissolved Bismuth (Bi)	2023/06/15	65 (1)	80 - 120	98	80 - 120	<0.0001	mg/L	NC	20		
8724636	Dissolved Boron (B)	2023/06/15	97	80 - 120	102	80 - 120	<0.001	mg/L	0.46	20		
8724636	Dissolved Cadmium (Cd)	2023/06/15	101	80 - 120	100	80 - 120	<0.00001	mg/L	NC	20		
8724636	Dissolved Calcium (Ca)	2023/06/15	NC	80 - 120	102	80 - 120	<0.02	mg/L	1.0	20		
8724636	Dissolved Cesium (Cs)	2023/06/15	101	80 - 120	106	80 - 120	<0.00002	mg/L	NC	N/A		
8724636	Dissolved Chromium (Cr)	2023/06/15	96	80 - 120	100	80 - 120	<0.0005	mg/L	NC	20		
8724636	Dissolved Cobalt (Co)	2023/06/15	93	80 - 120	100	80 - 120	<0.00005	mg/L	NC	20		
8724636	Dissolved Copper (Cu)	2023/06/15	97	80 - 120	101	80 - 120	<0.0001	mg/L	1.1	20		
8724636	Dissolved Iron (Fe)	2023/06/15	98	80 - 120	103	80 - 120	<0.005	mg/L	0.31	20		
8724636	Dissolved Lead (Pb)	2023/06/15	92	80 - 120	98	80 - 120	<0.00005	mg/L	NC	20		
8724636	Dissolved Lithium (Li)	2023/06/15	101	80 - 120	103	80 - 120	<0.0005	mg/L	0.39	20		
8724636	Dissolved Magnesium (Mg)	2023/06/15	NC	80 - 120	101	80 - 120	<0.005	mg/L	0.54	20		
8724636	Dissolved Manganese (Mn)	2023/06/15	NC	80 - 120	101	80 - 120	<0.0002	mg/L	0.66	20		
8724636	Dissolved Molybdenum (Mo)	2023/06/15	106	80 - 120	105	80 - 120	<0.00005	mg/L	4.0	20		
8724636	Dissolved Nickel (Ni)	2023/06/15	91	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8724636	Dissolved Phosphorus (P)	2023/06/15	107	80 - 120	97	80 - 120	<0.005	mg/L	3.3	20		
8724636	Dissolved Potassium (K)	2023/06/15	101	80 - 120	104	80 - 120	<0.02	mg/L	0.89	20		
8724636	Dissolved Rubidium (Rb)	2023/06/15	101	80 - 120	104	80 - 120	<0.00002	mg/L	NC	N/A		
8724636	Dissolved Selenium (Se)	2023/06/15	102	80 - 120	103	80 - 120	<0.0002	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8724636	Dissolved Silicon (Si)	2023/06/15	NC	80 - 120	100	80 - 120	<0.005	mg/L	0.39	20		
8724636	Dissolved Silver (Ag)	2023/06/15	102	80 - 120	105	80 - 120	<0.00001	mg/L	NC	20		
8724636	Dissolved Sodium (Na)	2023/06/15	NC	80 - 120	102	80 - 120	<0.01	mg/L	0.72	20		
8724636	Dissolved Strontium (Sr)	2023/06/15	NC	80 - 120	102	80 - 120	<0.0001	mg/L	0.82	20		
8724636	Dissolved Tellurium (Te)	2023/06/15	102	80 - 120	102	80 - 120	<0.0001	mg/L	NC	20		
8724636	Dissolved Thallium (Tl)	2023/06/15	96	80 - 120	101	80 - 120	<0.000005	mg/L	NC	20		
8724636	Dissolved Thorium (Th)	2023/06/15	95	80 - 120	100	80 - 120	<0.0002	mg/L				
8724636	Dissolved Tin (Sn)	2023/06/15	105	80 - 120	104	80 - 120	<0.0001	mg/L	NC	20		
8724636	Dissolved Titanium (Ti)	2023/06/15	99	80 - 120	102	80 - 120	<0.0005	mg/L	6.6	20		
8724636	Dissolved Tungsten (W)	2023/06/15	99	80 - 120	102	80 - 120	<0.0001	mg/L	NC	20		
8724636	Dissolved Uranium (U)	2023/06/15	95	80 - 120	99	80 - 120	<0.00001	mg/L	8.0	20		
8724636	Dissolved Vanadium (V)	2023/06/15	99	80 - 120	102	80 - 120	<0.00005	mg/L	NC	20		
8724636	Dissolved Zinc (Zn)	2023/06/15	93	80 - 120	99	80 - 120	<0.0005	mg/L	4.7	20		
8724636	Dissolved Zirconium (Zr)	2023/06/15	111	80 - 120	108	80 - 120	<0.0001	mg/L	2.8	20		
8725003	Turbidity	2023/06/14			99	80 - 120	<0.1	NTU	3.9	20		
8725251	Nitrate (N)	2023/06/14	87	80 - 120	91	80 - 120	<0.10	mg/L	5.2	20		
8725251	Nitrite (N)	2023/06/14	100	80 - 120	104	80 - 120	<0.010	mg/L	7.7	20		
8725259	Total Dissolved Solids	2023/06/16			102	90 - 110	<10	mg/L	11	20		
8725497	Mercury (Hg)	2023/06/14	103	75 - 125	104	80 - 120	<0.01	ug/L	NC	20		
8725603	Dissolved Mercury (Hg)	2023/06/14	100	75 - 125	103	80 - 120	<0.01	ug/L	NC	20		
8725825	Dissolved Sulphate (SO4)	2023/06/19	NC	75 - 125	94	80 - 120	<1.0	mg/L	1.4	20		
8725830	Dissolved Chloride (Cl-)	2023/06/19	NC	80 - 120	94	80 - 120	<1.0	mg/L	0.92	20		
8725922	Total Suspended Solids	2023/06/16			96	85 - 115	<1	mg/L	0	20		
8725994	pH	2023/06/15			102	98 - 103			0.70	N/A		
8726004	Alkalinity (Total as CaCO3)	2023/06/15			95	85 - 115	<1.0	mg/L	0.94	20		
8726012	Conductivity	2023/06/15			101	85 - 115	<0.001	mS/cm	0.33	10		
8726017	Fluoride (F-)	2023/06/15	101	80 - 120	105	80 - 120	<0.10	mg/L	0.95	20		
8726134	Total Suspended Solids	2023/06/16			95	85 - 115	<1	mg/L	11	20		
8728678	Total Kjeldahl Nitrogen (TKN)	2023/06/16	107	80 - 120	97	80 - 120	<0.10	mg/L	18	20	104	80 - 120
8730648	Acidity	2023/06/16	80	80 - 120	102	80 - 120	<5.0	mg/L	NC	25		
8730752	Total Sulphur (S)	2023/06/19	NC	80 - 120	97	80 - 120	<0.5	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8731905	Total Ammonia-N	2023/06/19	97	75 - 125	104	80 - 120	<0.050	mg/L	3.2	20		
8731984	Total Ammonia-N	2023/06/19	102	75 - 125	103	80 - 120	<0.050	mg/L	NC	20		
8735632	Dissolved Sulphur (S)	2023/06/19	NC	80 - 120	96	80 - 120	<0.5	mg/L	1.8	25		
8740659	Strong Acid Dissoc. Cyanide (CN)	2023/06/19	105	80 - 120	100	80 - 120	<0.00050	mg/L				
8743254	Total Phosphorus (P)	2023/06/21	130 (2)	80 - 120	108	80 - 120	<0.0010	mg/L			94	N/A
8744052	Total Phosphorus (P)	2023/06/21	108	80 - 120	108	80 - 120	<0.0010	mg/L			86	80 - 120
8749466	Free Cyanide (CN)	2023/06/22	94	80 - 120	90	80 - 120	<2.0	ug/L				

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix spike exceedes acceptance limits. Probable matrix interference.

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

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Anastassia Hamanov, Scientific Specialist

<original signed by>

Janah Rhyno, Scientific Specialist

<original signed by>

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your C.O.C. #: 717194

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/06/28
Report #: R7693318
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3H4242
Received: 2023/06/14, 14:58

Sample Matrix: Water
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	5	N/A	2023/06/21	ATL SOP-00205	SM 24 2310B m
Alkalinity	5	N/A	2023/06/19	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	5	N/A	2023/06/20	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	5	N/A	2023/06/19	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	5	N/A	2023/06/19	CAM SOP-00414	SM 23 2510 m
Petroleum Hydrocarbons F2-F4 in Water (3)	3	2023/06/19	2023/06/19	CAM SOP-00316	CCME PHC-CWS m
Fluoride	5	2023/06/17	2023/06/19	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	5	N/A	2023/06/22	CAM SOP 00102/00408/00447	SM 2340 B
Mercury in Water by CVAA	1	2023/06/20	2023/06/20	CAM SOP-00453	EPA 7470A m
Dissolved Mercury (low level)	5	2023/06/19	2023/06/20	CAM SOP-00453	EPA 7470 m
Mercury (low level)	4	2023/06/19	2023/06/19	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	5	2023/06/18	2023/06/21	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	2	N/A	2023/06/21	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS (low level)	3	N/A	2023/06/22	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	5	N/A	2023/06/21	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	5	2023/06/20	2023/06/21	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	5	N/A	2023/06/26	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	5	2023/06/21	2023/06/21	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	5	2023/06/21	2023/06/24	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	5	N/A	2023/06/20	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (4)	5	N/A	2023/06/19	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	5	2023/06/17	2023/06/19	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (5)	5	N/A	2023/06/15		Field pH Meter
Sulphate by Automated Turbidimetry	5	N/A	2023/06/19	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	5	2023/06/19	2023/06/20	CAM SOP-00428	SM 23 2540C m
Field Temperature (5)	5	N/A	2023/06/15		Field Thermometer
Total Kjeldahl Nitrogen in Water	5	2023/06/19	2023/06/20	CAM SOP-00938	OMOE E3516 m
Total Suspended Solids	1	2023/06/20	2023/06/21	CAM SOP-00428	SM 23 2540D m
Low Level Total Suspended Solids	3	2023/06/19	2023/06/20	CAM SOP-00428	SM 23 2540D m
Low Level Total Suspended Solids	1	2023/06/20	2023/06/20	CAM SOP-00428	SM 23 2540D m

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your C.O.C. #: 717194

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/06/28
Report #: R7693318
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3H4242
Received: 2023/06/14, 14:58

Sample Matrix: Water
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Turbidity	5	N/A	2023/06/17	CAM SOP-00417	SM 23 2130 B m
Volatile Organic Compounds and F1 PHCs	3	N/A	2023/06/19	CAM SOP-00230	EPA 8260C m

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
(4) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(5) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3H4242
Report Date: 2023/06/28

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: WM

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WCO642			WCO643			WCO644		
Sampling Date		2023/06/13 12:57			2023/06/13 13:53			2023/06/13 15:04		
COC Number		717194			717194			717194		
	UNITS	MW09-18	RDL	QC Batch	MW08-18	RDL	QC Batch	MW07-18	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	400	1.0	8728538	220	1.0	8728538	640	1.0	8728538
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.2	1.0	8728538	<1.0	1.0	8728538	1.3	1.0	8728538
Hardness (CaCO3)	mg/L	1700	1.0	8728542	970	1.0	8728542	1300	1.0	8728542
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8728538	<1.0	1.0	8728538	<1.0	1.0	8728538
Field Measurements										
Field Temperature	Celsius	15.0	N/A	ONSITE	14.0	N/A	ONSITE	14.9	N/A	ONSITE
Field Measured pH	pH	6.85		ONSITE	7.18		ONSITE	6.68		ONSITE
Inorganics										
Acidity	mg/L	51	5.0	8741277	11	5.0	8741277	99	5.0	8741277
Total Ammonia-N	mg/L	0.44	0.050	8737020	1.9	0.050	8737020	0.32	0.050	8737020
Conductivity	mS/cm	3.15	0.001	8734054	3.01	0.001	8734054	2.06	0.001	8734054
Free Cyanide (CN)	ug/L	2.7 (1)	2.0	8756226	<2.0 (1)	2.0	8756226	5.2 (1)	2.0	8756226
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.0303	0.00050	8751189	0.00996	0.00050	8751189	0.0364	0.00050	8751189
Total Dissolved Solids	mg/L	2760	10	8736698	2110	10	8736698	1640	10	8736698
Fluoride (F-)	mg/L	0.31	0.10	8734065	0.65	0.10	8734065	0.14	0.10	8734065
Total Kjeldahl Nitrogen (TKN)	mg/L	0.99	0.10	8736602	1.9	0.10	8736602	0.74	0.20	8736602
pH	pH	7.51		8734084	7.37		8734084	7.32		8734084
Total Phosphorus (P)	mg/L	0.21	0.0010	8751188	0.70	0.010	8751188	3.7	0.020	8751188
Total Suspended Solids	mg/L	61	1	8735749	520	5	8735749	4000	200	8738650
Dissolved Sulphate (SO4)	mg/L	1400	5.0	8733595	1300	5.0	8733595	530	5.0	8733595
Turbidity	NTU	13	0.1	8732167	47	0.1	8733603	36	0.1	8733603
Alkalinity (Total as CaCO3)	mg/L	400	1.0	8734052	220	1.0	8734052	640	1.0	8734052
Dissolved Chloride (Cl-)	mg/L	1.6	1.0	8733591	14	1.0	8733591	13	1.0	8733591
Nitrite (N)	mg/L	<0.010	0.010	8732777	<0.010	0.010	8733541	<0.010	0.010	8733541
Nitrate (N)	mg/L	<0.10	0.10	8732777	<0.10	0.10	8733541	<0.10	0.10	8733541
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8732777	<0.10	0.10	8733541	<0.10	0.10	8733541

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3H4242
Report Date: 2023/06/28

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: WM

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WCO645			WCO646			WCO646		
Sampling Date		2023/06/13 23:25			2023/06/13 12:11			2023/06/13 12:11		
COC Number		717194			717194			717194		
	UNITS	MW24-OB-21	RDL	QC Batch	MW24-BR-21	RDL	QC Batch	MW24-BR-21 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	170	1.0	8728538	160	1.0	8728538			
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.6	1.0	8728538	1.6	1.0	8728538			
Hardness (CaCO3)	mg/L	160	1.0	8728542	110	1.0	8728542			
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8728538	<1.0	1.0	8728538			
Field Measurements										
Field Temperature	Celsius	12.2	N/A	ONSITE	17.6	N/A	ONSITE			
Field Measured pH	pH	7.88		ONSITE	7.96		ONSITE			
Inorganics										
Acidity	mg/L	5.4	5.0	8741277	<5.0	5.0	8741277			
Total Ammonia-N	mg/L	0.25	0.050	8737020	0.54	0.050	8737020			
Conductivity	mS/cm	0.325	0.001	8734054	0.416	0.001	8734054	0.417	0.001	8734054
Free Cyanide (CN)	ug/L	2.2 (1)	2.0	8756226	2.5 (1)	2.0	8756226			
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050 (2)	0.00050	8751189	<0.00050 (2)	0.00050	8751189			
Total Dissolved Solids	mg/L	145	10	8736698	205	10	8736698			
Fluoride (F-)	mg/L	0.37	0.10	8734065	0.49	0.10	8734065	0.49	0.10	8734065
Total Kjeldahl Nitrogen (TKN)	mg/L	0.32	0.10	8736602	0.81	0.10	8736602			
pH	pH	8.01		8734084	8.02		8734084	8.07		8734084
Total Phosphorus (P)	mg/L	0.87	0.010	8751188	0.011	0.0010	8751188			
Total Suspended Solids	mg/L	740	1	8735805	25	1	8735749			
Dissolved Sulphate (SO4)	mg/L	4.1	1.0	8733595	37	1.0	8733595			
Turbidity	NTU	8.8	0.1	8733603	1.2	0.1	8732167			
Alkalinity (Total as CaCO3)	mg/L	170	1.0	8734052	170	1.0	8734052	170	1.0	8734052
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	8733591	2.7	1.0	8733591			
Nitrite (N)	mg/L	<0.010	0.010	8733541	<0.010	0.010	8732777			
Nitrate (N)	mg/L	<0.10	0.10	8733541	<0.10	0.10	8732777			
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8733541	<0.10	0.10	8732777			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WCO642			WCO642			WCO643		
Sampling Date		2023/06/13 12:57			2023/06/13 12:57			2023/06/13 13:53		
COC Number		717194			717194			717194		
	UNITS	MW09-18	RDL	QC Batch	MW09-18 Lab-Dup	RDL	QC Batch	MW08-18	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0026	0.0025	8743119				<0.0025	0.0025	8743119
. Aluminum (Al)	mg/L	0.119	0.0025	8743125	0.136	0.0025	8743125	1.47	0.0025	8743125
Dissolved Antimony (Sb)	mg/L	<0.0005	0.0005	8743119				<0.0005	0.0005	8743119
. Antimony (Sb)	mg/L	<0.0005	0.0005	8743125	<0.0005	0.0005	8743125	0.0009	0.0005	8743125
Dissolved Arsenic (As)	mg/L	1.15	0.005	8743119				7.94	0.01	8743119
. Arsenic (As)	mg/L	0.910	0.001	8743125	0.910	0.001	8743125	6.16	0.01	8743125
Dissolved Barium (Ba)	mg/L	0.046	0.001	8743119				0.014	0.001	8743119
. Barium (Ba)	mg/L	0.045	0.001	8743125	0.045	0.001	8743125	0.022	0.001	8743125
Dissolved Beryllium (Be)	mg/L	<0.00025	0.00025	8743119				<0.00025	0.00025	8743119
. Beryllium (Be)	mg/L	<0.00025	0.00025	8743125	<0.00025	0.00025	8743125	<0.00025	0.00025	8743125
Dissolved Bismuth (Bi)	mg/L	<0.0005	0.0005	8743119				<0.0005	0.0005	8743119
. Bismuth (Bi)	mg/L	<0.0005	0.0005	8743125	<0.0005	0.0005	8743125	<0.0005	0.0005	8743125
Dissolved Boron (B)	mg/L	0.055	0.005	8743119				0.082	0.005	8743119
. Boron (B)	mg/L	0.058	0.005	8743125	0.059	0.005	8743125	0.067	0.005	8743125
Dissolved Cadmium (Cd)	mg/L	<0.00005	0.00005	8743119				<0.00005	0.00005	8743119
. Cadmium (Cd)	mg/L	<0.000025	0.000025	8743125	<0.000025	0.000025	8743125	0.000025	0.000025	8743125
Dissolved Calcium (Ca)	mg/L	298	0.2	8743119				259	0.2	8743119
. Calcium (Ca)	mg/L	308	0.2	8743125	306	0.2	8743125	234	0.1	8743125
Dissolved Cesium (Cs)	mg/L	<0.0001	0.0001	8743119				<0.0001	0.0001	8743119
. Cesium (Cs)	mg/L	<0.0001	0.0001	8743125	<0.0001	0.0001	8743125	0.0004	0.0001	8743125
Dissolved Chromium (Cr)	mg/L	<0.0025	0.0025	8743119				<0.0025	0.0025	8743119
. Chromium (Cr)	mg/L	<0.0025	0.0025	8743125	<0.0025	0.0025	8743125	0.0099	0.0025	8743125
Dissolved Cobalt (Co)	mg/L	0.00389	0.00025	8743119				0.00276	0.00025	8743119
. Cobalt (Co)	mg/L	0.00389	0.00025	8743125	0.00385	0.00025	8743125	0.00461	0.00025	8743125
Dissolved Copper (Cu)	mg/L	0.0008	0.0005	8743119				<0.0005	0.0005	8743119
. Copper (Cu)	mg/L	<0.0005	0.0005	8743125	<0.0005	0.0005	8743125	0.0042	0.0005	8743125
Dissolved Iron (Fe)	mg/L	8.55	0.025	8743119				17.8	0.025	8743119
. Iron (Fe)	mg/L	8.57	0.025	8743125	8.46	0.025	8743125	21.2	0.025	8743125
Dissolved Lead (Pb)	mg/L	<0.00025	0.00025	8743119				<0.00025	0.00025	8743119
. Lead (Pb)	mg/L	0.00052	0.00025	8743125	0.00051	0.00025	8743125	0.00559	0.00025	8743125
Dissolved Lithium (Li)	mg/L	0.136	0.0025	8743119				0.103	0.0025	8743119

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WCO642			WCO642			WCO643		
Sampling Date		2023/06/13 12:57			2023/06/13 12:57			2023/06/13 13:53		
COC Number		717194			717194			717194		
	UNITS	MW09-18	RDL	QC Batch	MW09-18 Lab-Dup	RDL	QC Batch	MW08-18	RDL	QC Batch
. Lithium (Li)	mg/L	0.137	0.0025	8743125	0.140	0.0025	8743125	0.0886	0.0025	8743125
Dissolved Magnesium (Mg)	mg/L	227	0.05	8743119				78.7	0.025	8743119
. Magnesium (Mg)	mg/L	232	0.05	8743125	231	0.05	8743125	72.8	0.025	8743125
Dissolved Manganese (Mn)	mg/L	0.693	0.001	8743119				0.620	0.001	8743119
. Manganese (Mn)	mg/L	0.700	0.001	8743125	0.692	0.001	8743125	0.786	0.001	8743125
Mercury (Hg)	ug/L	<0.01	0.01	8735988				<0.01	0.01	8735988
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8735989				<0.01	0.01	8735989
Dissolved Molybdenum (Mo)	mg/L	0.00389	0.00025	8743119				0.00766	0.00025	8743119
. Molybdenum (Mo)	mg/L	0.00373	0.00025	8743125	0.00360	0.00025	8743125	0.00588	0.00025	8743125
Dissolved Nickel (Ni)	mg/L	0.0104	0.0005	8743119				0.0021	0.0005	8743119
. Nickel (Ni)	mg/L	0.0100	0.0005	8743125	0.0102	0.0005	8743125	0.0143	0.0005	8743125
Dissolved Phosphorus (P)	mg/L	<0.025	0.025	8743119				<0.025	0.025	8743119
. Phosphorus (P)	mg/L	0.035	0.025	8743125	0.044	0.025	8743125	0.243	0.025	8743125
Dissolved Potassium (K)	mg/L	30.8	0.1	8743119				29.0	0.1	8743119
. Potassium (K)	mg/L	32.0	0.1	8743125	31.7	0.1	8743125	25.1	0.1	8743125
Dissolved Rubidium (Rb)	mg/L	0.0100	0.0001	8743119				0.0089	0.0001	8743119
. Rubidium (Rb)	mg/L	0.0100	0.0001	8743125	0.0100	0.0001	8743125	0.0108	0.0001	8743125
Dissolved Selenium (Se)	mg/L	<0.001	0.001	8743119				<0.001	0.001	8743119
. Selenium (Se)	mg/L	<0.00025	0.00025	8743125	<0.00025	0.00025	8743125	<0.00025	0.00025	8743125
Dissolved Silicon (Si)	mg/L	8.18	0.025	8743119				3.89	0.025	8743119
. Silicon (Si)	mg/L	8.76	0.025	8743125	8.78	0.025	8743125	5.35	0.025	8743125
Dissolved Silver (Ag)	mg/L	<0.00005	0.00005	8743119				<0.00005	0.00005	8743119
. Silver (Ag)	mg/L	<0.00005	0.00005	8743125	<0.00005	0.00005	8743125	<0.00005	0.00005	8743125
Dissolved Sodium (Na)	mg/L	188	0.05	8743119				276	0.05	8743119
. Sodium (Na)	mg/L	198	0.05	8743125	193	0.05	8743125	244	0.05	8743125
Dissolved Strontium (Sr)	mg/L	2.54	0.0005	8743119				1.85	0.0005	8743119
. Strontium (Sr)	mg/L	2.47	0.0005	8743125	2.45	0.0005	8743125	1.59	0.0005	8743125
Dissolved Sulphur (S)	mg/L	560	5	8734801	550	5	8734801	480	0.5	8734801
Total Sulphur (S)	mg/L	570	5	8738117				390	0.5	8738117
Dissolved Tellurium (Te)	mg/L	<0.0005	0.0005	8743119				<0.0005	0.0005	8743119
. Tellurium (Te)	mg/L	<0.0005	0.0005	8743125	<0.0005	0.0005	8743125	<0.0005	0.0005	8743125
Dissolved Thallium (Tl)	mg/L	<0.000025	0.000025	8743119				<0.000025	0.000025	8743119

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WCO642			WCO642			WCO643		
Sampling Date		2023/06/13 12:57			2023/06/13 12:57			2023/06/13 13:53		
COC Number		717194			717194			717194		
	UNITS	MW09-18	RDL	QC Batch	MW09-18 Lab-Dup	RDL	QC Batch	MW08-18	RDL	QC Batch
. Thallium (Tl)	mg/L	<0.000025	0.000025	8743125	<0.000025	0.000025	8743125	0.000026	0.000025	8743125
Dissolved Thorium (Th)	mg/L	<0.001	0.001	8743119				<0.001	0.001	8743119
. Thorium (Th)	mg/L	<0.001	0.001	8743125	<0.001	0.001	8743125	<0.001	0.001	8743125
Dissolved Tin (Sn)	mg/L	<0.0005	0.0005	8743119				<0.0005	0.0005	8743119
. Tin (Sn)	mg/L	<0.0005	0.0005	8743125	<0.0005	0.0005	8743125	<0.0005	0.0005	8743125
Dissolved Titanium (Ti)	mg/L	<0.0025	0.0025	8743119				<0.0025	0.0025	8743119
. Titanium (Ti)	mg/L	0.0038	0.0025	8743125	0.0044	0.0025	8743125	0.0672	0.0025	8743125
Dissolved Tungsten (W)	mg/L	0.0006	0.0005	8743119				<0.0005	0.0005	8743119
. Tungsten (W)	mg/L	0.0005	0.0005	8743125	<0.0005	0.0005	8743125	0.0011	0.0005	8743125
Dissolved Uranium (U)	mg/L	0.0115	0.00005	8743119				0.00190	0.00005	8743119
. Uranium (U)	mg/L	0.0110	0.00005	8743125	0.0111	0.00005	8743125	0.00186	0.00005	8743125
Dissolved Vanadium (V)	mg/L	0.00033	0.00025	8743119				<0.00025	0.00025	8743119
. Vanadium (V)	mg/L	0.00069	0.00025	8743125	0.00065	0.00025	8743125	0.00539	0.00025	8743125
Dissolved Zinc (Zn)	mg/L	0.0030	0.0025	8743119				<0.0025	0.0025	8743119
. Zinc (Zn)	mg/L	0.0036	0.0025	8743125	0.0036	0.0025	8743125	0.0198	0.0025	8743125
Dissolved Zirconium (Zr)	mg/L	0.0006	0.0005	8743119				<0.0005	0.0005	8743119
. Zirconium (Zr)	mg/L	0.0008	0.0005	8743125	0.0008	0.0005	8743125	0.0010	0.0005	8743125

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3H4242
Report Date: 2023/06/28

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: WM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WCO644			WCO645		WCO646		
Sampling Date		2023/06/13 15:04			2023/06/13 23:25		2023/06/13 12:11		
COC Number		717194			717194		717194		
	UNITS	MW07-18	RDL	QC Batch	MW24-OB-21	RDL	MW24-BR-21	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	mg/L	0.260	0.0025	8743119	0.0028	0.0005	0.0421	0.0005	8743119
. Aluminum (Al)	mg/L	6.33	0.0025	8743125	2.70	0.0025	0.0831	0.0005	8743125
Dissolved Antimony (Sb)	mg/L	0.0008	0.0005	8743119	<0.0001	0.0001	0.0004	0.0001	8743119
. Antimony (Sb)	mg/L	0.0012	0.0005	8743125	<0.0005	0.0005	0.0002	0.0001	8743125
Dissolved Arsenic (As)	mg/L	1.62	0.005	8743119	0.0003	0.0001	0.0009	0.0001	8743119
. Arsenic (As)	mg/L	1.97	0.005	8743125	0.0026	0.0005	0.0010	0.0001	8743125
Dissolved Barium (Ba)	mg/L	0.142	0.001	8743119	0.0201	0.0002	0.0114	0.0002	8743119
. Barium (Ba)	mg/L	0.159	0.001	8743125	0.056	0.001	0.0152	0.0002	8743125
Dissolved Beryllium (Be)	mg/L	<0.00025	0.00025	8743119	<0.00005	0.00005	<0.00005	0.00005	8743119
. Beryllium (Be)	mg/L	0.00044	0.00025	8743125	<0.00025	0.00025	<0.00005	0.00005	8743125
Dissolved Bismuth (Bi)	mg/L	<0.0005	0.0005	8743119	<0.0001	0.0001	<0.0001	0.0001	8743119
. Bismuth (Bi)	mg/L	<0.0005	0.0005	8743125	<0.0005	0.0005	<0.0001	0.0001	8743125
Dissolved Boron (B)	mg/L	0.013	0.005	8743119	0.013	0.001	0.045	0.001	8743119
. Boron (B)	mg/L	0.019	0.005	8743125	0.023	0.005	0.046	0.001	8743125
Dissolved Cadmium (Cd)	mg/L	<0.00005	0.00005	8743119	<0.00001	0.00001	<0.00001	0.00001	8743119
. Cadmium (Cd)	mg/L	0.000164	0.000025	8743125	0.000137	0.000025	0.000009	0.000005	8743125
Dissolved Calcium (Ca)	mg/L	385	0.2	8743119	45.8	0.02	24.8	0.02	8743119
. Calcium (Ca)	mg/L	549	1	8743125	399	0.2	31.7	0.02	8743125
Dissolved Cesium (Cs)	mg/L	0.0001	0.0001	8743119	<0.00002	0.00002	<0.00002	0.00002	8743119
. Cesium (Cs)	mg/L	0.0016	0.0001	8743125	0.0002	0.0001	<0.00002	0.00002	8743125
Dissolved Chromium (Cr)	mg/L	<0.0025	0.0025	8743119	<0.0005	0.0005	<0.0005	0.0005	8743119
. Chromium (Cr)	mg/L	0.0483	0.0025	8743125	0.0099	0.0025	<0.0005	0.0005	8743125
Dissolved Cobalt (Co)	mg/L	0.00833	0.00025	8743119	<0.00005	0.00005	0.00015	0.00005	8743119
. Cobalt (Co)	mg/L	0.0173	0.00025	8743125	0.00493	0.00025	0.00018	0.00005	8743125
Dissolved Copper (Cu)	mg/L	0.0010	0.0005	8743119	0.0029	0.0001	0.0016	0.0001	8743119
. Copper (Cu)	mg/L	0.0495	0.0005	8743125	0.0134	0.0005	0.0010	0.0001	8743125
Dissolved Iron (Fe)	mg/L	18.3	0.025	8743119	1.43	0.005	2.84	0.005	8743119
. Iron (Fe)	mg/L	62.6	0.05	8743125	10.2	0.025	7.41	0.005	8743125
Dissolved Lead (Pb)	mg/L	0.00052	0.00025	8743119	<0.00005	0.00005	0.00023	0.00005	8743119
. Lead (Pb)	mg/L	0.0162	0.00025	8743125	0.00519	0.00025	0.00024	0.00005	8743125
Dissolved Lithium (Li)	mg/L	0.0114	0.0025	8743119	0.0034	0.0005	0.0084	0.0005	8743119

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WCO644			WCO645		WCO646		
Sampling Date		2023/06/13 15:04			2023/06/13 23:25		2023/06/13 12:11		
COC Number		717194			717194		717194		
	UNITS	MW07-18	RDL	QC Batch	MW24-OB-21	RDL	MW24-BR-21	RDL	QC Batch
. Lithium (Li)	mg/L	0.0171	0.0025	8743125	0.0085	0.0025	0.0085	0.0005	8743125
Dissolved Magnesium (Mg)	mg/L	86.2	0.025	8743119	12.0	0.005	11.5	0.005	8743119
. Magnesium (Mg)	mg/L	131	0.025	8743125	49.6	0.025	12.0	0.005	8743125
Dissolved Manganese (Mn)	mg/L	1.41	0.001	8743119	0.0582	0.0002	0.242	0.0002	8743119
. Manganese (Mn)	mg/L	3.27	0.001	8743125	0.346	0.001	0.306	0.0002	8743125
Mercury (Hg)	mg/L	<0.00010	0.00010	8738037					
Mercury (Hg)	ug/L				<0.01	0.01	<0.01	0.01	8735988
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8735989	<0.01	0.01	<0.01	0.01	8735989
Dissolved Molybdenum (Mo)	mg/L	0.00029	0.00025	8743119	0.00041	0.00005	0.0106	0.00005	8743119
. Molybdenum (Mo)	mg/L	<0.00025	0.00025	8743125	<0.00025	0.00025	0.0137	0.00005	8743125
Dissolved Nickel (Ni)	mg/L	0.0061	0.0005	8743119	<0.0001	0.0001	0.0007	0.0001	8743119
. Nickel (Ni)	mg/L	0.0446	0.0005	8743125	0.0093	0.0005	0.0006	0.0001	8743125
Dissolved Phosphorus (P)	mg/L	0.034	0.025	8743119	0.027	0.005	<0.005	0.005	8743119
. Phosphorus (P)	mg/L	1.44	0.025	8743125	1.80	0.025	0.005	0.005	8743125
Dissolved Potassium (K)	mg/L	9.8	0.1	8743119	1.37	0.02	5.39	0.02	8743119
. Potassium (K)	mg/L	14.0	0.1	8743125	1.7	0.1	4.87	0.02	8743125
Dissolved Rubidium (Rb)	mg/L	0.0072	0.0001	8743119	0.00112	0.00002	0.00547	0.00002	8743119
. Rubidium (Rb)	mg/L	0.0277	0.0001	8743125	0.0038	0.0001	0.00497	0.00002	8743125
Dissolved Selenium (Se)	mg/L	<0.001	0.001	8743119	<0.0002	0.0002	0.0010	0.0002	8743119
. Selenium (Se)	mg/L	<0.00025	0.00025	8743125	<0.00025	0.00025	0.00109	0.00005	8743125
Dissolved Silicon (Si)	mg/L	12.6	0.025	8743119	6.70	0.025	0.665	0.005	8743119
. Silicon (Si)	mg/L	19.4	0.025	8743125	9.86	0.025	1.00	0.005	8743125
Dissolved Silver (Ag)	mg/L	<0.00005	0.00005	8743119	<0.00001	0.00001	<0.00001	0.00001	8743119
. Silver (Ag)	mg/L	<0.00005	0.00005	8743125	<0.00005	0.00005	<0.00001	0.00001	8743125
Dissolved Sodium (Na)	mg/L	22.2	0.05	8743119	4.44	0.01	38.7	0.01	8743119
. Sodium (Na)	mg/L	23.5	0.05	8743125	4.69	0.05	38.4	0.01	8743125
Dissolved Strontium (Sr)	mg/L	0.894	0.0005	8743119	0.152	0.0001	0.128	0.0001	8743119
. Strontium (Sr)	mg/L	1.39	0.0005	8743125	0.363	0.0005	0.157	0.0001	8743125
Dissolved Sulphur (S)	mg/L	220	0.5	8734801	1.9	0.5	12	0.5	8734801
Total Sulphur (S)	mg/L	250	0.5	8738117	1.7	0.5	13	0.5	8738117
Dissolved Tellurium (Te)	mg/L	<0.0005	0.0005	8743119	<0.0001	0.0001	<0.0001	0.0001	8743119
. Tellurium (Te)	mg/L	<0.0005	0.0005	8743125	<0.0005	0.0005	<0.0001	0.0001	8743125

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WCO644			WCO645		WCO646		
Sampling Date		2023/06/13 15:04			2023/06/13 23:25		2023/06/13 12:11		
COC Number		717194			717194		717194		
	UNITS	MW07-18	RDL	QC Batch	MW24-OB-21	RDL	MW24-BR-21	RDL	QC Batch
Dissolved Thallium (Tl)	mg/L	<0.000025	0.000025	8743119	<0.000005	0.000005	0.000025	0.000005	8743119
. Thallium (Tl)	mg/L	0.000150	0.000025	8743125	0.000077	0.000025	0.000028	0.000005	8743125
Dissolved Thorium (Th)	mg/L	<0.001	0.001	8743119	<0.0002	0.0002	<0.0002	0.0002	8743119
. Thorium (Th)	mg/L	0.002	0.001	8743125	0.001	0.001	<0.0002	0.0002	8743125
Dissolved Tin (Sn)	mg/L	<0.0005	0.0005	8743119	0.0001	0.0001	0.0003	0.0001	8743119
. Tin (Sn)	mg/L	<0.0005	0.0005	8743125	<0.0005	0.0005	0.0003	0.0001	8743125
Dissolved Titanium (Ti)	mg/L	0.0228	0.0025	8743119	0.0006	0.0005	0.0017	0.0005	8743119
. Titanium (Ti)	mg/L	0.207	0.0025	8743125	0.0536	0.0025	0.0035	0.0005	8743125
Dissolved Tungsten (W)	mg/L	<0.0005	0.0005	8743119	0.0002	0.0001	0.0176	0.0001	8743119
. Tungsten (W)	mg/L	<0.0005	0.0005	8743125	<0.0005	0.0005	0.0348	0.0001	8743125
Dissolved Uranium (U)	mg/L	0.00081	0.00005	8743119	0.00003	0.00001	0.00058	0.00001	8743119
. Uranium (U)	mg/L	0.00135	0.00005	8743125	0.00078	0.00005	0.00061	0.00001	8743125
Dissolved Vanadium (V)	mg/L	0.00146	0.00025	8743119	<0.00005	0.00005	0.00010	0.00005	8743119
. Vanadium (V)	mg/L	0.0365	0.00025	8743125	0.0101	0.00025	0.00021	0.00005	8743125
Dissolved Zinc (Zn)	mg/L	0.0039	0.0025	8743119	0.104	0.0005	0.270	0.0005	8743119
. Zinc (Zn)	mg/L	0.0569	0.0025	8743125	1.42	0.0025	0.641	0.0005	8743125
Dissolved Zirconium (Zr)	mg/L	0.0006	0.0005	8743119	<0.0001	0.0001	<0.0001	0.0001	8743119
. Zirconium (Zr)	mg/L	0.0034	0.0005	8743125	0.0006	0.0005	<0.0001	0.0001	8743125

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VOLATILE ORGANICS BY GC/MS (WATER)

Bureau Veritas ID		WCO642	WCO643	WCO644		
Sampling Date		2023/06/13 12:57	2023/06/13 13:53	2023/06/13 15:04		
COC Number		717194	717194	717194		
	UNITS	MW09-18	MW08-18	MW07-18	RDL	QC Batch
Volatile Organics						
Benzene	ug/L	<0.17	<0.17	<0.17	0.17	8733846
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	8733846
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	8733846
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	8733846
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	8733846
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	8733846
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	8733846
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	8733846
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	8733846
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	8733846
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	8733846
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	8733846
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	8733846
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	8733846
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	8733846
F1 (C6-C10)	ug/L	<25	<25	<25	25	8733846
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	8733846
Surrogate Recovery (%)						
4-Bromofluorobenzene	%	95	93	93		8733846
D4-1,2-Dichloroethane	%	114	112	114		8733846
D8-Toluene	%	91	91	90		8733846

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		WCO642	WCO643	WCO644		
Sampling Date		2023/06/13 12:57	2023/06/13 13:53	2023/06/13 15:04		
COC Number		717194	717194	717194		
	UNITS	MW09-18	MW08-18	MW07-18	RDL	QC Batch
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	8735406
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	8735406
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	8735406
Reached Baseline at C50	ug/L	Yes	Yes	Yes		8735406
Surrogate Recovery (%)						
o-Terphenyl	%	101	102	101		8735406

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WCO642
Sample ID: MW09-18
Matrix: Water

Collected: 2023/06/13
Shipped:
Received: 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8741277	N/A	2023/06/21	Brent Boudreau
Alkalinity	AT	8734052	N/A	2023/06/19	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8728538	N/A	2023/06/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	8733591	N/A	2023/06/19	Alina Dobreanu
Conductivity	AT	8734054	N/A	2023/06/19	Kien Tran
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8735406	2023/06/19	2023/06/19	Agnieszka Brzuzy-Snopko
Fluoride	ISE	8734065	2023/06/17	2023/06/19	Kien Tran
Hardness (calculated as CaCO3)		8728542	N/A	2023/06/22	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8735989	2023/06/19	2023/06/20	Jaswinder Kaur
Mercury (low level)	CV/AA	8735988	2023/06/19	2023/06/19	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8734801	2023/06/18	2023/06/21	Thuy Linh Nguyen
Dissolved Metals by ICPMS (low level)	ICP1/MS	8743119	N/A	2023/06/22	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8743125	N/A	2023/06/21	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8738117	2023/06/20	2023/06/21	Thuy Linh Nguyen
Cyanide (Free)	SPEC	8756226	N/A	2023/06/26	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8751189	2023/06/21	2023/06/21	Ming Dong
Total Phosphorus Low Level Total	KONE	8751188	2023/06/21	2023/06/24	Carlo Truong
Total Ammonia-N	LACH/NH4	8737020	N/A	2023/06/20	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8732777	N/A	2023/06/19	Chandra Nandlal
pH	AT	8734084	2023/06/17	2023/06/19	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/15	Harmanpreet Kaur
Sulphate by Automated Turbidimetry	KONE	8733595	N/A	2023/06/19	Alina Dobreanu
Total Dissolved Solids	BAL	8736698	2023/06/19	2023/06/20	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/06/15	Harmanpreet Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8736602	2023/06/19	2023/06/20	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8735749	2023/06/19	2023/06/20	Shaneil Hall
Turbidity	AT	8732167	N/A	2023/06/17	Gurparteek KAUR
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8733846	N/A	2023/06/19	Denis Reid

Bureau Veritas ID: WCO642 Dup
Sample ID: MW09-18
Matrix: Water

Collected: 2023/06/13
Shipped:
Received: 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals Analysis by ICP	ICP	8734801	2023/06/18	2023/06/21	Thuy Linh Nguyen
Metals in Water by ICPMS (low level)	ICP1/MS	8743125	N/A	2023/06/21	Prempal Bhatti

Bureau Veritas ID: WCO643
Sample ID: MW08-18
Matrix: Water

Collected: 2023/06/13
Shipped:
Received: 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8741277	N/A	2023/06/21	Brent Boudreau
Alkalinity	AT	8734052	N/A	2023/06/19	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8728538	N/A	2023/06/20	Automated Statchk

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WCO643
Sample ID: MW08-18
Matrix: Water

Collected: 2023/06/13
Shipped:
Received: 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	8733591	N/A	2023/06/19	Alina Dobreanu
Conductivity	AT	8734054	N/A	2023/06/19	Kien Tran
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8735406	2023/06/19	2023/06/19	Agnieszka Brzuzy-Snopko
Fluoride	ISE	8734065	2023/06/17	2023/06/19	Kien Tran
Hardness (calculated as CaCO3)		8728542	N/A	2023/06/22	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8735989	2023/06/19	2023/06/20	Jaswinder Kaur
Mercury (low level)	CV/AA	8735988	2023/06/19	2023/06/19	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8734801	2023/06/18	2023/06/21	Thuy Linh Nguyen
Dissolved Metals by ICPMS (low level)	ICP1/MS	8743119	N/A	2023/06/22	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8743125	N/A	2023/06/21	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8738117	2023/06/20	2023/06/21	Thuy Linh Nguyen
Cyanide (Free)	SPEC	8756226	N/A	2023/06/26	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8751189	2023/06/21	2023/06/21	Ming Dong
Total Phosphorus Low Level Total	KONE	8751188	2023/06/21	2023/06/24	Carlo Truong
Total Ammonia-N	LACH/NH4	8737020	N/A	2023/06/20	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8733541	N/A	2023/06/19	Chandra Nandlal
pH	AT	8734084	2023/06/17	2023/06/19	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/15	Harmanpreet Kaur
Sulphate by Automated Turbidimetry	KONE	8733595	N/A	2023/06/19	Alina Dobreanu
Total Dissolved Solids	BAL	8736698	2023/06/19	2023/06/20	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/06/15	Harmanpreet Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8736602	2023/06/19	2023/06/20	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8735749	2023/06/19	2023/06/20	Shaneil Hall
Turbidity	AT	8733603	N/A	2023/06/17	Gurparteek KAUR
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8733846	N/A	2023/06/19	Denis Reid

Bureau Veritas ID: WCO644
Sample ID: MW07-18
Matrix: Water

Collected: 2023/06/13
Shipped:
Received: 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8741277	N/A	2023/06/21	Brent Boudreau
Alkalinity	AT	8734052	N/A	2023/06/19	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8728538	N/A	2023/06/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	8733591	N/A	2023/06/19	Alina Dobreanu
Conductivity	AT	8734054	N/A	2023/06/19	Kien Tran
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8735406	2023/06/19	2023/06/19	Agnieszka Brzuzy-Snopko
Fluoride	ISE	8734065	2023/06/17	2023/06/19	Kien Tran
Hardness (calculated as CaCO3)		8728542	N/A	2023/06/22	Automated Statchk
Mercury in Water by CVAA	CV/AA	8738037	2023/06/20	2023/06/20	Jaswinder Kaur
Dissolved Mercury (low level)	CV/AA	8735989	2023/06/19	2023/06/20	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8734801	2023/06/18	2023/06/21	Thuy Linh Nguyen
Dissolved Metals by ICPMS (low level)	ICP1/MS	8743119	N/A	2023/06/21	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8743125	N/A	2023/06/21	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8738117	2023/06/20	2023/06/21	Thuy Linh Nguyen

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WCO644
Sample ID: MW07-18
Matrix: Water

Collected: 2023/06/13
Shipped:
Received: 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Cyanide (Free)	SPEC	8756226	N/A	2023/06/26	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8751189	2023/06/21	2023/06/21	Ming Dong
Total Phosphorus Low Level Total	KONE	8751188	2023/06/21	2023/06/24	Carlo Truong
Total Ammonia-N	LACH/NH4	8737020	N/A	2023/06/20	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8733541	N/A	2023/06/19	Chandra Nandlal
pH	AT	8734084	2023/06/17	2023/06/19	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/15	Harmanpreet Kaur
Sulphate by Automated Turbidimetry	KONE	8733595	N/A	2023/06/19	Alina Dobreanu
Total Dissolved Solids	BAL	8736698	2023/06/19	2023/06/20	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/06/15	Harmanpreet Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8736602	2023/06/19	2023/06/20	Kruti Jitesh Patel
Total Suspended Solids	BAL	8738650	2023/06/20	2023/06/21	Tina Teng
Turbidity	AT	8733603	N/A	2023/06/17	Gurparteek KAUR
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8733846	N/A	2023/06/19	Denis Reid

Bureau Veritas ID: WCO645
Sample ID: MW24-OB-21
Matrix: Water

Collected: 2023/06/13
Shipped:
Received: 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8741277	N/A	2023/06/21	Brent Boudreau
Alkalinity	AT	8734052	N/A	2023/06/19	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8728538	N/A	2023/06/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	8733591	N/A	2023/06/19	Alina Dobreanu
Conductivity	AT	8734054	N/A	2023/06/19	Kien Tran
Fluoride	ISE	8734065	2023/06/17	2023/06/19	Kien Tran
Hardness (calculated as CaCO3)		8728542	N/A	2023/06/22	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8735989	2023/06/19	2023/06/20	Jaswinder Kaur
Mercury (low level)	CV/AA	8735988	2023/06/19	2023/06/19	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8734801	2023/06/18	2023/06/21	Thuy Linh Nguyen
Dissolved Metals by ICPMS (low level)	ICP1/MS	8743119	N/A	2023/06/22	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8743125	N/A	2023/06/21	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8738117	2023/06/20	2023/06/21	Thuy Linh Nguyen
Cyanide (Free)	SPEC	8756226	N/A	2023/06/26	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8751189	2023/06/21	2023/06/21	Ming Dong
Total Phosphorus Low Level Total	KONE	8751188	2023/06/21	2023/06/24	Carlo Truong
Total Ammonia-N	LACH/NH4	8737020	N/A	2023/06/20	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8733541	N/A	2023/06/19	Chandra Nandlal
pH	AT	8734084	2023/06/17	2023/06/19	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/15	Harmanpreet Kaur
Sulphate by Automated Turbidimetry	KONE	8733595	N/A	2023/06/19	Alina Dobreanu
Total Dissolved Solids	BAL	8736698	2023/06/19	2023/06/20	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/06/15	Harmanpreet Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8736602	2023/06/19	2023/06/20	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8735805	2023/06/20	2023/06/20	Darshan Patel

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WCO645 **Collected:** 2023/06/13
Sample ID: MW24-OB-21 **Shipped:**
Matrix: Water **Received:** 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Turbidity	AT	8733603	N/A	2023/06/17	Gurparteek KAUR

Bureau Veritas ID: WCO646 **Collected:** 2023/06/13
Sample ID: MW24-BR-21 **Shipped:**
Matrix: Water **Received:** 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8741277	N/A	2023/06/21	Brent Boudreau
Alkalinity	AT	8734052	N/A	2023/06/19	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8728538	N/A	2023/06/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	8733591	N/A	2023/06/19	Alina Dobreanu
Conductivity	AT	8734054	N/A	2023/06/19	Kien Tran
Fluoride	ISE	8734065	2023/06/17	2023/06/19	Kien Tran
Hardness (calculated as CaCO3)		8728542	N/A	2023/06/22	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8735989	2023/06/19	2023/06/20	Jaswinder Kaur
Mercury (low level)	CV/AA	8735988	2023/06/19	2023/06/19	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8734801	2023/06/18	2023/06/21	Thuy Linh Nguyen
Dissolved Metals by ICPMS (low level)	ICP1/MS	8743119	N/A	2023/06/21	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8743125	N/A	2023/06/21	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8738117	2023/06/20	2023/06/21	Thuy Linh Nguyen
Cyanide (Free)	SPEC	8756226	N/A	2023/06/26	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8751189	2023/06/21	2023/06/21	Ming Dong
Total Phosphorus Low Level Total	KONE	8751188	2023/06/21	2023/06/24	Carlo Truong
Total Ammonia-N	LACH/NH4	8737020	N/A	2023/06/20	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8732777	N/A	2023/06/19	Chandra Nandlal
pH	AT	8734084	2023/06/17	2023/06/19	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/15	Harmanpreet Kaur
Sulphate by Automated Turbidimetry	KONE	8733595	N/A	2023/06/19	Alina Dobreanu
Total Dissolved Solids	BAL	8736698	2023/06/19	2023/06/20	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/06/15	Harmanpreet Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8736602	2023/06/19	2023/06/20	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8735749	2023/06/19	2023/06/20	Shaneil Hall
Turbidity	AT	8732167	N/A	2023/06/17	Gurparteek KAUR

Bureau Veritas ID: WCO646 Dup **Collected:** 2023/06/13
Sample ID: MW24-BR-21 **Shipped:**
Matrix: Water **Received:** 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8734052	N/A	2023/06/19	Kien Tran
Conductivity	AT	8734054	N/A	2023/06/19	Kien Tran
Fluoride	ISE	8734065	2023/06/17	2023/06/19	Kien Tran
pH	AT	8734084	2023/06/17	2023/06/19	Kien Tran

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	5.3°C
Package 2	3.0°C

Sample WCO642 [MW09-18] : Acidity sample contained headspace.

Metals Analysis: Due to the sample matrix, the sample required dilution. Detection limits were adjusted accordingly.

Sample WCO643 [MW08-18] : Metals Analysis: Due to the sample matrix, the sample required dilution. Detection limits were adjusted accordingly.

Sample WCO644 [MW07-18] : Metals Analysis: Due to the sample matrix, the sample required dilution. Detection limits were adjusted accordingly.

Sample WCO645 [MW24-OB-21] : Metals Analysis: Due to the sample matrix, the sample required dilution. Detection limits were adjusted accordingly.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8733846	4-Bromofluorobenzene	2023/06/19	100	70 - 130	99	70 - 130	95	%				
8733846	D4-1,2-Dichloroethane	2023/06/19	106	70 - 130	106	70 - 130	114	%				
8733846	D8-Toluene	2023/06/19	106	70 - 130	105	70 - 130	90	%				
8735406	o-Terphenyl	2023/06/19	106	60 - 130	103	60 - 130	102	%				
8732167	Turbidity	2023/06/17			98	80 - 120	<0.1	NTU	2.1	20		
8732777	Nitrate (N)	2023/06/19	96	80 - 120	100	80 - 120	<0.10	mg/L	NC	20		
8732777	Nitrite (N)	2023/06/19	96	80 - 120	98	80 - 120	<0.010	mg/L	NC	20		
8733541	Nitrate (N)	2023/06/19	103	80 - 120	99	80 - 120	<0.10	mg/L	0.19	20		
8733541	Nitrite (N)	2023/06/19	103	80 - 120	98	80 - 120	<0.010	mg/L	0.65	20		
8733591	Dissolved Chloride (Cl-)	2023/06/19	NC	80 - 120	95	80 - 120	<1.0	mg/L	0.71	20		
8733595	Dissolved Sulphate (SO4)	2023/06/19	95	75 - 125	94	80 - 120	<1.0	mg/L	0.014	20		
8733603	Turbidity	2023/06/17			99	80 - 120	<0.1	NTU	6.5	20		
8733846	1,1,2,2-Tetrachloroethane	2023/06/19	111	70 - 130	109	70 - 130	<0.50	ug/L	NC	30		
8733846	1,2-Dichlorobenzene	2023/06/19	97	70 - 130	93	70 - 130	<0.50	ug/L	NC	30		
8733846	1,4-Dichlorobenzene	2023/06/19	107	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
8733846	Benzene	2023/06/19	102	70 - 130	98	70 - 130	<0.17	ug/L	NC	30		
8733846	Chloroform	2023/06/19	104	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
8733846	cis-1,2-Dichloroethylene	2023/06/19	108	70 - 130	104	70 - 130	<0.50	ug/L	NC	30		
8733846	Ethylbenzene	2023/06/19	81	70 - 130	77	70 - 130	<0.20	ug/L	NC	30		
8733846	F1 (C6-C10) - BTEX	2023/06/19					<25	ug/L	NC	30		
8733846	F1 (C6-C10)	2023/06/19	81	60 - 140	84	60 - 140	<25	ug/L	NC	30		
8733846	Methylene Chloride(Dichloromethane)	2023/06/19	114	70 - 130	109	70 - 130	<2.0	ug/L	NC	30		
8733846	o-Xylene	2023/06/19	88	70 - 130	85	70 - 130	<0.20	ug/L	NC	30		
8733846	p+m-Xylene	2023/06/19	84	70 - 130	80	70 - 130	<0.20	ug/L	NC	30		
8733846	Tetrachloroethylene	2023/06/19	91	70 - 130	87	70 - 130	<0.20	ug/L	NC	30		
8733846	Toluene	2023/06/19	96	70 - 130	91	70 - 130	<0.20	ug/L	NC	30		
8733846	Total Xylenes	2023/06/19					<0.20	ug/L	NC	30		
8733846	trans-1,3-Dichloropropene	2023/06/19	107	70 - 130	98	70 - 130	<0.40	ug/L	NC	30		
8733846	Trichloroethylene	2023/06/19	102	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
8734052	Alkalinity (Total as CaCO3)	2023/06/19			95	85 - 115	<1.0	mg/L	1.2	20		
8734054	Conductivity	2023/06/19			102	85 - 115	<0.001	mS/cm	0.24	10		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8734065	Fluoride (F-)	2023/06/19	95	80 - 120	99	80 - 120	<0.10	mg/L	0.45	20		
8734084	pH	2023/06/19			102	98 - 103			0.67	N/A		
8734801	Dissolved Sulphur (S)	2023/06/21	NC	80 - 120	98	80 - 120	<0.5	mg/L	1.3	25		
8735406	F2 (C10-C16 Hydrocarbons)	2023/06/19	NC (1)	60 - 130	104	60 - 130	<100	ug/L	NC	30		
8735406	F3 (C16-C34 Hydrocarbons)	2023/06/19	74	60 - 130	103	60 - 130	<200	ug/L	6.9	30		
8735406	F4 (C34-C50 Hydrocarbons)	2023/06/19	82	60 - 130	102	60 - 130	<200	ug/L	15	30		
8735749	Total Suspended Solids	2023/06/20			98	85 - 115	<1	mg/L	11	20		
8735805	Total Suspended Solids	2023/06/20			98	85 - 115	<1	mg/L	1.4	20		
8735988	Mercury (Hg)	2023/06/19	97	75 - 125	104	80 - 120	<0.01	ug/L	NC	20		
8735989	Dissolved Mercury (Hg)	2023/06/20	101	75 - 125	100	80 - 120	<0.01	ug/L	NC	20		
8736602	Total Kjeldahl Nitrogen (TKN)	2023/06/20	106	80 - 120	103	80 - 120	<0.10	mg/L	0.38	20	113	80 - 120
8736698	Total Dissolved Solids	2023/06/20			95	90 - 110	<10	mg/L	1.2	20		
8737020	Total Ammonia-N	2023/06/20	101	75 - 125	102	80 - 120	<0.050	mg/L	6.1	20		
8738037	Mercury (Hg)	2023/06/20	97	75 - 125	102	80 - 120	<0.00010	mg/L	NC	20		
8738117	Total Sulphur (S)	2023/06/21	NC	80 - 120	97	80 - 120	<0.5	mg/L				
8738650	Total Suspended Solids	2023/06/21			99	85 - 115	<10	mg/L	13	20		
8741277	Acidity	2023/06/21	103	80 - 120	101	80 - 120	<5.0	mg/L	2.0	25		
8743119	Dissolved Aluminum (Al)	2023/06/22	96	80 - 120	96	80 - 120	<0.0005	mg/L	1.7	20		
8743119	Dissolved Antimony (Sb)	2023/06/22	105	80 - 120	107	80 - 120	<0.0001	mg/L	1.5	20		
8743119	Dissolved Arsenic (As)	2023/06/22	96	80 - 120	99	80 - 120	<0.0001	mg/L	2.1	20		
8743119	Dissolved Barium (Ba)	2023/06/22	95	80 - 120	97	80 - 120	<0.0002	mg/L	0.33	20		
8743119	Dissolved Beryllium (Be)	2023/06/22	99	80 - 120	94	80 - 120	<0.00005	mg/L	NC	20		
8743119	Dissolved Bismuth (Bi)	2023/06/22	74 (2)	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8743119	Dissolved Boron (B)	2023/06/22	97	80 - 120	96	80 - 120	<0.001	mg/L	0.91	20		
8743119	Dissolved Cadmium (Cd)	2023/06/22	99	80 - 120	97	80 - 120	<0.00001	mg/L	NC	20		
8743119	Dissolved Calcium (Ca)	2023/06/22	NC	80 - 120	99	80 - 120	<0.02	mg/L	2.3	20		
8743119	Dissolved Cesium (Cs)	2023/06/22	98	80 - 120	99	80 - 120	<0.00002	mg/L	NC	N/A		
8743119	Dissolved Chromium (Cr)	2023/06/22	96	80 - 120	98	80 - 120	<0.0005	mg/L	NC	20		
8743119	Dissolved Cobalt (Co)	2023/06/22	93	80 - 120	99	80 - 120	<0.00005	mg/L	1.6	20		
8743119	Dissolved Copper (Cu)	2023/06/22	96	80 - 120	97	80 - 120	<0.0001	mg/L	0	20		
8743119	Dissolved Iron (Fe)	2023/06/22	NC	80 - 120	101	80 - 120	<0.005	mg/L	2.2	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8743119	Dissolved Lead (Pb)	2023/06/22	96	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8743119	Dissolved Lithium (Li)	2023/06/22	105	80 - 120	102	80 - 120	<0.0005	mg/L	0.97	20		
8743119	Dissolved Magnesium (Mg)	2023/06/22	NC	80 - 120	99	80 - 120	<0.005	mg/L	1.6	20		
8743119	Dissolved Manganese (Mn)	2023/06/22	NC	80 - 120	98	80 - 120	<0.0002	mg/L	2.5	20		
8743119	Dissolved Molybdenum (Mo)	2023/06/22	106	80 - 120	102	80 - 120	<0.00005	mg/L	0.12	20		
8743119	Dissolved Nickel (Ni)	2023/06/22	92	80 - 120	98	80 - 120	<0.0001	mg/L	1.2	20		
8743119	Dissolved Phosphorus (P)	2023/06/22	108	80 - 120	90	80 - 120	<0.005	mg/L	18	20		
8743119	Dissolved Potassium (K)	2023/06/22	97	80 - 120	101	80 - 120	<0.02	mg/L	0.59	20		
8743119	Dissolved Rubidium (Rb)	2023/06/22	100	80 - 120	102	80 - 120	<0.00002	mg/L	3.3	N/A		
8743119	Dissolved Selenium (Se)	2023/06/22	94	80 - 120	101	80 - 120	<0.0002	mg/L	NC	20		
8743119	Dissolved Silicon (Si)	2023/06/22	NC	80 - 120	97	80 - 120	<0.005	mg/L	1.5	20		
8743119	Dissolved Silver (Ag)	2023/06/22	83	80 - 120	99	80 - 120	<0.00001	mg/L	NC	20		
8743119	Dissolved Sodium (Na)	2023/06/22	NC	80 - 120	99	80 - 120	<0.01	mg/L	0.74	20		
8743119	Dissolved Strontium (Sr)	2023/06/22	NC	80 - 120	100	80 - 120	<0.0001	mg/L	3.4	20		
8743119	Dissolved Tellurium (Te)	2023/06/22	90	80 - 120	98	80 - 120	<0.0001	mg/L	NC	20		
8743119	Dissolved Thallium (Tl)	2023/06/22	98	80 - 120	100	80 - 120	<0.000005	mg/L	0	20		
8743119	Dissolved Thorium (Th)	2023/06/22	97	80 - 120	98	80 - 120	<0.0002	mg/L	NC	20		
8743119	Dissolved Tin (Sn)	2023/06/22	103	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8743119	Dissolved Titanium (Ti)	2023/06/22	99	80 - 120	98	80 - 120	<0.0005	mg/L	3.1	20		
8743119	Dissolved Tungsten (W)	2023/06/22	105	80 - 120	102	80 - 120	<0.0001	mg/L	0.47	20		
8743119	Dissolved Uranium (U)	2023/06/22	101	80 - 120	98	80 - 120	<0.00001	mg/L	0.13	20		
8743119	Dissolved Vanadium (V)	2023/06/22	99	80 - 120	99	80 - 120	<0.00005	mg/L	2.9	20		
8743119	Dissolved Zinc (Zn)	2023/06/22	93	80 - 120	98	80 - 120	<0.0005	mg/L	3.9	20		
8743119	Dissolved Zirconium (Zr)	2023/06/22	110	80 - 120	101	80 - 120	<0.0001	mg/L	0.21	20		
8743125	. Aluminum (Al)	2023/06/21	NC	80 - 120	104	80 - 120	<0.0005	mg/L	13	20		
8743125	. Antimony (Sb)	2023/06/21	93	80 - 120	109	80 - 120	<0.0001	mg/L	NC	20		
8743125	. Arsenic (As)	2023/06/21	NC	80 - 120	98	80 - 120	<0.0001	mg/L	0.0038	20		
8743125	. Barium (Ba)	2023/06/21	90	80 - 120	98	80 - 120	<0.0002	mg/L	1.2	20		
8743125	. Beryllium (Be)	2023/06/21	85	80 - 120	96	80 - 120	<0.00005	mg/L	NC	20		
8743125	. Bismuth (Bi)	2023/06/21	87	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8743125	. Boron (B)	2023/06/21	NC	80 - 120	98	80 - 120	<0.001	mg/L	1.5	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8743125	. Cadmium (Cd)	2023/06/21	91	80 - 120	98	80 - 120	<0.000005	mg/L	NC	20		
8743125	. Calcium (Ca)	2023/06/21	NC	80 - 120	104	80 - 120	<0.02	mg/L	0.42	20		
8743125	. Cesium (Cs)	2023/06/21	89	80 - 120	101	80 - 120	<0.00002	mg/L	NC	N/A		
8743125	. Chromium (Cr)	2023/06/21	90	80 - 120	98	80 - 120	<0.0005	mg/L	NC	20		
8743125	. Cobalt (Co)	2023/06/21	90	80 - 120	98	80 - 120	<0.00005	mg/L	1.1	20		
8743125	. Copper (Cu)	2023/06/21	92	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8743125	. Iron (Fe)	2023/06/21	NC	80 - 120	101	80 - 120	<0.005	mg/L	1.4	20		
8743125	. Lead (Pb)	2023/06/21	89	80 - 120	99	80 - 120	<0.00005	mg/L	1.4	20		
8743125	. Lithium (Li)	2023/06/21	NC	80 - 120	102	80 - 120	<0.0005	mg/L	2.5	20		
8743125	. Magnesium (Mg)	2023/06/21	NC	80 - 120	101	80 - 120	<0.005	mg/L	0.51	20		
8743125	. Manganese (Mn)	2023/06/21	NC	80 - 120	98	80 - 120	<0.0002	mg/L	1.2	20		
8743125	. Molybdenum (Mo)	2023/06/21	100	80 - 120	103	80 - 120	<0.00005	mg/L	3.5	20		
8743125	. Nickel (Ni)	2023/06/21	87	80 - 120	97	80 - 120	<0.0001	mg/L	2.3	20		
8743125	. Phosphorus (P)	2023/06/21	90	80 - 120	97	80 - 120	<0.005	mg/L	NC	20		
8743125	. Potassium (K)	2023/06/21	NC	80 - 120	103	80 - 120	<0.02	mg/L	0.99	20		
8743125	. Rubidium (Rb)	2023/06/21	92	80 - 120	99	80 - 120	<0.00002	mg/L	NC	N/A		
8743125	. Selenium (Se)	2023/06/21	91	80 - 120	102	80 - 120	<0.00005	mg/L	NC	20		
8743125	. Silicon (Si)	2023/06/21	NC	80 - 120	104	80 - 120	<0.005	mg/L	0.24	20		
8743125	. Silver (Ag)	2023/06/21	76 (2)	80 - 120	100	80 - 120	<0.00001	mg/L	NC	20		
8743125	. Sodium (Na)	2023/06/21	NC	80 - 120	102	80 - 120	<0.01	mg/L	2.4	20		
8743125	. Strontium (Sr)	2023/06/21	NC	80 - 120	98	80 - 120	<0.0001	mg/L	1.0	20		
8743125	. Tellurium (Te)	2023/06/21	90	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8743125	. Thallium (Tl)	2023/06/21	90	80 - 120	101	80 - 120	<0.000005	mg/L	NC	20		
8743125	. Thorium (Th)	2023/06/21	91	80 - 120	97	80 - 120	<0.0002	mg/L	NC	20		
8743125	. Tin (Sn)	2023/06/21	96	80 - 120	102	80 - 120	<0.0001	mg/L	NC	20		
8743125	. Titanium (Ti)	2023/06/21	92	80 - 120	101	80 - 120	<0.0005	mg/L	14	20		
8743125	. Tungsten (W)	2023/06/21	97	80 - 120	103	80 - 120	<0.0001	mg/L	7.5	20		
8743125	. Uranium (U)	2023/06/21	93	80 - 120	101	80 - 120	<0.00001	mg/L	0.34	20		
8743125	. Vanadium (V)	2023/06/21	94	80 - 120	99	80 - 120	<0.00005	mg/L	6.4	20		
8743125	. Zinc (Zn)	2023/06/21	87	80 - 120	98	80 - 120	<0.0005	mg/L	0.14	20		
8743125	. Zirconium (Zr)	2023/06/21	101	80 - 120	104	80 - 120	<0.0001	mg/L	2.1	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8751188	Total Phosphorus (P)	2023/06/24	106	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20	89	80 - 120
8751189	Strong Acid Dissoc. Cyanide (CN)	2023/06/21	92	80 - 120	98	80 - 120	<0.00050	mg/L				
8756226	Free Cyanide (CN)	2023/06/26	91	80 - 120	87	80 - 120	<2.0	ug/L				

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike recoveries were not calculated (NC) because of high concentration of target compounds in the parent sample. The relative difference between the spiked and un-spiked concentrations is not sufficiently significant to permit a reliable recovery calculation.

(2) Matrix spike exceedes acceptance limits. Probable matrix interference.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Anastassia Hamanov, Scientific Specialist

<original signed by>

Colleen Acker, B.Sc, Scientific Service Specialist

<original signed by>

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your C.O.C. #: 718121

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/06/27
Report #: R7691949
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3H7099
Received: 2023/06/15, 16:51

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	3	N/A	2023/06/22	ATL SOP-00205	SM 24 2310B m
Alkalinity	3	N/A	2023/06/21	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	3	N/A	2023/06/22	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	3	N/A	2023/06/22	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	3	N/A	2023/06/21	CAM SOP-00414	SM 23 2510 m
Fluoride	3	2023/06/21	2023/06/21	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	3	N/A	2023/06/23	CAM SOP 00102/00408/00447	SM 2340 B
Mercury in Water by CVAA	2	2023/06/22	2023/06/22	CAM SOP-00453	EPA 7470A m
Dissolved Mercury (low level)	3	2023/06/20	2023/06/20	CAM SOP-00453	EPA 7470 m
Mercury (low level)	1	2023/06/21	2023/06/21	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	3	2023/06/20	2023/06/20	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	3	N/A	2023/06/23	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	3	N/A	2023/06/23	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	3	2023/06/21	2023/06/22	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	3	N/A	2023/06/26	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	3	2023/06/22	2023/06/22	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	3	2023/06/24	2023/06/27	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	1	N/A	2023/06/22	CAM SOP-00441	USGS I-2522-90 m
Total Ammonia-N	2	N/A	2023/06/23	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (3)	3	N/A	2023/06/20	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	3	2023/06/21	2023/06/21	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (4)	3	N/A	2023/06/17		Field pH Meter
Sulphate by Automated Turbidimetry	3	N/A	2023/06/22	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	3	2023/06/21	2023/06/22	CAM SOP-00428	SM 23 2540C m
Field Temperature (4)	3	N/A	2023/06/17		Field Thermometer
Total Kjeldahl Nitrogen in Water	3	2023/06/21	2023/06/22	CAM SOP-00938	OMOE E3516 m
Low Level Total Suspended Solids	3	2023/06/21	2023/06/22	CAM SOP-00428	SM 23 2540D m
Turbidity	3	N/A	2023/06/20	CAM SOP-00417	SM 23 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your C.O.C. #: 718121

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/06/27
Report #: R7691949
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3H7099
Received: 2023/06/15, 16:51

(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(4) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633
==========
This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3H7099
Report Date: 2023/06/27

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: BM

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WDD736			WDD736			WDD737		
Sampling Date		2023/06/14 12:31			2023/06/14 12:31			2023/06/14 08:00		
COC Number		718121			718121			718121		
	UNITS	MW22-OB-21	RDL	QC Batch	MW22-OB-21 Lab-Dup	RDL	QC Batch	GW Duplicate 1	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	180	1.0	8736006				180	1.0	8736006
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.6	1.0	8736006				1.7	1.0	8736006
Hardness (CaCO3)	mg/L	190	1.0	8736590				190	1.0	8736590
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8736006				<1.0	1.0	8736006
Field Measurements										
Field Temperature	Celsius	5.9	N/A	ONSITE				0.00	N/A	ONSITE
Field Measured pH	pH	7.84		ONSITE				0.00		ONSITE
Inorganics										
Acidity	mg/L	<5.0	5.0	8744967				<5.0	5.0	8744967
Total Ammonia-N	mg/L	0.22	0.050	8743362				0.24	0.050	8743451
Conductivity	mS/cm	0.348	0.001	8741687	0.353	0.001	8741687	0.347	0.001	8741687
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	8753723				<2.0 (1)	2.0	8753723
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8755995				<0.00050	0.00050	8755995
Total Dissolved Solids	mg/L	235	10	8741772				255	10	8741772
Fluoride (F-)	mg/L	0.80	0.10	8741685	0.80	0.10	8741685	0.80	0.10	8741685
Total Kjeldahl Nitrogen (TKN)	mg/L	0.66	0.20	8742159				0.72	0.20	8742159
pH	pH	7.98		8741688	7.99		8741688	8.00		8741688
Total Phosphorus (P)	mg/L	1.1	0.010	8755987				1.7	0.010	8755987
Total Suspended Solids	mg/L	190	1	8741824				3100	5	8741912
Dissolved Sulphate (SO4)	mg/L	<1.0	1.0	8737632				<1.0	1.0	8737632
Turbidity	NTU	6.9	0.1	8735636				2.5	0.1	8735636
Alkalinity (Total as CaCO3)	mg/L	180	1.0	8741678	180	1.0	8741678	180	1.0	8741678
Dissolved Chloride (Cl-)	mg/L	2.0	1.0	8737624				1.7	1.0	8737624
Nitrite (N)	mg/L	<0.010	0.010	8737502				<0.010	0.010	8737502
Nitrate (N)	mg/L	<0.10	0.10	8737502				<0.10	0.10	8737502
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8737502				<0.10	0.10	8737502

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3H7099
Report Date: 2023/06/27

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: BM

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WDD738		
Sampling Date		2023/06/14 08:00		
COC Number		718121		
	UNITS	**Field Blank1**	**RDL**	**QC Batch**
Calculated Parameters				
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8736006
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8736006
Hardness (CaCO3)	mg/L	<1.0	1.0	8736590
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8736006
Field Measurements				
Field Temperature	Celsius	0.00	N/A	ONSITE
Field Measured pH	pH	0.00		ONSITE
Inorganics				
Acidity	mg/L	<5.0	5.0	8744967
Total Ammonia-N	mg/L	<0.050	0.050	8743362
Conductivity	mS/cm	0.001	0.001	8741687
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	8753723
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8755995
Total Dissolved Solids	mg/L	<10	10	8741772
Fluoride (F-)	mg/L	<0.10	0.10	8741685
Total Kjeldahl Nitrogen (TKN)	mg/L	<0.10	0.10	8742159
pH	pH	5.75		8741688
Total Phosphorus (P)	mg/L	<0.0010	0.0010	8755987
Total Suspended Solids	mg/L	<1	1	8741912
Dissolved Sulphate (SO4)	mg/L	<1.0	1.0	8737632
Turbidity	NTU	<0.1	0.1	8735636
Alkalinity (Total as CaCO3)	mg/L	<1.0	1.0	8741678
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	8737624
Nitrite (N)	mg/L	<0.010	0.010	8737502
Nitrate (N)	mg/L	<0.10	0.10	8737502
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8737502

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WDD736			WDD736			WDD737		
Sampling Date		2023/06/14 12:31			2023/06/14 12:31			2023/06/14 08:00		
COC Number		718121			718121			718121		
	UNITS	MW22-OB-21	RDL	QC Batch	MW22-OB-21 Lab-Dup	RDL	QC Batch	GW Duplicate 1	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0028	0.0005	8745770	0.0028	0.0005	8745770	0.0031	0.0005	8745770
. Aluminum (Al)	mg/L	3.73	0.0025	8745906	3.92	0.0025	8745906	9.72	0.0025	8745906
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8745770	<0.0001	0.0001	8745770	<0.0001	0.0001	8745770
. Antimony (Sb)	mg/L	<0.0005	0.0005	8745906	<0.0005	0.0005	8745906	<0.0005	0.0005	8745906
Dissolved Arsenic (As)	mg/L	0.0011	0.0001	8745770	0.0011	0.0001	8745770	0.0010	0.0001	8745770
. Arsenic (As)	mg/L	0.0063	0.0005	8745906	0.0063	0.0005	8745906	0.0044	0.0005	8745906
Dissolved Barium (Ba)	mg/L	0.0277	0.0002	8745770	0.0275	0.0002	8745770	0.0281	0.0002	8745770
. Barium (Ba)	mg/L	0.088	0.001	8745906	0.087	0.001	8745906	0.119	0.001	8745906
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8745770	<0.00005	0.00005	8745770	<0.00005	0.00005	8745770
. Beryllium (Be)	mg/L	0.00033	0.00025	8745906	0.00032	0.00025	8745906	0.00041	0.00025	8745906
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8745770	<0.0001	0.0001	8745770	<0.0001	0.0001	8745770
. Bismuth (Bi)	mg/L	<0.0005	0.0005	8745906	<0.0005	0.0005	8745906	<0.0005	0.0005	8745906
Dissolved Boron (B)	mg/L	0.028	0.001	8745770	0.028	0.001	8745770	0.027	0.001	8745770
. Boron (B)	mg/L	0.053	0.005	8745906	0.053	0.005	8745906	0.051	0.005	8745906
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8745770	<0.00001	0.00001	8745770	<0.00001	0.00001	8745770
. Cadmium (Cd)	mg/L	0.000191	0.000025	8745906	0.000213	0.000025	8745906	0.000177	0.000025	8745906
Dissolved Calcium (Ca)	mg/L	43.0	0.02	8745770	43.2	0.02	8745770	44.2	0.02	8745770
. Calcium (Ca)	mg/L	490	1	8745906	499	1	8745906	421	1	8745906
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	8745770	<0.00002	0.00002	8745770	<0.00002	0.00002	8745770
. Cesium (Cs)	mg/L	0.0002	0.0001	8745906	0.0002	0.0001	8745906	0.0006	0.0001	8745906
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8745770	<0.0005	0.0005	8745770	<0.0005	0.0005	8745770
. Chromium (Cr)	mg/L	0.0167	0.0025	8745906	0.0162	0.0025	8745906	0.0255	0.0025	8745906
Dissolved Cobalt (Co)	mg/L	0.00029	0.00005	8745770	0.00029	0.00005	8745770	0.00030	0.00005	8745770
. Cobalt (Co)	mg/L	0.00870	0.00025	8745906	0.00864	0.00025	8745906	0.00861	0.00025	8745906
Dissolved Copper (Cu)	mg/L	0.0005	0.0001	8745770	0.0005	0.0001	8745770	0.0001	0.0001	8745770
. Copper (Cu)	mg/L	0.0192	0.0005	8745906	0.0196	0.0005	8745906	0.0224	0.0005	8745906
Dissolved Iron (Fe)	mg/L	0.131	0.005	8745770	0.131	0.005	8745770	0.173	0.005	8745770
. Iron (Fe)	mg/L	9.28	0.025	8745906	9.19	0.025	8745906	12.6	0.025	8745906
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8745770	<0.00005	0.00005	8745770	<0.00005	0.00005	8745770
. Lead (Pb)	mg/L	0.00684	0.00025	8745906	0.00687	0.00025	8745906	0.00809	0.00025	8745906

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WDD736			WDD736			WDD737		
Sampling Date		2023/06/14 12:31			2023/06/14 12:31			2023/06/14 08:00		
COC Number		718121			718121			718121		
	UNITS	MW22-OB-21	RDL	QC Batch	MW22-OB-21 Lab-Dup	RDL	QC Batch	GW Duplicate 1	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0108	0.0005	8745770	0.0110	0.0005	8745770	0.0110	0.0005	8745770
. Lithium (Li)	mg/L	0.0182	0.0025	8745906	0.0182	0.0025	8745906	0.0220	0.0025	8745906
Dissolved Magnesium (Mg)	mg/L	20.1	0.005	8745770	20.2	0.005	8745770	20.5	0.005	8745770
. Magnesium (Mg)	mg/L	145	0.025	8745906	146	0.025	8745906	115	0.025	8745906
Dissolved Manganese (Mn)	mg/L	0.0799	0.0002	8745770	0.0809	0.0002	8745770	0.0810	0.0002	8745770
. Manganese (Mn)	mg/L	0.808	0.001	8745906	0.815	0.001	8745906	0.708	0.001	8745906
Mercury (Hg)	mg/L	<0.00010	0.00010	8744473				<0.00010	0.00010	8744473
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8738565				<0.01	0.01	8739051
Dissolved Molybdenum (Mo)	mg/L	0.0200	0.00005	8745770	0.0201	0.00005	8745770	0.0197	0.00005	8745770
. Molybdenum (Mo)	mg/L	0.00695	0.00025	8745906	0.00698	0.00025	8745906	0.0110	0.00025	8745906
Dissolved Nickel (Ni)	mg/L	0.0020	0.0001	8745770	0.0019	0.0001	8745770	0.0020	0.0001	8745770
. Nickel (Ni)	mg/L	0.0151	0.0005	8745906	0.0153	0.0005	8745906	0.0175	0.0005	8745906
Dissolved Phosphorus (P)	mg/L	<0.005	0.005	8745770	<0.005	0.005	8745770	<0.005	0.005	8745770
. Phosphorus (P)	mg/L	2.13	0.025	8745906	2.10	0.025	8745906	1.70	0.025	8745906
Dissolved Potassium (K)	mg/L	5.11	0.02	8745770	5.12	0.02	8745770	5.13	0.02	8745770
. Potassium (K)	mg/L	6.0	0.1	8745906	6.0	0.1	8745906	7.9	0.1	8745906
Dissolved Rubidium (Rb)	mg/L	0.00138	0.00002	8745770	0.00140	0.00002	8745770	0.00139	0.00002	8745770
. Rubidium (Rb)	mg/L	0.0065	0.0001	8745906	0.0066	0.0001	8745906	0.0156	0.0001	8745906
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8745770	<0.0002	0.0002	8745770	<0.0002	0.0002	8745770
. Selenium (Se)	mg/L	<0.00025	0.00025	8745906	<0.00025	0.00025	8745906	<0.00025	0.00025	8745906
Dissolved Silicon (Si)	mg/L	5.66	0.025	8745770	5.56	0.025	8745770	5.71	0.025	8745770
. Silicon (Si)	mg/L	11.5	0.025	8745906	10.6	0.025	8745906	11.2	0.25	8745906
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8745770	<0.00001	0.00001	8745770	<0.00001	0.00001	8745770
. Silver (Ag)	mg/L	<0.00005	0.00005	8745906	<0.00005	0.00005	8745906	<0.00005	0.00005	8745906
Dissolved Sodium (Na)	mg/L	9.32	0.01	8745770	9.36	0.01	8745770	9.39	0.01	8745770
. Sodium (Na)	mg/L	9.70	0.05	8745906	9.73	0.05	8745906	10.8	0.05	8745906
Dissolved Strontium (Sr)	mg/L	0.176	0.0001	8745770	0.176	0.0001	8745770	0.179	0.0001	8745770
. Strontium (Sr)	mg/L	0.409	0.0005	8745906	0.409	0.0005	8745906	0.375	0.0005	8745906
Dissolved Sulphur (S)	mg/L	<0.5	0.5	8737749				<0.5	0.5	8737749
Total Sulphur (S)	mg/L	1.8	0.5	8741498				0.8	0.5	8741498
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8745770	<0.0001	0.0001	8745770	<0.0001	0.0001	8745770

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WDD736			WDD736			WDD737		
Sampling Date		2023/06/14 12:31			2023/06/14 12:31			2023/06/14 08:00		
COC Number		718121			718121			718121		
	UNITS	MW22-OB-21	RDL	QC Batch	MW22-OB-21 Lab-Dup	RDL	QC Batch	GW Duplicate 1	RDL	QC Batch
. Tellurium (Te)	mg/L	<0.0005	0.0005	8745906	<0.0005	0.0005	8745906	<0.0005	0.0005	8745906
Dissolved Thallium (Tl)	mg/L	0.000008	0.000005	8745770	0.000006	0.000005	8745770	0.000005	0.000005	8745770
. Thallium (Tl)	mg/L	0.000161	0.000025	8745906	0.000162	0.000025	8745906	0.000198	0.000025	8745906
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8745770	<0.0002	0.0002	8745770	<0.0002	0.0002	8745770
. Thorium (Th)	mg/L	<0.001	0.001	8745906	<0.001	0.001	8745906	0.002	0.001	8745906
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8745770	<0.0001	0.0001	8745770	<0.0001	0.0001	8745770
. Tin (Sn)	mg/L	<0.0005	0.0005	8745906	<0.0005	0.0005	8745906	0.0009	0.0005	8745906
Dissolved Titanium (Ti)	mg/L	<0.0005	0.0005	8745770	0.0006	0.0005	8745770	0.0005	0.0005	8745770
. Titanium (Ti)	mg/L	0.0498	0.0025	8745906	0.0465	0.0025	8745906	0.416	0.0025	8745906
Dissolved Tungsten (W)	mg/L	0.0003	0.0001	8745770	0.0003	0.0001	8745770	0.0003	0.0001	8745770
. Tungsten (W)	mg/L	<0.0005	0.0005	8745906	<0.0005	0.0005	8745906	<0.0005	0.0005	8745906
Dissolved Uranium (U)	mg/L	0.00023	0.00001	8745770	0.00024	0.00001	8745770	0.00024	0.00001	8745770
. Uranium (U)	mg/L	0.00149	0.00005	8745906	0.00144	0.00005	8745906	0.00150	0.00005	8745906
Dissolved Vanadium (V)	mg/L	0.00019	0.00005	8745770	0.00019	0.00005	8745770	0.00018	0.00005	8745770
. Vanadium (V)	mg/L	0.0137	0.00025	8745906	0.0137	0.00025	8745906	0.0211	0.00025	8745906
Dissolved Zinc (Zn)	mg/L	0.0008	0.0005	8745770	0.0008	0.0005	8745770	0.0007	0.0005	8745770
. Zinc (Zn)	mg/L	0.208	0.0025	8745906	0.208	0.0025	8745906	0.188	0.0025	8745906
Dissolved Zirconium (Zr)	mg/L	<0.0001	0.0001	8745770	<0.0001	0.0001	8745770	<0.0001	0.0001	8745770
. Zirconium (Zr)	mg/L	0.0022	0.0005	8745906	0.0020	0.0005	8745906	0.0111	0.0005	8745906

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WDD738		
Sampling Date		2023/06/14 08:00		
COC Number		718121		
	UNITS	Field Blank1	RDL	QC Batch
Metals				
Dissolved Aluminum (Al)	mg/L	0.0009	0.0005	8745770
. Aluminum (Al)	mg/L	0.0103	0.0005	8745906
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8745770
. Antimony (Sb)	mg/L	<0.0001	0.0001	8745906
Dissolved Arsenic (As)	mg/L	<0.0001	0.0001	8745770
. Arsenic (As)	mg/L	<0.0001	0.0001	8745906
Dissolved Barium (Ba)	mg/L	<0.0002	0.0002	8745770
. Barium (Ba)	mg/L	<0.0002	0.0002	8745906
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8745770
. Beryllium (Be)	mg/L	<0.00005	0.00005	8745906
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8745770
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8745906
Dissolved Boron (B)	mg/L	<0.001	0.001	8745770
. Boron (B)	mg/L	<0.001	0.001	8745906
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8745770
. Cadmium (Cd)	mg/L	<0.000005	0.000005	8745906
Dissolved Calcium (Ca)	mg/L	<0.02	0.02	8745770
. Calcium (Ca)	mg/L	0.18	0.02	8745906
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	8745770
. Cesium (Cs)	mg/L	<0.00002	0.00002	8745906
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8745770
. Chromium (Cr)	mg/L	<0.0005	0.0005	8745906
Dissolved Cobalt (Co)	mg/L	<0.00005	0.00005	8745770
. Cobalt (Co)	mg/L	<0.00005	0.00005	8745906
Dissolved Copper (Cu)	mg/L	<0.0001	0.0001	8745770
. Copper (Cu)	mg/L	0.0003	0.0001	8745906
Dissolved Iron (Fe)	mg/L	<0.005	0.005	8745770
. Iron (Fe)	mg/L	0.006	0.005	8745906
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8745770
. Lead (Pb)	mg/L	<0.00005	0.00005	8745906
Dissolved Lithium (Li)	mg/L	<0.0005	0.0005	8745770

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WDD738		
Sampling Date		2023/06/14 08:00		
COC Number		718121		
	UNITS	Field Blank1	RDL	QC Batch
. Lithium (Li)	mg/L	<0.0005	0.0005	8745906
Dissolved Magnesium (Mg)	mg/L	<0.005	0.005	8745770
. Magnesium (Mg)	mg/L	0.010	0.005	8745906
Dissolved Manganese (Mn)	mg/L	<0.0002	0.0002	8745770
. Manganese (Mn)	mg/L	0.0003	0.0002	8745906
Mercury (Hg)	ug/L	<0.01	0.01	8741555
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8738565
Dissolved Molybdenum (Mo)	mg/L	<0.00005	0.00005	8745770
. Molybdenum (Mo)	mg/L	<0.00005	0.00005	8745906
Dissolved Nickel (Ni)	mg/L	<0.0001	0.0001	8745770
. Nickel (Ni)	mg/L	<0.0001	0.0001	8745906
Dissolved Phosphorus (P)	mg/L	<0.005	0.005	8745770
. Phosphorus (P)	mg/L	<0.005	0.005	8745906
Dissolved Potassium (K)	mg/L	<0.02	0.02	8745770
. Potassium (K)	mg/L	<0.02	0.02	8745906
Dissolved Rubidium (Rb)	mg/L	<0.00002	0.00002	8745770
. Rubidium (Rb)	mg/L	<0.00002	0.00002	8745906
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8745770
. Selenium (Se)	mg/L	<0.00005	0.00005	8745906
Dissolved Silicon (Si)	mg/L	<0.005	0.005	8745770
. Silicon (Si)	mg/L	0.011	0.005	8745906
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8745770
. Silver (Ag)	mg/L	<0.00001	0.00001	8745906
Dissolved Sodium (Na)	mg/L	<0.01	0.01	8745770
. Sodium (Na)	mg/L	<0.01	0.01	8745906
Dissolved Strontium (Sr)	mg/L	<0.0001	0.0001	8745770
. Strontium (Sr)	mg/L	0.0002	0.0001	8745906
Dissolved Sulphur (S)	mg/L	<0.5	0.5	8737749
Total Sulphur (S)	mg/L	<0.5	0.5	8741498
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8745770
. Tellurium (Te)	mg/L	<0.0001	0.0001	8745906
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8745770

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WDD738		
Sampling Date		2023/06/14 08:00		
COC Number		718121		
	UNITS	Field Blank1	RDL	QC Batch
. Thallium (Tl)	mg/L	<0.000005	0.000005	8745906
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8745770
. Thorium (Th)	mg/L	<0.0002	0.0002	8745906
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8745770
. Tin (Sn)	mg/L	<0.0001	0.0001	8745906
Dissolved Titanium (Ti)	mg/L	<0.0005	0.0005	8745770
. Titanium (Ti)	mg/L	<0.0005	0.0005	8745906
Dissolved Tungsten (W)	mg/L	<0.0001	0.0001	8745770
. Tungsten (W)	mg/L	<0.0001	0.0001	8745906
Dissolved Uranium (U)	mg/L	<0.00001	0.00001	8745770
. Uranium (U)	mg/L	<0.00001	0.00001	8745906
Dissolved Vanadium (V)	mg/L	<0.00005	0.00005	8745770
. Vanadium (V)	mg/L	<0.00005	0.00005	8745906
Dissolved Zinc (Zn)	mg/L	<0.0005	0.0005	8745770
. Zinc (Zn)	mg/L	0.0005	0.0005	8745906
Dissolved Zirconium (Zr)	mg/L	<0.0001	0.0001	8745770
. Zirconium (Zr)	mg/L	<0.0001	0.0001	8745906

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3H7099
Report Date: 2023/06/27

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: BM

TEST SUMMARY

Bureau Veritas ID: WDD736
Sample ID: MW22-OB-21
Matrix: Water

Collected: 2023/06/14
Shipped:
Received: 2023/06/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8744967	N/A	2023/06/22	Brent Boudreau
Alkalinity	AT	8741678	N/A	2023/06/21	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8736006	N/A	2023/06/22	Automated Statchk
Chloride by Automated Colourimetry	KONE	8737624	N/A	2023/06/22	Alina Dobreanu
Conductivity	AT	8741687	N/A	2023/06/21	Kien Tran
Fluoride	ISE	8741685	2023/06/21	2023/06/21	Kien Tran
Hardness (calculated as CaCO3)		8736590	N/A	2023/06/23	Automated Statchk
Mercury in Water by CVAA	CV/AA	8744473	2023/06/22	2023/06/22	Jaswinder Kaur
Dissolved Mercury (low level)	CV/AA	8738565	2023/06/20	2023/06/20	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8737749	2023/06/20	2023/06/20	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8745770	N/A	2023/06/23	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8745906	N/A	2023/06/23	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8741498	2023/06/21	2023/06/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8753723	N/A	2023/06/26	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8755995	2023/06/22	2023/06/22	Ming Dong
Total Phosphorus Low Level Total	KONE	8755987	2023/06/24	2023/06/27	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8743362	N/A	2023/06/23	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8737502	N/A	2023/06/20	Chandra Nandlal
pH	AT	8741688	2023/06/21	2023/06/21	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/17	Harmanpreet Kaur
Sulphate by Automated Turbidimetry	KONE	8737632	N/A	2023/06/22	Alina Dobreanu
Total Dissolved Solids	BAL	8741772	2023/06/21	2023/06/22	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/06/17	Harmanpreet Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8742159	2023/06/21	2023/06/22	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8741824	2023/06/21	2023/06/22	Shaneil Hall
Turbidity	AT	8735636	N/A	2023/06/20	Gurparteek KAUR

Bureau Veritas ID: WDD736 Dup
Sample ID: MW22-OB-21
Matrix: Water

Collected: 2023/06/14
Shipped:
Received: 2023/06/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8741678	N/A	2023/06/21	Kien Tran
Conductivity	AT	8741687	N/A	2023/06/21	Kien Tran
Fluoride	ISE	8741685	2023/06/21	2023/06/21	Kien Tran
Dissolved Metals by ICPMS (low level)	ICP1/MS	8745770	N/A	2023/06/23	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8745906	N/A	2023/06/23	Prempal Bhatti
pH	AT	8741688	2023/06/21	2023/06/21	Kien Tran

Bureau Veritas ID: WDD737
Sample ID: GW Duplicate 1
Matrix: Water

Collected: 2023/06/14
Shipped:
Received: 2023/06/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8744967	N/A	2023/06/22	Brent Boudreau

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WDD737
Sample ID: GW Duplicate 1
Matrix: Water

Collected: 2023/06/14
Shipped:
Received: 2023/06/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8741678	N/A	2023/06/21	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8736006	N/A	2023/06/22	Automated Statchk
Chloride by Automated Colourimetry	KONE	8737624	N/A	2023/06/22	Alina Dobreanu
Conductivity	AT	8741687	N/A	2023/06/21	Kien Tran
Fluoride	ISE	8741685	2023/06/21	2023/06/21	Kien Tran
Hardness (calculated as CaCO3)		8736590	N/A	2023/06/23	Automated Statchk
Mercury in Water by CVAA	CV/AA	8744473	2023/06/22	2023/06/22	Jaswinder Kaur
Dissolved Mercury (low level)	CV/AA	8739051	2023/06/20	2023/06/20	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8737749	2023/06/20	2023/06/20	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8745770	N/A	2023/06/23	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8745906	N/A	2023/06/23	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8741498	2023/06/21	2023/06/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8753723	N/A	2023/06/26	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8755995	2023/06/22	2023/06/22	Ming Dong
Total Phosphorus Low Level Total	KONE	8755987	2023/06/24	2023/06/27	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8743451	N/A	2023/06/22	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8737502	N/A	2023/06/20	Chandra Nandlal
pH	AT	8741688	2023/06/21	2023/06/21	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/17	Harmanpreet Kaur
Sulphate by Automated Turbidimetry	KONE	8737632	N/A	2023/06/22	Alina Dobreanu
Total Dissolved Solids	BAL	8741772	2023/06/21	2023/06/22	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/06/17	Harmanpreet Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8742159	2023/06/21	2023/06/22	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8741912	2023/06/21	2023/06/22	Shaneil Hall
Turbidity	AT	8735636	N/A	2023/06/20	Gurparteek KAUR

Bureau Veritas ID: WDD738
Sample ID: Field Blank1
Matrix: Water

Collected: 2023/06/14
Shipped:
Received: 2023/06/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8744967	N/A	2023/06/22	Brent Boudreau
Alkalinity	AT	8741678	N/A	2023/06/21	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8736006	N/A	2023/06/22	Automated Statchk
Chloride by Automated Colourimetry	KONE	8737624	N/A	2023/06/22	Alina Dobreanu
Conductivity	AT	8741687	N/A	2023/06/21	Kien Tran
Fluoride	ISE	8741685	2023/06/21	2023/06/21	Kien Tran
Hardness (calculated as CaCO3)		8736590	N/A	2023/06/23	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8738565	2023/06/20	2023/06/20	Jaswinder Kaur
Mercury (low level)	CV/AA	8741555	2023/06/21	2023/06/21	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8737749	2023/06/20	2023/06/20	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8745770	N/A	2023/06/23	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8745906	N/A	2023/06/23	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8741498	2023/06/21	2023/06/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8753723	N/A	2023/06/26	Amy Phan

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3H7099
Report Date: 2023/06/27

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: BM

TEST SUMMARY

Bureau Veritas ID: WDD738
Sample ID: Field Blank1
Matrix: Water

Collected: 2023/06/14
Shipped:
Received: 2023/06/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8755995	2023/06/22	2023/06/22	Ming Dong
Total Phosphorus Low Level Total	KONE	8755987	2023/06/24	2023/06/27	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8743362	N/A	2023/06/23	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8737502	N/A	2023/06/20	Chandra Nandlal
pH	AT	8741688	2023/06/21	2023/06/21	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/17	Harmanpreet Kaur
Sulphate by Automated Turbidimetry	KONE	8737632	N/A	2023/06/22	Alina Dobreanu
Total Dissolved Solids	BAL	8741772	2023/06/21	2023/06/22	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/06/17	Harmanpreet Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8742159	2023/06/21	2023/06/22	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8741912	2023/06/21	2023/06/22	Shaneil Hall
Turbidity	AT	8735636	N/A	2023/06/20	Gurparteek KAUR

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	4.0°C

Sample WDD736 [MW22-OB-21] : Acidity sample contained headspace.

Metals Analysis: Due to the sample matrix, the sample required dilution. Detection limits were adjusted accordingly.

Sample WDD737 [GW Duplicate 1] : Acidity sample contained headspace.

Metals Analysis: Due to the sample matrix, the sample required dilution. Detection limits were adjusted accordingly.

Sample WDD738 [Field Blank1] : Acidity sample contained headspace.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3H7099
Report Date: 2023/06/27

QUALITY ASSURANCE REPORT

Greenstone Mine
Your P.O. #: 4800001036
Sampler Initials: BM

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8735636	Turbidity	2023/06/20			98	80 - 120	<0.1	NTU	5.2	20		
8737502	Nitrate (N)	2023/06/20	NC	80 - 120	107	80 - 120	<0.10	mg/L	0.053	20		
8737502	Nitrite (N)	2023/06/20	106	80 - 120	107	80 - 120	<0.010	mg/L	3.7	20		
8737624	Dissolved Chloride (Cl-)	2023/06/22	NC	80 - 120	93	80 - 120	<1.0	mg/L	1.0	20		
8737632	Dissolved Sulphate (SO4)	2023/06/22	NC	75 - 125	94	80 - 120	<1.0	mg/L	1.7	20		
8737749	Dissolved Sulphur (S)	2023/06/20	NC	80 - 120	97	80 - 120	<0.5	mg/L				
8738565	Dissolved Mercury (Hg)	2023/06/20	102	75 - 125	101	80 - 120	<0.01	ug/L	NC	20		
8739051	Dissolved Mercury (Hg)	2023/06/20	105	75 - 125	101	80 - 120	<0.01	ug/L	NC	20		
8741498	Total Sulphur (S)	2023/06/22	NC	80 - 120	101	80 - 120	<0.5	mg/L				
8741555	Mercury (Hg)	2023/06/21	101	75 - 125	102	80 - 120	<0.01	ug/L	NC	20		
8741678	Alkalinity (Total as CaCO3)	2023/06/21			95	85 - 115	<1.0	mg/L	0.74	20		
8741685	Fluoride (F-)	2023/06/21	108	80 - 120	104	80 - 120	<0.10	mg/L	0.46	20		
8741687	Conductivity	2023/06/21			101	85 - 115	<0.001	mS/cm	1.4	10		
8741688	pH	2023/06/21			102	98 - 103			0.078	N/A		
8741772	Total Dissolved Solids	2023/06/22			95	90 - 110	<10	mg/L	2.8	20		
8741824	Total Suspended Solids	2023/06/22			101	85 - 115	<1	mg/L	0	20		
8741912	Total Suspended Solids	2023/06/22			101	85 - 115	<1	mg/L	15	20		
8742159	Total Kjeldahl Nitrogen (TKN)	2023/06/22	NC	80 - 120	99	80 - 120	<0.10	mg/L	15	20	98	80 - 120
8743362	Total Ammonia-N	2023/06/23	96	75 - 125	102	80 - 120	<0.050	mg/L	5.4	20		
8743451	Total Ammonia-N	2023/06/22	100	75 - 125	101	80 - 120	<0.050	mg/L	NC	20		
8744473	Mercury (Hg)	2023/06/22	102	75 - 125	100	80 - 120	<0.00010	mg/L	NC	20		
8744967	Acidity	2023/06/22	91	80 - 120	101	80 - 120	<5.0	mg/L	NC	25		
8745770	Dissolved Aluminum (Al)	2023/06/23	111	80 - 120	100	80 - 120	<0.0005	mg/L	0.18	20		
8745770	Dissolved Antimony (Sb)	2023/06/23	115	80 - 120	109	80 - 120	<0.0001	mg/L	NC	20		
8745770	Dissolved Arsenic (As)	2023/06/23	105	80 - 120	99	80 - 120	<0.0001	mg/L	0.57	20		
8745770	Dissolved Barium (Ba)	2023/06/23	106	80 - 120	100	80 - 120	<0.0002	mg/L	0.51	20		
8745770	Dissolved Beryllium (Be)	2023/06/23	107	80 - 120	98	80 - 120	<0.00005	mg/L	NC	20		
8745770	Dissolved Bismuth (Bi)	2023/06/23	63 (1)	80 - 120	97	80 - 120	<0.0001	mg/L	NC	20		
8745770	Dissolved Boron (B)	2023/06/23	105	80 - 120	100	80 - 120	<0.001	mg/L	1.5	20		
8745770	Dissolved Cadmium (Cd)	2023/06/23	109	80 - 120	99	80 - 120	<0.00001	mg/L	NC	20		
8745770	Dissolved Calcium (Ca)	2023/06/23	NC	80 - 120	100	80 - 120	<0.02	mg/L	0.59	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8745770	Dissolved Cesium (Cs)	2023/06/23	102	80 - 120	100	80 - 120	<0.00002	mg/L	NC	N/A		
8745770	Dissolved Chromium (Cr)	2023/06/23	106	80 - 120	100	80 - 120	<0.0005	mg/L	NC	20		
8745770	Dissolved Cobalt (Co)	2023/06/23	102	80 - 120	100	80 - 120	<0.00005	mg/L	0.69	20		
8745770	Dissolved Copper (Cu)	2023/06/23	109	80 - 120	101	80 - 120	<0.0001	mg/L	0	20		
8745770	Dissolved Iron (Fe)	2023/06/23	105	80 - 120	100	80 - 120	<0.005	mg/L	0.31	20		
8745770	Dissolved Lead (Pb)	2023/06/23	99	80 - 120	98	80 - 120	<0.00005	mg/L	NC	20		
8745770	Dissolved Lithium (Li)	2023/06/23	109	80 - 120	104	80 - 120	<0.0005	mg/L	1.4	20		
8745770	Dissolved Magnesium (Mg)	2023/06/23	NC	80 - 120	101	80 - 120	<0.005	mg/L	0.17	20		
8745770	Dissolved Manganese (Mn)	2023/06/23	NC	80 - 120	101	80 - 120	<0.0002	mg/L	1.2	20		
8745770	Dissolved Molybdenum (Mo)	2023/06/23	117	80 - 120	102	80 - 120	<0.00005	mg/L	0.13	20		
8745770	Dissolved Nickel (Ni)	2023/06/23	100	80 - 120	100	80 - 120	<0.0001	mg/L	0.72	20		
8745770	Dissolved Phosphorus (P)	2023/06/23	126 (1)	80 - 120	108	80 - 120	<0.005	mg/L	NC	20		
8745770	Dissolved Potassium (K)	2023/06/23	NC	80 - 120	101	80 - 120	<0.02	mg/L	0.31	20		
8745770	Dissolved Rubidium (Rb)	2023/06/23	104	80 - 120	100	80 - 120	<0.00002	mg/L	NC	N/A		
8745770	Dissolved Selenium (Se)	2023/06/23	107	80 - 120	98	80 - 120	<0.0002	mg/L	NC	20		
8745770	Dissolved Silicon (Si)	2023/06/23	NC	80 - 120	101	80 - 120	<0.005	mg/L	1.7	20		
8745770	Dissolved Silver (Ag)	2023/06/23	93	80 - 120	102	80 - 120	<0.00001	mg/L	NC	20		
8745770	Dissolved Sodium (Na)	2023/06/23	NC	80 - 120	101	80 - 120	<0.01	mg/L	0.34	20		
8745770	Dissolved Strontium (Sr)	2023/06/23	NC	80 - 120	100	80 - 120	<0.0001	mg/L	0.053	20		
8745770	Dissolved Tellurium (Te)	2023/06/23	109	80 - 120	98	80 - 120	<0.0001	mg/L	NC	20		
8745770	Dissolved Thallium (Tl)	2023/06/23	100	80 - 120	100	80 - 120	<0.000005	mg/L	NC	20		
8745770	Dissolved Thorium (Th)	2023/06/23	101	80 - 120	97	80 - 120	<0.0002	mg/L	NC	20		
8745770	Dissolved Tin (Sn)	2023/06/23	114	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8745770	Dissolved Titanium (Ti)	2023/06/23	109	80 - 120	100	80 - 120	<0.0005	mg/L	11	20		
8745770	Dissolved Tungsten (W)	2023/06/23	106	80 - 120	102	80 - 120	<0.0001	mg/L	4.1	20		
8745770	Dissolved Uranium (U)	2023/06/23	103	80 - 120	100	80 - 120	<0.00001	mg/L	2.6	20		
8745770	Dissolved Vanadium (V)	2023/06/23	109	80 - 120	101	80 - 120	<0.00005	mg/L	0.52	20		
8745770	Dissolved Zinc (Zn)	2023/06/23	105	80 - 120	101	80 - 120	<0.0005	mg/L	0.38	20		
8745770	Dissolved Zirconium (Zr)	2023/06/23	120	80 - 120	104	80 - 120	<0.0001	mg/L	NC	20		
8745906	. Aluminum (Al)	2023/06/23	NC	80 - 120	101	80 - 120	<0.0005	mg/L	4.8	20		
8745906	. Antimony (Sb)	2023/06/23	99	80 - 120	108	80 - 120	<0.0001	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8745906	. Arsenic (As)	2023/06/23	115	80 - 120	98	80 - 120	<0.0001	mg/L	1.4	20		
8745906	. Barium (Ba)	2023/06/23	NC	80 - 120	99	80 - 120	<0.0002	mg/L	0.75	20		
8745906	. Beryllium (Be)	2023/06/23	90	80 - 120	97	80 - 120	<0.00005	mg/L	4.0	20		
8745906	. Bismuth (Bi)	2023/06/23	24 (1)	80 - 120	96	80 - 120	<0.0001	mg/L	NC	20		
8745906	. Boron (B)	2023/06/23	NC	80 - 120	97	80 - 120	<0.001	mg/L	1.4	20		
8745906	. Cadmium (Cd)	2023/06/23	91	80 - 120	98	80 - 120	<0.000005	mg/L	11	20		
8745906	. Calcium (Ca)	2023/06/23	NC	80 - 120	103	80 - 120	<0.02	mg/L	1.7	20		
8745906	. Cesium (Cs)	2023/06/23	89	80 - 120	98	80 - 120	<0.00002	mg/L	NC	N/A		
8745906	. Chromium (Cr)	2023/06/23	121 (1)	80 - 120	99	80 - 120	<0.0005	mg/L	2.9	20		
8745906	. Cobalt (Co)	2023/06/23	100	80 - 120	99	80 - 120	<0.00005	mg/L	0.73	20		
8745906	. Copper (Cu)	2023/06/23	125 (1)	80 - 120	100	80 - 120	<0.0001	mg/L	2.2	20		
8745906	. Iron (Fe)	2023/06/23	NC	80 - 120	99	80 - 120	<0.005	mg/L	1.1	20		
8745906	. Lead (Pb)	2023/06/23	87	80 - 120	98	80 - 120	<0.00005	mg/L	0.45	20		
8745906	. Lithium (Li)	2023/06/23	157 (1)	80 - 120	103	80 - 120	<0.0005	mg/L	0.13	20		
8745906	. Magnesium (Mg)	2023/06/23	NC	80 - 120	100	80 - 120	<0.005	mg/L	0.54	20		
8745906	. Manganese (Mn)	2023/06/23	NC	80 - 120	99	80 - 120	<0.0002	mg/L	0.86	20		
8745906	. Molybdenum (Mo)	2023/06/23	116	80 - 120	101	80 - 120	<0.00005	mg/L	0.36	20		
8745906	. Nickel (Ni)	2023/06/23	103	80 - 120	99	80 - 120	<0.0001	mg/L	0.89	20		
8745906	. Phosphorus (P)	2023/06/23	NC	80 - 120	106	80 - 120	<0.005	mg/L	1.2	20		
8745906	. Potassium (K)	2023/06/23	NC	80 - 120	100	80 - 120	<0.02	mg/L	1.3	20		
8745906	. Rubidium (Rb)	2023/06/23	127 (2)	80 - 120	99	80 - 120	<0.00002	mg/L	NC	N/A		
8745906	. Selenium (Se)	2023/06/23	89	80 - 120	100	80 - 120	<0.00005	mg/L	NC	20		
8745906	. Silicon (Si)	2023/06/23	NC	80 - 120	102	80 - 120	<0.005	mg/L	8.3	20		
8745906	. Silver (Ag)	2023/06/23	82	80 - 120	102	80 - 120	<0.00001	mg/L	NC	20		
8745906	. Sodium (Na)	2023/06/23	NC	80 - 120	100	80 - 120	<0.01	mg/L	0.29	20		
8745906	. Strontium (Sr)	2023/06/23	NC	80 - 120	99	80 - 120	<0.0001	mg/L	0.0056	20		
8745906	. Tellurium (Te)	2023/06/23	87	80 - 120	98	80 - 120	<0.0001	mg/L	NC	20		
8745906	. Thallium (Tl)	2023/06/23	81	80 - 120	97	80 - 120	<0.000005	mg/L	0.62	20		
8745906	. Thorium (Th)	2023/06/23	105	80 - 120	97	80 - 120	<0.0002	mg/L	NC	20		
8745906	. Tin (Sn)	2023/06/23	103	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8745906	. Titanium (Ti)	2023/06/23	NC	80 - 120	99	80 - 120	<0.0005	mg/L	6.9	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8745906	. Tungsten (W)	2023/06/23	83	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8745906	. Uranium (U)	2023/06/23	85	80 - 120	100	80 - 120	<0.00001	mg/L	3.4	20		
8745906	. Vanadium (V)	2023/06/23	126 (1)	80 - 120	100	80 - 120	<0.00005	mg/L	0.088	20		
8745906	. Zinc (Zn)	2023/06/23	NC	80 - 120	100	80 - 120	<0.0005	mg/L	0.098	20		
8745906	. Zirconium (Zr)	2023/06/23	123 (1)	80 - 120	104	80 - 120	<0.0001	mg/L	9.3	20		
8753723	Free Cyanide (CN)	2023/06/26	98	80 - 120	94	80 - 120	<2.0	ug/L				
8755987	Total Phosphorus (P)	2023/06/27	112	80 - 120	106	80 - 120	0.0019, RDL=0.0010 (3)	mg/L			95	80 - 120
8755995	Strong Acid Dissoc. Cyanide (CN)	2023/06/22	96	80 - 120	98	80 - 120	<0.00050	mg/L				

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix spike exceedes acceptance limits. Probable matrix interference.

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

(3) Method blank exceeds acceptance limits, 2x RDL acceptable for low level analysis

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Cristina Carriere, Senior Scientific Specialist

<original signed by>

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

<original signed by>

Janah Rhyno, Scientific Specialist

<original signed by>

Sandy Yuan, M.Sc., QP, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 720524

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/31
Report #: R7743890
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3I2612
Received: 2023/06/20, 14:53

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	1	N/A	2023/06/29	ATL SOP-00205	SM 24 2310B m
Alkalinity	1	N/A	2023/07/10	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	1	N/A	2023/06/26	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	1	N/A	2023/07/10	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	1	N/A	2023/06/24	CAM SOP-00414	SM 23 2510 m
Fluoride	1	2023/06/23	2023/06/24	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	1	N/A	2023/06/27	CAM SOP 00102/00408/00447	SM 2340 B
Mercury in Water by CVAA	1	2023/06/27	2023/06/27	CAM SOP-00453	EPA 7470A m
Dissolved Mercury (low level)	1	2023/06/25	2023/06/26	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	1	2023/06/25	2023/06/27	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	1	N/A	2023/07/26	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICPMS	1	2023/07/07	2023/07/10	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	1	2023/06/26	2023/06/26	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	1	N/A	2023/06/27	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	1	2023/06/28	2023/06/28	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	1	2023/06/28	2023/06/28	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	1	N/A	2023/06/25	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (3)	1	N/A	2023/06/24	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	1	2023/06/23	2023/06/24	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (4)	1	N/A	2023/06/22		Field pH Meter
Sulphate by Automated Turbidimetry	1	N/A	2023/07/10	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	1	2023/06/24	2023/06/26	CAM SOP-00428	SM 23 2540C m
Field Temperature (4)	1	N/A	2023/06/22		Field Thermometer
Total Kjeldahl Nitrogen in Water	1	2023/06/23	2023/06/25	CAM SOP-00938	OMOE E3516 m
Low Level Total Suspended Solids	1	2023/06/23	2023/06/24	CAM SOP-00428	SM 23 2540D m
Turbidity	1	N/A	2023/06/24	CAM SOP-00417	SM 23 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(4) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 720524

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/31
Report #: R7743890
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3I2612
Received: 2023/06/20, 14:53

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C3I2612
Report Date: 2023/07/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WEH725			WEH725		
Sampling Date		2023/06/19 16:46			2023/06/19 16:46		
COC Number		720524			720524		
	UNITS	Seep 10	RDL	QC Batch	Seep 10 Lab-Dup	RDL	QC Batch
Calculated Parameters							
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	320	1.0	8744634			
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8744634			
Hardness (CaCO3)	mg/L	1600	1.0	8744720			
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8744634			
Field Measurements							
Field Temperature	Celsius	18.1	N/A	ONSITE			
Field Measured pH	pH	6.97		ONSITE			
Inorganics							
Acidity	mg/L	44	5.0	8759986			
Total Ammonia-N	mg/L	0.11	0.050	8749640			
Conductivity	mS/cm	6.58	0.001	8750093			
Free Cyanide (CN)	ug/L	5.2 (1)	2.0	8761031			
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.0681	0.00050	8761047			
Total Dissolved Solids	mg/L	4120	10	8747463			
Fluoride (F-)	mg/L	0.16	0.10	8750096			
Total Kjeldahl Nitrogen (TKN)	mg/L	2.2	0.50	8749112			
pH	pH	7.50		8750094			
Total Phosphorus (P)	mg/L	1.6 (2)	0.010	8761046			
Total Suspended Solids	mg/L	520	5	8747489			
Dissolved Sulphate (SO4)	mg/L	960	5.0	8778398			
Turbidity	NTU	6.4	0.1	8750121	5.6	0.1	8750121
Alkalinity (Total as CaCO3)	mg/L	330	1.0	8776576			
Dissolved Chloride (Cl-)	mg/L	1400	20	8778392			
Nitrite (N)	mg/L	<0.010	0.010	8749324			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

(2) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3I2612
Report Date: 2023/07/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WEH725			WEH725		
Sampling Date		2023/06/19 16:46			2023/06/19 16:46		
COC Number		720524			720524		
	UNITS	Seep 10	RDL	QC Batch	Seep 10 Lab-Dup	RDL	QC Batch
Nitrate (N)	mg/L	<0.10	0.10	8749324			
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8749324			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WEH725			WEH725		
Sampling Date		2023/06/19 16:46			2023/06/19 16:46		
COC Number		720524			720524		
	UNITS	Seep 10	RDL	QC Batch	Seep 10 Lab-Dup	RDL	QC Batch
Metals							
Dissolved Aluminum (Al)	mg/L	0.008	0.005	8819518	0.008	0.005	8819518
Dissolved Antimony (Sb)	mg/L	<0.001	0.001	8819518	<0.001	0.001	8819518
Dissolved Arsenic (As)	mg/L	1.40	0.005	8819518	1.39	0.005	8819518
Dissolved Barium (Ba)	mg/L	0.075	0.002	8819518	0.075	0.002	8819518
Dissolved Beryllium (Be)	mg/L	<0.0005	0.0005	8819518	<0.0005	0.0005	8819518
Dissolved Bismuth (Bi)	mg/L	<0.001	0.001	8819518	<0.001	0.001	8819518
Dissolved Boron (B)	mg/L	0.10	0.01	8819518	0.10	0.01	8819518
Dissolved Cadmium (Cd)	mg/L	<0.0001	0.0001	8819518	<0.0001	0.0001	8819518
Dissolved Calcium (Ca)	mg/L	411	0.2	8819518	403	0.2	8819518
Dissolved Cesium (Cs)	mg/L	<0.0002	0.0002	8819518	<0.0002	0.0002	8819518
Dissolved Chromium (Cr)	mg/L	<0.005	0.005	8819518	<0.005	0.005	8819518
Dissolved Cobalt (Co)	mg/L	0.0016	0.0005	8819518	0.0015	0.0005	8819518
Dissolved Copper (Cu)	mg/L	<0.001	0.001	8819518	<0.001	0.001	8819518
Dissolved Iron (Fe)	mg/L	2.48	0.05	8819518	2.49	0.05	8819518
Dissolved Lead (Pb)	mg/L	<0.0005	0.0005	8819518	<0.0005	0.0005	8819518
Dissolved Lithium (Li)	mg/L	0.009	0.005	8819518	0.009	0.005	8819518
Dissolved Magnesium (Mg)	mg/L	147	0.05	8819518	147	0.05	8819518
Dissolved Manganese (Mn)	mg/L	0.838	0.002	8819518	0.842	0.002	8819518
Mercury (Hg)	mg/L	<0.00010	0.00010	8754533			
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8751297			
Dissolved Molybdenum (Mo)	mg/L	<0.0005	0.0005	8819518	<0.0005	0.0005	8819518
Dissolved Nickel (Ni)	mg/L	<0.001	0.001	8819518	<0.001	0.001	8819518
Dissolved Phosphorus (P)	mg/L	0.07	0.05	8819518	0.07	0.05	8819518
Dissolved Potassium (K)	mg/L	24.5	0.2	8819518	24.5	0.2	8819518
Dissolved Rubidium (Rb)	mg/L	0.0069	0.0002	8819518	0.0071	0.0002	8819518
Dissolved Selenium (Se)	mg/L	<0.002	0.002	8819518	<0.002	0.002	8819518
Dissolved Silicon (Si)	mg/L	8.05	0.05	8819518	7.98	0.05	8819518
Dissolved Silver (Ag)	mg/L	<0.0001	0.0001	8819518	<0.0001	0.0001	8819518
Dissolved Sodium (Na)	mg/L	902	0.5	8819518	896	0.5	8819518

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WEH725			WEH725		
Sampling Date		2023/06/19 16:46			2023/06/19 16:46		
COC Number		720524			720524		
	UNITS	Seep 10	RDL	QC Batch	Seep 10 Lab-Dup	RDL	QC Batch
Dissolved Strontium (Sr)	mg/L	2.21	0.001	8819518	2.21	0.001	8819518
Dissolved Sulphur (S)	mg/L	330	0.5	8751215			
Total Sulphur (S)	mg/L	340	0.5	8751957			
Dissolved Tellurium (Te)	mg/L	<0.001	0.001	8819518	<0.001	0.001	8819518
Dissolved Thallium (Tl)	mg/L	<0.00005	0.00005	8819518	<0.00005	0.00005	8819518
Dissolved Thorium (Th)	mg/L	<0.002	0.002	8819518	<0.002	0.002	8819518
Dissolved Tin (Sn)	mg/L	<0.001	0.001	8819518	<0.001	0.001	8819518
Dissolved Titanium (Ti)	mg/L	<0.005	0.005	8819518	<0.005	0.005	8819518
Dissolved Tungsten (W)	mg/L	<0.001	0.001	8819518	<0.001	0.001	8819518
Dissolved Uranium (U)	mg/L	<0.0001	0.0001	8819518	<0.0001	0.0001	8819518
Dissolved Vanadium (V)	mg/L	<0.0005	0.0005	8819518	<0.0005	0.0005	8819518
Dissolved Zinc (Zn)	mg/L	<0.005	0.005	8819518	<0.005	0.005	8819518
Dissolved Zirconium (Zr)	mg/L	<0.001	0.001	8819518	<0.001	0.001	8819518
Total Aluminum (Al)	ug/L	1300	4.9	8774853			
Total Antimony (Sb)	ug/L	<0.50	0.50	8774853			
Total Arsenic (As)	ug/L	19000	50	8774853			
Total Barium (Ba)	ug/L	170	2.0	8774853			
Total Beryllium (Be)	ug/L	<0.40	0.40	8774853			
Total Bismuth (Bi)	ug/L	<1.0	1.0	8774853			
Total Boron (B)	ug/L	99	10	8774853			
Total Cadmium (Cd)	ug/L	<0.090	0.090	8774853			
Total Calcium (Ca)	ug/L	440000	200	8774853			
Total Chromium (Cr)	ug/L	7.1	5.0	8774853			
Total Cobalt (Co)	ug/L	5.1	0.50	8774853			
Total Copper (Cu)	ug/L	9.8	0.90	8774853			
Total Iron (Fe)	ug/L	63000	100	8774853			
Total Lead (Pb)	ug/L	2.3	0.50	8774853			
Total Lithium (Li)	ug/L	11	5.0	8774853			
Total Magnesium (Mg)	ug/L	150000	50	8774853			
Total Manganese (Mn)	ug/L	2500	2.0	8774853			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WEH725			WEH725		
Sampling Date		2023/06/19 16:46			2023/06/19 16:46		
COC Number		720524			720524		
	UNITS	Seep 10	RDL	QC Batch	Seep 10 Lab-Dup	RDL	QC Batch
Total Molybdenum (Mo)	ug/L	<0.50	0.50	8774853			
Total Nickel (Ni)	ug/L	7.6	1.0	8774853			
Total Potassium (K)	ug/L	25000	200	8774853			
Total Selenium (Se)	ug/L	<2.0	2.0	8774853			
Total Silicon (Si)	ug/L	12000	50	8774853			
Total Silver (Ag)	ug/L	<0.090	0.090	8774853			
Total Sodium (Na)	ug/L	900000	500	8774853			
Total Strontium (Sr)	ug/L	2500	1.0	8774853			
Total Tellurium (Te)	ug/L	<1.0	1.0	8774853			
Total Thallium (Tl)	ug/L	<0.050	0.050	8774853			
Total Tin (Sn)	ug/L	<1.0	1.0	8774853			
Total Titanium (Ti)	ug/L	49	5.0	8774853			
Total Tungsten (W)	ug/L	5.1	1.0	8774853			
Total Uranium (U)	ug/L	0.17	0.10	8774853			
Total Vanadium (V)	ug/L	5.1	0.50	8774853			
Total Zinc (Zn)	ug/L	43	5.0	8774853			
Total Zirconium (Zr)	ug/L	1.3	1.0	8774853			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3I2612
Report Date: 2023/07/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

TEST SUMMARY

Bureau Veritas ID: WEH725
Sample ID: Seep 10
Matrix: Water

Collected: 2023/06/19
Shipped:
Received: 2023/06/20

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8759986	N/A	2023/06/29	Brent Boudreau
Alkalinity	AT	8776576	N/A	2023/07/10	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8744634	N/A	2023/06/26	Automated Statchk
Chloride by Automated Colourimetry	KONE	8778392	N/A	2023/07/10	Massarat Jan
Conductivity	AT	8750093	N/A	2023/06/24	Surinder Rai
Fluoride	ISE	8750096	2023/06/23	2023/06/24	Surinder Rai
Hardness (calculated as CaCO3)		8744720	N/A	2023/06/27	Automated Statchk
Mercury in Water by CVAA	CV/AA	8754533	2023/06/27	2023/06/27	Japneet Gill
Dissolved Mercury (low level)	CV/AA	8751297	2023/06/25	2023/06/26	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8751215	2023/06/25	2023/06/27	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8819518	N/A	2023/07/26	Azita Fazaeli
Total Metals Analysis by ICPMS	ICP/MS	8774853	2023/07/07	2023/07/10	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8751957	2023/06/26	2023/06/26	Suban Kanapathippllai
Cyanide (Free)	SPEC	8761031	N/A	2023/06/27	Dafne Strozake Maximo
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8761047	2023/06/28	2023/06/28	Ming Dong
Total Phosphorus Low Level Total	KONE	8761046	2023/06/28	2023/06/28	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8749640	N/A	2023/06/25	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8749324	N/A	2023/06/24	Chandra Nandlal
pH	AT	8750094	2023/06/23	2023/06/24	Surinder Rai
Field Measured pH	PH	ONSITE	N/A	2023/06/22	Prabhjot Singh
Sulphate by Automated Turbidimetry	KONE	8778398	N/A	2023/07/10	Massarat Jan
Total Dissolved Solids	BAL	8747463	2023/06/24	2023/06/26	Razieh Tabesh
Field Measured pH	PH	ONSITE	N/A	2023/06/22	Prabhjot Singh
Total Kjeldahl Nitrogen in Water	SKAL	8749112	2023/06/23	2023/06/25	Jency Sara Johnson
Low Level Total Suspended Solids	BAL	8747489	2023/06/23	2023/06/24	Razieh Tabesh
Turbidity	AT	8750121	N/A	2023/06/24	Gurparteek KAUR

Bureau Veritas ID: WEH725 Dup
Sample ID: Seep 10
Matrix: Water

Collected: 2023/06/19
Shipped:
Received: 2023/06/20

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals by ICPMS (low level)	ICP1/MS	8819518	N/A	2023/07/26	Azita Fazaeli
Turbidity	AT	8750121	N/A	2023/06/24	Gurparteek KAUR

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	8.3°C

Sample WEH725 [Seep 10] : Metals Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.
Acidity sample contained headspace.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3I2612
Report Date: 2023/07/31

QUALITY ASSURANCE REPORT

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8747463	Total Dissolved Solids	2023/06/26			95	90 - 110	<10	mg/L	0.34	20		
8747489	Total Suspended Solids	2023/06/24			95	85 - 115	<1	mg/L	11	20		
8749112	Total Kjeldahl Nitrogen (TKN)	2023/06/25	107	80 - 120	96	80 - 120	<0.10	mg/L	NC	20	101	80 - 120
8749324	Nitrate (N)	2023/06/24	83	80 - 120	98	80 - 120	<0.10	mg/L	0.14	20		
8749324	Nitrite (N)	2023/06/24	104	80 - 120	104	80 - 120	<0.010	mg/L	NC	20		
8749640	Total Ammonia-N	2023/06/25	92	75 - 125	100	80 - 120	<0.050	mg/L	1.7	20		
8750093	Conductivity	2023/06/24			101	85 - 115	<0.001	mS/cm	0.28	10		
8750094	pH	2023/06/24			102	98 - 103			0.14	N/A		
8750096	Fluoride (F-)	2023/06/24	96	80 - 120	100	80 - 120	<0.10	mg/L	NC	20		
8750121	Turbidity	2023/06/24			100	80 - 120	<0.1	NTU	13	20		
8751215	Dissolved Sulphur (S)	2023/06/27	98	80 - 120	95	80 - 120	<0.5	mg/L	0.21	25		
8751297	Dissolved Mercury (Hg)	2023/06/26	96	75 - 125	99	80 - 120	<0.01	ug/L	NC	20		
8751957	Total Sulphur (S)	2023/06/26	NC	80 - 120	101	80 - 120	<0.5	mg/L				
8754533	Mercury (Hg)	2023/06/27	100	75 - 125	101	80 - 120	<0.00010	mg/L	NC	20		
8759986	Acidity	2023/06/29	98	80 - 120	103	80 - 120	<5.0	mg/L	NC	25		
8761031	Free Cyanide (CN)	2023/06/27	93	80 - 120	95	80 - 120	<2.0	ug/L				
8761046	Total Phosphorus (P)	2023/06/28	NC	80 - 120	115	80 - 120	<0.0010	mg/L			92	80 - 120
8761047	Strong Acid Dissoc. Cyanide (CN)	2023/06/28	91	80 - 120	96	80 - 120	<0.00050	mg/L				
8774853	Total Aluminum (Al)	2023/07/10	99	80 - 120	97	80 - 120	<4.9	ug/L	7.6	20		
8774853	Total Antimony (Sb)	2023/07/10	110	80 - 120	107	80 - 120	<0.50	ug/L	NC	20		
8774853	Total Arsenic (As)	2023/07/10	103	80 - 120	102	80 - 120	<1.0	ug/L	1.9	20		
8774853	Total Barium (Ba)	2023/07/10	98	80 - 120	98	80 - 120	<2.0	ug/L	7.0	20		
8774853	Total Beryllium (Be)	2023/07/10	97	80 - 120	96	80 - 120	<0.40	ug/L	NC	20		
8774853	Total Bismuth (Bi)	2023/07/10	95	80 - 120	95	80 - 120	<1.0	ug/L	NC	20		
8774853	Total Boron (B)	2023/07/10	98	80 - 120	97	80 - 120	<10	ug/L	2.8	20		
8774853	Total Cadmium (Cd)	2023/07/10	99	80 - 120	98	80 - 120	<0.090	ug/L	NC	20		
8774853	Total Calcium (Ca)	2023/07/10	NC	80 - 120	98	80 - 120	<200	ug/L	5.5	20		
8774853	Total Chromium (Cr)	2023/07/10	99	80 - 120	98	80 - 120	<5.0	ug/L	NC	20		
8774853	Total Cobalt (Co)	2023/07/10	99	80 - 120	99	80 - 120	<0.50	ug/L	NC	20		
8774853	Total Copper (Cu)	2023/07/10	102	80 - 120	100	80 - 120	<0.90	ug/L	18	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8774853	Total Iron (Fe)	2023/07/10	100	80 - 120	100	80 - 120	<100	ug/L	NC	20		
8774853	Total Lead (Pb)	2023/07/10	98	80 - 120	99	80 - 120	<0.50	ug/L	NC	20		
8774853	Total Lithium (Li)	2023/07/10	102	80 - 120	101	80 - 120	<5.0	ug/L	4.6	20		
8774853	Total Magnesium (Mg)	2023/07/10	100	80 - 120	98	80 - 120	<50	ug/L	3.5	20		
8774853	Total Manganese (Mn)	2023/07/10	97	80 - 120	96	80 - 120	<2.0	ug/L	3.9	20		
8774853	Total Molybdenum (Mo)	2023/07/10	105	80 - 120	102	80 - 120	<0.50	ug/L	0.060	20		
8774853	Total Nickel (Ni)	2023/07/10	98	80 - 120	98	80 - 120	<1.0	ug/L	19	20		
8774853	Total Potassium (K)	2023/07/10	101	80 - 120	99	80 - 120	<200	ug/L	4.7	20		
8774853	Total Selenium (Se)	2023/07/10	105	80 - 120	104	80 - 120	<2.0	ug/L	3.1	20		
8774853	Total Silicon (Si)	2023/07/10	98	80 - 120	96	80 - 120	<50	ug/L	4.3	20		
8774853	Total Silver (Ag)	2023/07/10	99	80 - 120	99	80 - 120	<0.090	ug/L	NC	20		
8774853	Total Sodium (Na)	2023/07/10	NC	80 - 120	100	80 - 120	<100	ug/L	4.3	20		
8774853	Total Strontium (Sr)	2023/07/10	98	80 - 120	97	80 - 120	<1.0	ug/L	3.4	20		
8774853	Total Tellurium (Te)	2023/07/10	98	80 - 120	98	80 - 120	<1.0	ug/L	NC	20		
8774853	Total Thallium (Tl)	2023/07/10	99	80 - 120	99	80 - 120	<0.050	ug/L	NC	20		
8774853	Total Tin (Sn)	2023/07/10	100	80 - 120	98	80 - 120	<1.0	ug/L	NC	20		
8774853	Total Titanium (Ti)	2023/07/10	95	80 - 120	96	80 - 120	<5.0	ug/L	NC	20		
8774853	Total Tungsten (W)	2023/07/10	102	80 - 120	102	80 - 120	<1.0	ug/L	0.63	20		
8774853	Total Uranium (U)	2023/07/10	100	80 - 120	99	80 - 120	<0.10	ug/L	NC	20		
8774853	Total Vanadium (V)	2023/07/10	100	80 - 120	99	80 - 120	<0.50	ug/L	5.9	20		
8774853	Total Zinc (Zn)	2023/07/10	101	80 - 120	102	80 - 120	<5.0	ug/L	20	20		
8774853	Total Zirconium (Zr)	2023/07/10	105	80 - 120	103	80 - 120	<1.0	ug/L	NC	20		
8776576	Alkalinity (Total as CaCO3)	2023/07/10			95	85 - 115	<1.0	mg/L	0.12	20		
8778392	Dissolved Chloride (Cl-)	2023/07/10	NC	80 - 120	101	80 - 120	<1.0	mg/L	0.46	20		
8778398	Dissolved Sulphate (SO4)	2023/07/10	NC	75 - 125	95	80 - 120	<1.0	mg/L	0.54	20		
8819518	Dissolved Aluminum (Al)	2023/07/26	105	80 - 120	102	80 - 120	<0.0005	mg/L	7.7	20		
8819518	Dissolved Antimony (Sb)	2023/07/26	105	80 - 120	106	80 - 120	<0.0001	mg/L	NC	20		
8819518	Dissolved Arsenic (As)	2023/07/26	NC	80 - 120	101	80 - 120	<0.0001	mg/L	1.2	20		
8819518	Dissolved Barium (Ba)	2023/07/26	NC	80 - 120	102	80 - 120	<0.0002	mg/L	0.097	20		
8819518	Dissolved Beryllium (Be)	2023/07/26	100	80 - 120	101	80 - 120	<0.00005	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8819518	Dissolved Bismuth (Bi)	2023/07/26	98	80 - 120	105	80 - 120	<0.0001	mg/L	NC	20		
8819518	Dissolved Boron (B)	2023/07/26	NC	80 - 120	102	80 - 120	<0.001	mg/L	2.1	20		
8819518	Dissolved Cadmium (Cd)	2023/07/26	99	80 - 120	100	80 - 120	<0.00001	mg/L	NC	20		
8819518	Dissolved Calcium (Ca)	2023/07/26	NC	80 - 120	103	80 - 120	<0.02	mg/L	2.0	20		
8819518	Dissolved Cesium (Cs)	2023/07/26	99	80 - 120	103	80 - 120	<0.00002	mg/L	NC	N/A		
8819518	Dissolved Chromium (Cr)	2023/07/26	100	80 - 120	99	80 - 120	<0.0005	mg/L	NC	20		
8819518	Dissolved Cobalt (Co)	2023/07/26	96	80 - 120	99	80 - 120	<0.00005	mg/L	5.7	20		
8819518	Dissolved Copper (Cu)	2023/07/26	101	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8819518	Dissolved Iron (Fe)	2023/07/26	101	80 - 120	102	80 - 120	<0.005	mg/L	0.44	20		
8819518	Dissolved Lead (Pb)	2023/07/26	97	80 - 120	101	80 - 120	<0.00005	mg/L	NC	20		
8819518	Dissolved Lithium (Li)	2023/07/26	104	80 - 120	103	80 - 120	<0.0005	mg/L	0.16	20		
8819518	Dissolved Magnesium (Mg)	2023/07/26	NC	80 - 120	101	80 - 120	<0.005	mg/L	0.34	20		
8819518	Dissolved Manganese (Mn)	2023/07/26	NC	80 - 120	100	80 - 120	<0.0002	mg/L	0.50	20		
8819518	Dissolved Molybdenum (Mo)	2023/07/26	113	80 - 120	103	80 - 120	<0.00005	mg/L	NC	20		
8819518	Dissolved Nickel (Ni)	2023/07/26	95	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8819518	Dissolved Phosphorus (P)	2023/07/26	NC	80 - 120	102	80 - 120	<0.005	mg/L	1.5	20		
8819518	Dissolved Potassium (K)	2023/07/26	NC	80 - 120	103	80 - 120	<0.02	mg/L	0.045	20		
8819518	Dissolved Rubidium (Rb)	2023/07/26	103	80 - 120	103	80 - 120	<0.00002	mg/L	NC	N/A		
8819518	Dissolved Selenium (Se)	2023/07/26	100	80 - 120	101	80 - 120	<0.0002	mg/L	NC	20		
8819518	Dissolved Silicon (Si)	2023/07/26	NC	80 - 120	101	80 - 120	<0.005	mg/L	0.85	20		
8819518	Dissolved Silver (Ag)	2023/07/26	99	80 - 120	102	80 - 120	<0.00001	mg/L	NC	20		
8819518	Dissolved Sodium (Na)	2023/07/26	NC	80 - 120	103	80 - 120	<0.01	mg/L	0.72	20		
8819518	Dissolved Strontium (Sr)	2023/07/26	NC	80 - 120	101	80 - 120	<0.0001	mg/L	0.14	20		
8819518	Dissolved Tellurium (Te)	2023/07/26	96	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8819518	Dissolved Thallium (Tl)	2023/07/26	96	80 - 120	99	80 - 120	<0.000005	mg/L	NC	20		
8819518	Dissolved Thorium (Th)	2023/07/26	98	80 - 120	102	80 - 120	<0.0002	mg/L	NC	20		
8819518	Dissolved Tin (Sn)	2023/07/26	108	80 - 120	104	80 - 120	<0.0001	mg/L	NC	20		
8819518	Dissolved Titanium (Ti)	2023/07/26	101	80 - 120	99	80 - 120	<0.0005	mg/L	NC	20		
8819518	Dissolved Tungsten (W)	2023/07/26	105	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8819518	Dissolved Uranium (U)	2023/07/26	99	80 - 120	100	80 - 120	<0.00001	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8819518	Dissolved Vanadium (V)	2023/07/26	103	80 - 120	99	80 - 120	<0.00005	mg/L	NC	20		
8819518	Dissolved Zinc (Zn)	2023/07/26	94	80 - 120	100	80 - 120	<0.0005	mg/L	NC	20		
8819518	Dissolved Zirconium (Zr)	2023/07/26	113	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3I2612
Report Date: 2023/07/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Anastassia Hamanov, Scientific Specialist

<original signed by>

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

<original signed by>

Mike MacGillivray, Scientific Specialist (Inorganics)

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 721104

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/05
Report #: R7702029
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3I6244
Received: 2023/06/23, 09:23

Sample Matrix: Ground Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	3	N/A	2023/06/29	ATL SOP-00205	SM 24 2310B m
Alkalinity	3	N/A	2023/06/27	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	3	N/A	2023/06/27	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	3	N/A	2023/06/29	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	3	N/A	2023/06/27	CAM SOP-00414	SM 23 2510 m
Dissolved Organic Carbon (DOC) (3)	1	N/A	2023/06/27	CAM SOP-00446	SM 23 5310 B m
Dissolved Organic Carbon (DOC) (3)	2	N/A	2023/06/28	CAM SOP-00446	SM 23 5310 B m
Petroleum Hydro. CCME F1 & BTEX in Water	2	N/A	2023/06/28	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (4)	2	2023/06/28	2023/06/29	CAM SOP-00316	CCME PHC-CWS m
Fluoride	3	2023/06/26	2023/06/27	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	3	N/A	2023/06/29	CAM SOP 00102/00408/00447	SM 2340 B
Dissolved Mercury (low level)	3	2023/06/28	2023/06/28	CAM SOP-00453	EPA 7470 m
Mercury (low level)	3	2023/06/28	2023/06/28	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	3	2023/06/27	2023/07/04	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	3	N/A	2023/06/29	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	3	N/A	2023/07/01	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	3	2023/06/29	2023/06/29	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	3	N/A	2023/06/29	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	3	2023/06/30	2023/06/30	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	3	2023/06/28	2023/06/28	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	1	N/A	2023/06/28	CAM SOP-00441	USGS I-2522-90 m
Total Ammonia-N	2	N/A	2023/06/29	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (5)	3	N/A	2023/06/27	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	3	2023/06/26	2023/06/27	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (6)	2	N/A	2023/06/26		Field pH Meter
Sulphate by Automated Turbidimetry	3	N/A	2023/06/29	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	3	2023/06/28	2023/06/29	CAM SOP-00428	SM 23 2540C m
Field Temperature (6)	2	N/A	2023/06/26		Field Thermometer
Total Kjeldahl Nitrogen in Water	3	2023/06/27	2023/06/28	CAM SOP-00938	OMOE E3516 m
Low Level Total Suspended Solids	3	2023/06/27	2023/06/28	CAM SOP-00428	SM 23 2540D m

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 721104

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/05
Report #: R7702029
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3I6244
Received: 2023/06/23, 09:23

Sample Matrix: Ground Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Turbidity	3	N/A	2023/06/27	CAM SOP-00417	SM 23 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
(4) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following “Alberta Environment’s Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003”. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
(5) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(6) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3I6244
Report Date: 2023/07/05

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WFB489			WFB490			WFB490		
Sampling Date		2023/06/20 14:28			2023/06/20 15:16			2023/06/20 15:16		
COC Number		721104			721104			721104		
	UNITS	G7-OB2-14	RDL	QC Batch	G7-OB1-14	RDL	QC Batch	G7-OB1-14 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	210	1.0	8752229	150	1.0	8752229			
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.6	1.0	8752229	1.2	1.0	8752229			
Hardness (CaCO3)	mg/L	210	1.0	8752230	150	1.0	8752230			
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8752229	<1.0	1.0	8752229			
Field Measurements										
Field Temperature	Celsius	5.4	N/A	ONSITE	9.0	N/A	ONSITE			
Field Measured pH	pH	7.53		ONSITE	7.58		ONSITE			
Inorganics										
Acidity	mg/L	7.6	5.0	8759986	<5.0	5.0	8759986			
Total Ammonia-N	mg/L	0.083	0.050	8755851	0.065	0.050	8755304			
Conductivity	mS/cm	0.414	0.001	8753150	0.296	0.001	8753150	0.298	0.001	8753150
Free Cyanide (CN)	ug/L	4.7 (1)	2.0	8761879	5.2 (1)	2.0	8761879			
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8764506	<0.00050	0.00050	8764506			
Total Dissolved Solids	mg/L	220	10	8756591	175	10	8756591			
Fluoride (F-)	mg/L	0.20	0.10	8753044	0.12	0.10	8753044	0.11	0.10	8753044
Total Kjeldahl Nitrogen (TKN)	mg/L	0.35	0.10	8755171	0.25	0.10	8755171			
Dissolved Organic Carbon	mg/L	3.6	0.40	8751278	5.0	0.40	8751278			
pH	pH	7.88		8753091	7.93		8753091	7.95		8753091
Total Phosphorus (P)	mg/L	1.1	0.010	8761046	0.069	0.0010	8761046			
Total Suspended Solids	mg/L	3900	5	8753965	67	1	8753965			
Dissolved Sulphate (SO4)	mg/L	2.7	1.0	8755212	<1.0	1.0	8755212			
Turbidity	NTU	18	0.1	8752952	18	0.1	8752952			
Alkalinity (Total as CaCO3)	mg/L	220	1.0	8753072	150	1.0	8753072	150	1.0	8753072
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	8755199	<1.0	1.0	8755199			
Nitrite (N)	mg/L	<0.010	0.010	8754154	<0.010	0.010	8754154			
Nitrate (N)	mg/L	<0.10	0.10	8754154	<0.10	0.10	8754154			
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8754154	<0.10	0.10	8754154			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3I6244
Report Date: 2023/07/05

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WFB491		
Sampling Date		2023/06/20 08:00		
COC Number		721104		
	UNITS	Duplicate 3	RDL	QC Batch
Calculated Parameters				
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	150	1.0	8752229
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.4	1.0	8752229
Hardness (CaCO3)	mg/L	160	1.0	8752230
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8752229
Inorganics				
Acidity	mg/L	<5.0	5.0	8759986
Total Ammonia-N	mg/L	0.062	0.050	8755304
Conductivity	mS/cm	0.298	0.001	8753150
Free Cyanide (CN)	ug/L	5.4 (1)	2.0	8761879
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8764506
Total Dissolved Solids	mg/L	190	10	8756591
Fluoride (F-)	mg/L	0.12	0.10	8753044
Total Kjeldahl Nitrogen (TKN)	mg/L	0.20	0.10	8755171
Dissolved Organic Carbon	mg/L	5.2	0.40	8755058
pH	pH	8.00		8753091
Total Phosphorus (P)	mg/L	0.077	0.0010	8761046
Total Suspended Solids	mg/L	110	1	8753965
Dissolved Sulphate (SO4)	mg/L	<1.0	1.0	8755212
Turbidity	NTU	39	0.1	8752952
Alkalinity (Total as CaCO3)	mg/L	160	1.0	8753072
Dissolved Chloride (Cl-)	mg/L	<2.0 (2)	2.0	8755199
Nitrite (N)	mg/L	<0.010	0.010	8754154
Nitrate (N)	mg/L	<0.10	0.10	8754154
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8754154

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) Detection Limit was raised due to matrix interferences.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WFB489		WFB490			WFB490		
Sampling Date		2023/06/20 14:28		2023/06/20 15:16			2023/06/20 15:16		
COC Number		721104		721104			721104		
	UNITS	G7-OB2-14	RDL	G7-OB1-14	RDL	QC Batch	G7-OB1-14 Lab-Dup	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	mg/L	0.0046	0.0005	0.0028	0.0005	8759516			
. Aluminum (Al)	mg/L	1.90	0.0025	0.554	0.0005	8759035			
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8759516			
. Antimony (Sb)	mg/L	<0.0005	0.0005	0.0001	0.0001	8759035			
Dissolved Arsenic (As)	mg/L	0.0008	0.0001	0.0008	0.0001	8759516			
. Arsenic (As)	mg/L	0.0016	0.0005	0.0012	0.0001	8759035			
Dissolved Barium (Ba)	mg/L	0.0221	0.0002	0.0100	0.0002	8759516			
. Barium (Ba)	mg/L	0.044	0.001	0.0172	0.0002	8759035			
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	<0.00005	0.00005	8759516			
. Beryllium (Be)	mg/L	<0.00025	0.00025	<0.00005	0.00005	8759035			
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8759516			
. Bismuth (Bi)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8759035			
Dissolved Boron (B)	mg/L	0.008	0.001	0.005	0.001	8759516			
. Boron (B)	mg/L	0.024	0.005	0.006	0.001	8759035			
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	<0.00001	0.00001	8759516			
. Cadmium (Cd)	mg/L	0.000090	0.000025	0.000019	0.000005	8759035			
Dissolved Calcium (Ca)	mg/L	64.6	0.1	47.8	0.1	8759516			
. Calcium (Ca)	mg/L	303	0.2	68.9	0.1	8759035			
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	<0.00002	0.00002	8759516			
. Cesium (Cs)	mg/L	0.0002	0.0001	0.00009	0.00002	8759035			
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	<0.0005	0.0005	8759516			
. Chromium (Cr)	mg/L	0.0078	0.0025	0.0019	0.0005	8759035			
Dissolved Cobalt (Co)	mg/L	<0.00005	0.00005	<0.00005	0.00005	8759516			
. Cobalt (Co)	mg/L	0.00345	0.00025	0.00067	0.00005	8759035			
Dissolved Copper (Cu)	mg/L	0.0005	0.0001	0.0001	0.0001	8759516			
. Copper (Cu)	mg/L	0.0051	0.0005	0.0020	0.0001	8759035			
Dissolved Iron (Fe)	mg/L	0.677	0.005	0.468	0.005	8759516			
. Iron (Fe)	mg/L	4.67	0.025	1.45	0.005	8759035			
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	<0.00005	0.00005	8759516			
. Lead (Pb)	mg/L	0.00410	0.00025	0.00095	0.00005	8759035			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3I6244
Report Date: 2023/07/05

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WFB489		WFB490			WFB490		
Sampling Date		2023/06/20 14:28		2023/06/20 15:16			2023/06/20 15:16		
COC Number		721104		721104			721104		
	UNITS	G7-OB2-14	RDL	G7-OB1-14	RDL	QC Batch	G7-OB1-14 Lab-Dup	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0018	0.0005	0.0008	0.0005	8759516			
. Lithium (Li)	mg/L	0.0054	0.0025	0.0018	0.0005	8759035			
Dissolved Magnesium (Mg)	mg/L	12.9	0.005	8.29	0.005	8759516			
. Magnesium (Mg)	mg/L	78.9	0.025	11.9	0.005	8759035			
Dissolved Manganese (Mn)	mg/L	0.0436	0.0002	0.0574	0.0002	8759516			
. Manganese (Mn)	mg/L	0.361	0.001	0.0960	0.0002	8759035			
Mercury (Hg)	ug/L	0.01	0.01	<0.01	0.01	8757028			
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	<0.01	0.01	8757040	<0.01	0.01	8757040
Dissolved Molybdenum (Mo)	mg/L	0.00023	0.00005	0.00018	0.00005	8759516			
. Molybdenum (Mo)	mg/L	<0.00025	0.00025	0.00014	0.00005	8759035			
Dissolved Nickel (Ni)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8759516			
. Nickel (Ni)	mg/L	0.0064	0.0005	0.0016	0.0001	8759035			
Dissolved Phosphorus (P)	mg/L	0.018	0.005	0.015	0.005	8759516			
. Phosphorus (P)	mg/L	1.27	0.025	0.096	0.005	8759035			
Dissolved Potassium (K)	mg/L	1.05	0.02	0.61	0.02	8759516			
. Potassium (K)	mg/L	1.4	0.1	0.82	0.02	8759035			
Dissolved Rubidium (Rb)	mg/L	0.00171	0.00002	0.00111	0.00002	8759516			
. Rubidium (Rb)	mg/L	0.0051	0.0001	0.00239	0.00002	8759035			
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	<0.0002	0.0002	8759516			
. Selenium (Se)	mg/L	<0.00025	0.00025	<0.00005	0.00005	8759035			
Dissolved Silicon (Si)	mg/L	5.56	0.025	4.78	0.005	8759516			
. Silicon (Si)	mg/L	8.14	0.025	6.00	0.025	8759035			
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	<0.00001	0.00001	8759516			
. Silver (Ag)	mg/L	<0.00005	0.00005	<0.00001	0.00001	8759035			
Dissolved Sodium (Na)	mg/L	2.54	0.01	1.83	0.01	8759516			
. Sodium (Na)	mg/L	2.79	0.05	1.92	0.01	8759035			
Dissolved Strontium (Sr)	mg/L	0.0720	0.0001	0.0463	0.0001	8759516			
. Strontium (Sr)	mg/L	0.198	0.0005	0.0617	0.0001	8759035			
Dissolved Sulphur (S)	mg/L	1.0	0.5	<0.5	0.5	8755377			
Total Sulphur (S)	mg/L	1.3	0.5	<0.5	0.5	8759522			
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8759516			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WFB489		WFB490			WFB490		
Sampling Date		2023/06/20 14:28		2023/06/20 15:16			2023/06/20 15:16		
COC Number		721104		721104			721104		
	UNITS	G7-OB2-14	RDL	G7-OB1-14	RDL	QC Batch	G7-OB1-14 Lab-Dup	RDL	QC Batch
. Tellurium (Te)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8759035			
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	<0.000005	0.000005	8759516			
. Thallium (Tl)	mg/L	0.000078	0.000025	0.000014	0.000005	8759035			
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	<0.0002	0.0002	8759516			
. Thorium (Th)	mg/L	0.001	0.001	0.0004	0.0002	8759035			
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8759516			
. Tin (Sn)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8759035			
Dissolved Titanium (Ti)	mg/L	0.0009	0.0005	<0.0005	0.0005	8759516			
. Titanium (Ti)	mg/L	0.0846	0.0025	0.0348	0.0005	8759035			
Dissolved Tungsten (W)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8759516			
. Tungsten (W)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8759035			
Dissolved Uranium (U)	mg/L	0.00003	0.00001	<0.00001	0.00001	8759516			
. Uranium (U)	mg/L	0.00129	0.00005	0.00009	0.00001	8759035			
Dissolved Vanadium (V)	mg/L	0.00066	0.00005	0.00048	0.00005	8759516			
. Vanadium (V)	mg/L	0.00866	0.00025	0.00211	0.00005	8759035			
Dissolved Zinc (Zn)	mg/L	0.0006	0.0005	0.0007	0.0005	8759516			
. Zinc (Zn)	mg/L	0.0143	0.0025	0.0061	0.0005	8759035			
Dissolved Zirconium (Zr)	mg/L	0.0008	0.0001	0.0009	0.0001	8759516			
. Zirconium (Zr)	mg/L	0.0023	0.0005	0.0016	0.0001	8759035			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WFB491		
Sampling Date		2023/06/20 08:00		
COC Number		721104		
	UNITS	Duplicate 3	RDL	QC Batch
Metals				
Dissolved Aluminum (Al)	mg/L	0.0038	0.0005	8759516
. Aluminum (Al)	mg/L	0.519	0.0005	8759035
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8759516
. Antimony (Sb)	mg/L	0.0002	0.0001	8759035
Dissolved Arsenic (As)	mg/L	0.0008	0.0001	8759516
. Arsenic (As)	mg/L	0.0012	0.0001	8759035
Dissolved Barium (Ba)	mg/L	0.0099	0.0002	8759516
. Barium (Ba)	mg/L	0.0167	0.0002	8759035
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8759516
. Beryllium (Be)	mg/L	<0.00005	0.00005	8759035
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8759516
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8759035
Dissolved Boron (B)	mg/L	0.005	0.001	8759516
. Boron (B)	mg/L	0.006	0.001	8759035
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8759516
. Cadmium (Cd)	mg/L	0.000016	0.000005	8759035
Dissolved Calcium (Ca)	mg/L	49.6	0.02	8759516
. Calcium (Ca)	mg/L	71.8	0.1	8759035
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	8759516
. Cesium (Cs)	mg/L	0.00008	0.00002	8759035
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8759516
. Chromium (Cr)	mg/L	0.0019	0.0005	8759035
Dissolved Cobalt (Co)	mg/L	<0.00005	0.00005	8759516
. Cobalt (Co)	mg/L	0.00061	0.00005	8759035
Dissolved Copper (Cu)	mg/L	0.0043	0.0001	8759516
. Copper (Cu)	mg/L	0.0019	0.0001	8759035
Dissolved Iron (Fe)	mg/L	0.433	0.005	8759516
. Iron (Fe)	mg/L	1.37	0.005	8759035
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8759516
. Lead (Pb)	mg/L	0.00112	0.00005	8759035
Dissolved Lithium (Li)	mg/L	0.0009	0.0005	8759516

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WFB491		
Sampling Date		2023/06/20 08:00		
COC Number		721104		
	UNITS	Duplicate 3	RDL	QC Batch
. Lithium (Li)	mg/L	0.0017	0.0005	8759035
Dissolved Magnesium (Mg)	mg/L	8.07	0.005	8759516
. Magnesium (Mg)	mg/L	12.6	0.005	8759035
Dissolved Manganese (Mn)	mg/L	0.0587	0.0002	8759516
. Manganese (Mn)	mg/L	0.0962	0.0002	8759035
Mercury (Hg)	ug/L	<0.01	0.01	8757028
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8757040
Dissolved Molybdenum (Mo)	mg/L	0.00018	0.00005	8759516
. Molybdenum (Mo)	mg/L	0.00013	0.00005	8759035
Dissolved Nickel (Ni)	mg/L	0.0001	0.0001	8759516
. Nickel (Ni)	mg/L	0.0015	0.0001	8759035
Dissolved Phosphorus (P)	mg/L	0.015	0.005	8759516
. Phosphorus (P)	mg/L	0.098	0.005	8759035
Dissolved Potassium (K)	mg/L	0.61	0.02	8759516
. Potassium (K)	mg/L	0.82	0.02	8759035
Dissolved Rubidium (Rb)	mg/L	0.00109	0.00002	8759516
. Rubidium (Rb)	mg/L	0.00229	0.00002	8759035
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8759516
. Selenium (Se)	mg/L	<0.00005	0.00005	8759035
Dissolved Silicon (Si)	mg/L	4.77	0.005	8759516
. Silicon (Si)	mg/L	5.85	0.025	8759035
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8759516
. Silver (Ag)	mg/L	<0.00001	0.00001	8759035
Dissolved Sodium (Na)	mg/L	1.90	0.01	8759516
. Sodium (Na)	mg/L	1.93	0.01	8759035
Dissolved Strontium (Sr)	mg/L	0.0461	0.0001	8759516
. Strontium (Sr)	mg/L	0.0618	0.0001	8759035
Dissolved Sulphur (S)	mg/L	<0.5	0.5	8755377
Total Sulphur (S)	mg/L	<0.5	0.5	8759522
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8759516
. Tellurium (Te)	mg/L	<0.0001	0.0001	8759035
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8759516

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WFB491		
Sampling Date		2023/06/20 08:00		
COC Number		721104		
	UNITS	Duplicate 3	RDL	QC Batch
. Thallium (Tl)	mg/L	0.000015	0.000005	8759035
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8759516
. Thorium (Th)	mg/L	0.0004	0.0002	8759035
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8759516
. Tin (Sn)	mg/L	<0.0001	0.0001	8759035
Dissolved Titanium (Ti)	mg/L	<0.0005	0.0005	8759516
. Titanium (Ti)	mg/L	0.0330	0.0005	8759035
Dissolved Tungsten (W)	mg/L	<0.0001	0.0001	8759516
. Tungsten (W)	mg/L	<0.0001	0.0001	8759035
Dissolved Uranium (U)	mg/L	<0.00001	0.00001	8759516
. Uranium (U)	mg/L	0.00009	0.00001	8759035
Dissolved Vanadium (V)	mg/L	0.00045	0.00005	8759516
. Vanadium (V)	mg/L	0.00201	0.00005	8759035
Dissolved Zinc (Zn)	mg/L	0.0010	0.0005	8759516
. Zinc (Zn)	mg/L	0.0066	0.0005	8759035
Dissolved Zirconium (Zr)	mg/L	0.0009	0.0001	8759516
. Zirconium (Zr)	mg/L	0.0017	0.0001	8759035

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		WFB489	WFB490		
Sampling Date		2023/06/20 14:28	2023/06/20 15:16		
COC Number		721104	721104		
	UNITS	G7-OB2-14	G7-OB1-14	RDL	QC Batch
BTEX & F1 Hydrocarbons					
F1 (C6-C10)	ug/L	<25	<25	25	8757632
F2-F4 Hydrocarbons					
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	100	8757464
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	200	8757464
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	200	8757464
Reached Baseline at C50	ug/L	Yes	Yes		8757464
Surrogate Recovery (%)					
1,4-Difluorobenzene	%	99	98		8757632
4-Bromofluorobenzene	%	98	99		8757632
D10-o-Xylene	%	106	104		8757632
D4-1,2-Dichloroethane	%	93	92		8757632
o-Terphenyl	%	96	99		8757464

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WFB489
Sample ID: G7-OB2-14
Matrix: Ground Water

Collected: 2023/06/20
Shipped:
Received: 2023/06/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8759986	N/A	2023/06/29	Brent Boudreau
Alkalinity	AT	8753072	N/A	2023/06/27	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8752229	N/A	2023/06/27	Automated Statchk
Chloride by Automated Colourimetry	KONE	8755199	N/A	2023/06/29	Massarat Jan
Conductivity	AT	8753150	N/A	2023/06/27	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	8751278	N/A	2023/06/28	Nimarta Singh
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	8757632	N/A	2023/06/28	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8757464	2023/06/28	2023/06/29	Agnieszka Brzuzy-Snopko
Fluoride	ISE	8753044	2023/06/26	2023/06/27	Kien Tran
Hardness (calculated as CaCO3)		8752230	N/A	2023/06/29	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8757040	2023/06/28	2023/06/28	Japneet Gill
Mercury (low level)	CV/AA	8757028	2023/06/28	2023/06/28	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8755377	2023/06/27	2023/07/04	Thuy Linh Nguyen
Dissolved Metals by ICPMS (low level)	ICP1/MS	8759516	N/A	2023/06/29	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8759035	N/A	2023/07/01	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8759522	2023/06/29	2023/06/29	Suban Kanapathippllai
Cyanide (Free)	SPEC	8761879	N/A	2023/06/29	Dafne Strozake Maximo
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8764506	2023/06/30	2023/06/30	Ming Dong
Total Phosphorus Low Level Total	KONE	8761046	2023/06/28	2023/06/28	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8755851	N/A	2023/06/28	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8754154	N/A	2023/06/27	Chandra Nandlal
pH	AT	8753091	2023/06/26	2023/06/27	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/26	Rupinder Kaur
Sulphate by Automated Turbidimetry	KONE	8755212	N/A	2023/06/29	Massarat Jan
Total Dissolved Solids	BAL	8756591	2023/06/28	2023/06/29	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/06/26	Rupinder Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8755171	2023/06/27	2023/06/28	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8753965	2023/06/27	2023/06/28	Shaneil Hall
Turbidity	AT	8752952	N/A	2023/06/27	Gurparteek KAUR

Bureau Veritas ID: WFB490
Sample ID: G7-OB1-14
Matrix: Ground Water

Collected: 2023/06/20
Shipped:
Received: 2023/06/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8759986	N/A	2023/06/29	Brent Boudreau
Alkalinity	AT	8753072	N/A	2023/06/27	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8752229	N/A	2023/06/27	Automated Statchk
Chloride by Automated Colourimetry	KONE	8755199	N/A	2023/06/29	Massarat Jan
Conductivity	AT	8753150	N/A	2023/06/27	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	8751278	N/A	2023/06/28	Nimarta Singh
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	8757632	N/A	2023/06/28	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8757464	2023/06/28	2023/06/29	Agnieszka Brzuzy-Snopko
Fluoride	ISE	8753044	2023/06/26	2023/06/27	Kien Tran

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WFB490 **Collected:** 2023/06/20
Sample ID: G7-OB1-14 **Shipped:**
Matrix: Ground Water **Received:** 2023/06/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hardness (calculated as CaCO3)		8752230	N/A	2023/06/29	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8757040	2023/06/28	2023/06/28	Japneet Gill
Mercury (low level)	CV/AA	8757028	2023/06/28	2023/06/28	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8755377	2023/06/27	2023/07/04	Thuy Linh Nguyen
Dissolved Metals by ICPMS (low level)	ICP1/MS	8759516	N/A	2023/06/29	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8759035	N/A	2023/07/01	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8759522	2023/06/29	2023/06/29	Suban Kanapathippllai
Cyanide (Free)	SPEC	8761879	N/A	2023/06/29	Dafne Strozake Maximo
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8764506	2023/06/30	2023/06/30	Ming Dong
Total Phosphorus Low Level Total	KONE	8761046	2023/06/28	2023/06/28	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8755304	N/A	2023/06/29	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8754154	N/A	2023/06/27	Chandra Nandlal
pH	AT	8753091	2023/06/26	2023/06/27	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/06/26	Rupinder Kaur
Sulphate by Automated Turbidimetry	KONE	8755212	N/A	2023/06/29	Massarat Jan
Total Dissolved Solids	BAL	8756591	2023/06/28	2023/06/29	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/06/26	Rupinder Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8755171	2023/06/27	2023/06/28	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8753965	2023/06/27	2023/06/28	Shaneil Hall
Turbidity	AT	8752952	N/A	2023/06/27	Gurparteek KAUR

Bureau Veritas ID: WFB490 Dup **Collected:** 2023/06/20
Sample ID: G7-OB1-14 **Shipped:**
Matrix: Ground Water **Received:** 2023/06/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8753072	N/A	2023/06/27	Kien Tran
Conductivity	AT	8753150	N/A	2023/06/27	Kien Tran
Fluoride	ISE	8753044	2023/06/26	2023/06/27	Kien Tran
Dissolved Mercury (low level)	CV/AA	8757040	2023/06/28	2023/06/28	Japneet Gill
pH	AT	8753091	2023/06/26	2023/06/27	Kien Tran

Bureau Veritas ID: WFB491 **Collected:** 2023/06/20
Sample ID: Duplicate 3 **Shipped:**
Matrix: Ground Water **Received:** 2023/06/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8759986	N/A	2023/06/29	Brent Boudreau
Alkalinity	AT	8753072	N/A	2023/06/27	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8752229	N/A	2023/06/27	Automated Statchk
Chloride by Automated Colourimetry	KONE	8755199	N/A	2023/06/29	Massarat Jan
Conductivity	AT	8753150	N/A	2023/06/27	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	8755058	N/A	2023/06/27	Nimarta Singh
Fluoride	ISE	8753044	2023/06/26	2023/06/27	Kien Tran

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3I6244
Report Date: 2023/07/05

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

TEST SUMMARY

Bureau Veritas ID: WFB491
Sample ID: Duplicate 3
Matrix: Ground Water

Collected: 2023/06/20
Shipped:
Received: 2023/06/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hardness (calculated as CaCO3)		8752230	N/A	2023/06/29	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8757040	2023/06/28	2023/06/28	Japneet Gill
Mercury (low level)	CV/AA	8757028	2023/06/28	2023/06/28	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8755377	2023/06/27	2023/07/04	Thuy Linh Nguyen
Dissolved Metals by ICPMS (low level)	ICP1/MS	8759516	N/A	2023/06/29	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8759035	N/A	2023/07/01	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8759522	2023/06/29	2023/06/29	Suban Kanapathippllai
Cyanide (Free)	SPEC	8761879	N/A	2023/06/29	Dafne Strozake Maximo
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8764506	2023/06/30	2023/06/30	Ming Dong
Total Phosphorus Low Level Total	KONE	8761046	2023/06/28	2023/06/28	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8755304	N/A	2023/06/29	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8754154	N/A	2023/06/27	Chandra Nandlal
pH	AT	8753091	2023/06/26	2023/06/27	Kien Tran
Sulphate by Automated Turbidimetry	KONE	8755212	N/A	2023/06/29	Massarat Jan
Total Dissolved Solids	BAL	8756591	2023/06/28	2023/06/29	Shaneil Hall
Total Kjeldahl Nitrogen in Water	SKAL	8755171	2023/06/27	2023/06/28	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8753965	2023/06/27	2023/06/28	Shaneil Hall
Turbidity	AT	8752952	N/A	2023/06/27	Gurparteek KAUR

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	0.7°C
Package 2	0.3°C

Sample received past hold time for Turbidity analysis, proceeded with client consent.
Acidity samples contained headspace.

Sample WFB489 [G7-OB2-14] : Metals Analysis:Due to the sample matrix, the sample required dilution. Detection limits were adjusted accordingly.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8757464	o-Terphenyl	2023/06/29	96	60 - 130	100	60 - 130	96	%				
8757632	1,4-Difluorobenzene	2023/06/28	98	70 - 130	97	70 - 130	99	%				
8757632	4-Bromofluorobenzene	2023/06/28	100	70 - 130	99	70 - 130	98	%				
8757632	D10-o-Xylene	2023/06/28	108	70 - 130	104	70 - 130	102	%				
8757632	D4-1,2-Dichloroethane	2023/06/28	90	70 - 130	90	70 - 130	92	%				
8751278	Dissolved Organic Carbon	2023/06/28	95	80 - 120	94	80 - 120	<0.40	mg/L	11	20		
8752952	Turbidity	2023/06/27			100	80 - 120	<0.1	NTU	10	20		
8753044	Fluoride (F-)	2023/06/27	99	80 - 120	96	80 - 120	<0.10	mg/L	1.3	20		
8753072	Alkalinity (Total as CaCO3)	2023/06/27			93	85 - 115	<1.0	mg/L	0.32	20		
8753091	pH	2023/06/27			102	98 - 103			0.16	N/A		
8753150	Conductivity	2023/06/27			102	85 - 115	<0.001	mS/cm	0.67	10		
8753965	Total Suspended Solids	2023/06/28			101	85 - 115	<1	mg/L	2.6	20		
8754154	Nitrate (N)	2023/06/27	96	80 - 120	96	80 - 120	<0.10	mg/L	NC	20		
8754154	Nitrite (N)	2023/06/27	105	80 - 120	104	80 - 120	<0.010	mg/L	NC	20		
8755058	Dissolved Organic Carbon	2023/06/27	95	80 - 120	97	80 - 120	<0.40	mg/L	1.2	20		
8755171	Total Kjeldahl Nitrogen (TKN)	2023/06/28	98	80 - 120	102	80 - 120	<0.10	mg/L	17	20	100	80 - 120
8755199	Dissolved Chloride (Cl-)	2023/06/29	NC	80 - 120	98	80 - 120	<1.0	mg/L	1.1	20		
8755212	Dissolved Sulphate (SO4)	2023/06/29	NC	75 - 125	97	80 - 120	<1.0	mg/L	0.23	20		
8755304	Total Ammonia-N	2023/06/29	102	75 - 125	105	80 - 120	<0.050	mg/L	9.4	20		
8755377	Dissolved Sulphur (S)	2023/07/04	NC	80 - 120	100	80 - 120	<0.5	mg/L				
8755851	Total Ammonia-N	2023/06/28	103	75 - 125	99	80 - 120	<0.050	mg/L	NC	20		
8756591	Total Dissolved Solids	2023/06/29			95	90 - 110	<10	mg/L	2.9	20		
8757028	Mercury (Hg)	2023/06/28	98	75 - 125	100	80 - 120	<0.01	ug/L	NC	20		
8757040	Dissolved Mercury (Hg)	2023/06/28	100	75 - 125	101	80 - 120	<0.01	ug/L	NC	20		
8757464	F2 (C10-C16 Hydrocarbons)	2023/06/29	95	60 - 130	101	60 - 130	<100	ug/L	NC	30		
8757464	F3 (C16-C34 Hydrocarbons)	2023/06/29	99	60 - 130	105	60 - 130	<200	ug/L	NC	30		
8757464	F4 (C34-C50 Hydrocarbons)	2023/06/29	99	60 - 130	103	60 - 130	<200	ug/L	NC	30		
8757632	F1 (C6-C10)	2023/06/28	104	60 - 140	99	60 - 140	<25	ug/L	NC	30		
8759035	. Aluminum (Al)	2023/06/28	NC	80 - 120	100	80 - 120	<0.0005	mg/L	1.0	20		
8759035	. Antimony (Sb)	2023/06/28	124 (1)	80 - 120	111	80 - 120	<0.0001	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8759035	. Arsenic (As)	2023/06/28	107	80 - 120	100	80 - 120	<0.0001	mg/L				
8759035	. Barium (Ba)	2023/06/28	104	80 - 120	98	80 - 120	<0.0002	mg/L				
8759035	. Beryllium (Be)	2023/06/28	106	80 - 120	101	80 - 120	<0.00005	mg/L				
8759035	. Bismuth (Bi)	2023/06/28	97	80 - 120	106	80 - 120	<0.0001	mg/L				
8759035	. Boron (B)	2023/06/28	108	80 - 120	100	80 - 120	<0.001	mg/L				
8759035	. Cadmium (Cd)	2023/06/28	107	80 - 120	98	80 - 120	<0.000005	mg/L				
8759035	. Calcium (Ca)	2023/06/28	NC	80 - 120	100	80 - 120	<0.02	mg/L				
8759035	. Cesium (Cs)	2023/06/28	104	80 - 120	102	80 - 120	<0.00002	mg/L				
8759035	. Chromium (Cr)	2023/06/28	103	80 - 120	99	80 - 120	<0.0005	mg/L				
8759035	. Cobalt (Co)	2023/06/28	101	80 - 120	100	80 - 120	<0.00005	mg/L				
8759035	. Copper (Cu)	2023/06/28	104	80 - 120	100	80 - 120	<0.0001	mg/L				
8759035	. Iron (Fe)	2023/06/28	102	80 - 120	99	80 - 120	<0.005	mg/L				
8759035	. Lead (Pb)	2023/06/28	99	80 - 120	98	80 - 120	<0.00005	mg/L				
8759035	. Lithium (Li)	2023/06/28	106	80 - 120	102	80 - 120	<0.0005	mg/L				
8759035	. Magnesium (Mg)	2023/06/28	NC	80 - 120	99	80 - 120	<0.005	mg/L				
8759035	. Manganese (Mn)	2023/06/28	103	80 - 120	100	80 - 120	<0.0002	mg/L				
8759035	. Molybdenum (Mo)	2023/06/28	112	80 - 120	102	80 - 120	<0.00005	mg/L				
8759035	. Nickel (Ni)	2023/06/28	101	80 - 120	99	80 - 120	<0.0001	mg/L				
8759035	. Phosphorus (P)	2023/06/28	129 (1)	80 - 120	103	80 - 120	<0.005	mg/L				
8759035	. Potassium (K)	2023/06/28	105	80 - 120	101	80 - 120	<0.02	mg/L				
8759035	. Rubidium (Rb)	2023/06/28	105	80 - 120	102	80 - 120	<0.00002	mg/L				
8759035	. Selenium (Se)	2023/06/28	110	80 - 120	101	80 - 120	<0.00005	mg/L				
8759035	. Silicon (Si)	2023/06/28	106	80 - 120	101	80 - 120	<0.005	mg/L				
8759035	. Silver (Ag)	2023/06/28	104	80 - 120	101	80 - 120	<0.00001	mg/L				
8759035	. Sodium (Na)	2023/06/28	NC	80 - 120	100	80 - 120	<0.01	mg/L				
8759035	. Strontium (Sr)	2023/06/28	NC	80 - 120	99	80 - 120	<0.0001	mg/L				
8759035	. Tellurium (Te)	2023/06/28	106	80 - 120	97	80 - 120	<0.0001	mg/L				
8759035	. Thallium (Tl)	2023/06/28	101	80 - 120	99	80 - 120	<0.000005	mg/L				
8759035	. Thorium (Th)	2023/06/28	104	80 - 120	101	80 - 120	<0.0002	mg/L				
8759035	. Tin (Sn)	2023/06/28	110	80 - 120	103	80 - 120	<0.0001	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8759035	. Titanium (Ti)	2023/06/28	104	80 - 120	102	80 - 120	<0.0005	mg/L				
8759035	. Tungsten (W)	2023/06/28	107	80 - 120	105	80 - 120	<0.0001	mg/L				
8759035	. Uranium (U)	2023/06/28	111	80 - 120	106	80 - 120	<0.00001	mg/L				
8759035	. Vanadium (V)	2023/06/28	107	80 - 120	100	80 - 120	<0.00005	mg/L				
8759035	. Zinc (Zn)	2023/06/28	106	80 - 120	102	80 - 120	<0.0005	mg/L				
8759035	. Zirconium (Zr)	2023/06/28	113	80 - 120	102	80 - 120	<0.0001	mg/L				
8759516	Dissolved Aluminum (Al)	2023/06/29	103	80 - 120	98	80 - 120	<0.0005	mg/L	2.1	20		
8759516	Dissolved Antimony (Sb)	2023/06/29	103	80 - 120	99	80 - 120	<0.0001	mg/L	0.34	20		
8759516	Dissolved Arsenic (As)	2023/06/29	NC	80 - 120	98	80 - 120	<0.0001	mg/L	1.2	20		
8759516	Dissolved Barium (Ba)	2023/06/29	102	80 - 120	96	80 - 120	<0.0002	mg/L	3.6	20		
8759516	Dissolved Beryllium (Be)	2023/06/29	105	80 - 120	100	80 - 120	<0.00005	mg/L	NC	20		
8759516	Dissolved Bismuth (Bi)	2023/06/29	95	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8759516	Dissolved Boron (B)	2023/06/29	105	80 - 120	101	80 - 120	<0.001	mg/L	1.5	20		
8759516	Dissolved Cadmium (Cd)	2023/06/29	102	80 - 120	97	80 - 120	<0.00001	mg/L	NC	20		
8759516	Dissolved Calcium (Ca)	2023/06/29	NC	80 - 120	101	80 - 120	<0.02	mg/L	0.88	20		
8759516	Dissolved Cesium (Cs)	2023/06/29	95	80 - 120	93	80 - 120	<0.00002	mg/L	NC	N/A		
8759516	Dissolved Chromium (Cr)	2023/06/29	94	80 - 120	97	80 - 120	<0.0005	mg/L	NC	20		
8759516	Dissolved Cobalt (Co)	2023/06/29	98	80 - 120	98	80 - 120	<0.00005	mg/L	0	20		
8759516	Dissolved Copper (Cu)	2023/06/29	98	80 - 120	100	80 - 120	<0.0001	mg/L	0.78	20		
8759516	Dissolved Iron (Fe)	2023/06/29	101	80 - 120	99	80 - 120	<0.005	mg/L	0.66	20		
8759516	Dissolved Lead (Pb)	2023/06/29	103	80 - 120	98	80 - 120	<0.00005	mg/L	7.4	20		
8759516	Dissolved Lithium (Li)	2023/06/29	107	80 - 120	102	80 - 120	<0.0005	mg/L	6.5	20		
8759516	Dissolved Magnesium (Mg)	2023/06/29	NC	80 - 120	100	80 - 120	<0.005	mg/L	0.36	20		
8759516	Dissolved Manganese (Mn)	2023/06/29	NC	80 - 120	94	80 - 120	<0.0002	mg/L	0.35	20		
8759516	Dissolved Molybdenum (Mo)	2023/06/29	105	80 - 120	98	80 - 120	<0.00005	mg/L	4.2	20		
8759516	Dissolved Nickel (Ni)	2023/06/29	94	80 - 120	96	80 - 120	<0.0001	mg/L	5.0	20		
8759516	Dissolved Phosphorus (P)	2023/06/29	104	80 - 120	98	80 - 120	<0.005	mg/L	1.0	20		
8759516	Dissolved Potassium (K)	2023/06/29	97	80 - 120	97	80 - 120	<0.02	mg/L	1.3	20		
8759516	Dissolved Rubidium (Rb)	2023/06/29	102	80 - 120	99	80 - 120	<0.00002	mg/L	NC	N/A		
8759516	Dissolved Selenium (Se)	2023/06/29	106	80 - 120	100	80 - 120	<0.0002	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8759516	Dissolved Silicon (Si)	2023/06/29	106	80 - 120	99	80 - 120	<0.005	mg/L	1.4	20		
8759516	Dissolved Silver (Ag)	2023/06/29	93	80 - 120	97	80 - 120	<0.00001	mg/L	NC	20		
8759516	Dissolved Sodium (Na)	2023/06/29	100	80 - 120	100	80 - 120	<0.01	mg/L	7.7	20		
8759516	Dissolved Strontium (Sr)	2023/06/29	101	80 - 120	91	80 - 120	<0.0001	mg/L	1.8	20		
8759516	Dissolved Tellurium (Te)	2023/06/29	106	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8759516	Dissolved Thallium (Tl)	2023/06/29	100	80 - 120	94	80 - 120	<0.000005	mg/L	NC	20		
8759516	Dissolved Thorium (Th)	2023/06/29	100	80 - 120	96	80 - 120	<0.0002	mg/L				
8759516	Dissolved Tin (Sn)	2023/06/29	104	80 - 120	98	80 - 120	<0.0001	mg/L	NC	20		
8759516	Dissolved Titanium (Ti)	2023/06/29	103	80 - 120	98	80 - 120	<0.0005	mg/L	NC	20		
8759516	Dissolved Tungsten (W)	2023/06/29	107	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		
8759516	Dissolved Uranium (U)	2023/06/29	102	80 - 120	98	80 - 120	<0.00001	mg/L	2.5	20		
8759516	Dissolved Vanadium (V)	2023/06/29	102	80 - 120	99	80 - 120	<0.00005	mg/L	0.65	20		
8759516	Dissolved Zinc (Zn)	2023/06/29	100	80 - 120	99	80 - 120	<0.0005	mg/L	0.73	20		
8759516	Dissolved Zirconium (Zr)	2023/06/29	100	80 - 120	94	80 - 120	<0.0001	mg/L	7.6	20		
8759522	Total Sulphur (S)	2023/06/29	NC	80 - 120	100	80 - 120	<0.5	mg/L				
8759986	Acidity	2023/06/29	98	80 - 120	103	80 - 120	<5.0	mg/L	NC	25		
8761046	Total Phosphorus (P)	2023/06/28	NC	80 - 120	115	80 - 120	<0.0010	mg/L			92	80 - 120
8761879	Free Cyanide (CN)	2023/06/29	79 (2)	80 - 120	82	80 - 120	<2.0	ug/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8764506	Strong Acid Dissoc. Cyanide (CN)	2023/06/30	93	80 - 120	98	80 - 120	<0.00050	mg/L				

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike exceeds accaeptance limits, probable matrix interference.

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

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3I6244
Report Date: 2023/07/05

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Cristina Carriere, Senior Scientific Specialist

<original signed by>

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

<original signed by>

Janah Rhyno, Scientific Specialist

<original signed by>

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: GROUNDWATER SAMPLING PROGRAM
Your C.O.C. #: 725641

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/13
Report #: R7712828
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3J6607
Received: 2023/06/29, 16:43

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	1	N/A	2023/07/11	ATL SOP-00205	SM 24 2310B m
Alkalinity	1	N/A	2023/07/07	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	1	N/A	2023/07/10	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	1	N/A	2023/07/07	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	1	N/A	2023/07/07	CAM SOP-00414	SM 23 2510 m
Fluoride	1	2023/07/06	2023/07/07	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	1	N/A	2023/07/11	CAM SOP 00102/00408/00447	SM 2340 B
Mercury in Water by CVAA	1	2023/07/07	2023/07/07	CAM SOP-00453	EPA 7470A m
Dissolved Mercury (low level)	1	2023/07/07	2023/07/07	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	1	2023/07/05	2023/07/06	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	1	N/A	2023/07/11	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	1	N/A	2023/07/12	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	1	2023/07/07	2023/07/07	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	1	N/A	2023/07/10	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	1	2023/07/10	2023/07/10	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	1	2023/07/11	2023/07/12	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	1	N/A	2023/07/10	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (3)	1	N/A	2023/07/07	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	1	2023/07/06	2023/07/07	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (4)	1	N/A	2023/07/05		Field pH Meter
Sulphate by Automated Turbidimetry	1	N/A	2023/07/07	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	1	2023/07/06	2023/07/07	CAM SOP-00428	SM 23 2540C m
Field Temperature (4)	1	N/A	2023/07/05		Field Thermometer
Total Kjeldahl Nitrogen in Water	1	2023/07/07	2023/07/10	CAM SOP-00938	OMOE E3516 m
Total Suspended Solids	1	2023/07/06	2023/07/07	CAM SOP-00428	SM 23 2540D m
Turbidity	1	N/A	2023/07/10	CAM SOP-00417	SM 23 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(4) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: GROUNDWATER SAMPLING PROGRAM
Your C.O.C. #: 725641

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/13
Report #: R7712828
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3J6607
Received: 2023/06/29, 16:43

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WHF142			WHF142		
Sampling Date		2023/06/28 13:10			2023/06/28 13:10		
COC Number		725641			725641		
	UNITS	BH14-15	RDL	QC Batch	BH14-15 Lab-Dup	RDL	QC Batch
Calculated Parameters							
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	350	1.0	8769432			
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.2	1.0	8769432			
Hardness (CaCO3)	mg/L	330	1.0	8768594			
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8769432			
Field Measurements							
Field Temperature	Celsius	8.7	N/A	ONSITE			
Field Measured pH	pH	7.31		ONSITE			
Inorganics							
Acidity	mg/L	22	5.0	8780779			
Total Ammonia-N	mg/L	0.32	0.050	8776231			
Conductivity	mS/cm	0.646	0.001	8773324			
Free Cyanide (CN)	ug/L	2.6 (1)	2.0	8780325			
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050 (2)	0.00050	8784557			
Total Dissolved Solids	mg/L	445	10	8771237			
Fluoride (F-)	mg/L	0.39	0.10	8773299			
Total Kjeldahl Nitrogen (TKN)	mg/L	0.70	0.20	8774887			
pH	pH	7.82		8773315			
Total Phosphorus (P)	mg/L	1.5	0.010	8784555			
Total Suspended Solids	mg/L	23000	100	8771352			
Dissolved Sulphate (SO4)	mg/L	7.0	1.0	8773464	8.0	1.0	8773464
Turbidity	NTU	4.1	0.1	8773035			
Alkalinity (Total as CaCO3)	mg/L	350	1.0	8773322			
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	8773455	<1.0	1.0	8773455
Nitrite (N)	mg/L	0.017	0.010	8773230			
Nitrate (N)	mg/L	0.10	0.10	8773230			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J6607
Report Date: 2023/07/13

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: SPJ

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WHF142			WHF142		
Sampling Date		2023/06/28 13:10			2023/06/28 13:10		
COC Number		725641			725641		
	UNITS	**BH14-15**	**RDL**	**QC Batch**	**BH14-15 Lab-Dup**	**RDL**	**QC Batch**
Nitrate + Nitrite (N)	mg/L	0.12	0.10	8773230			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF142		
Sampling Date		2023/06/28 13:10		
COC Number		725641		
	UNITS	BH14-15	RDL	QC Batch
Metals				
Dissolved Aluminum (Al)	mg/L	0.0009	0.0005	8780704
. Aluminum (Al)	mg/L	0.32	0.25	8780697
Dissolved Antimony (Sb)	mg/L	0.0002	0.0001	8780704
. Antimony (Sb)	mg/L	0.0004	0.0001	8780697
Dissolved Arsenic (As)	mg/L	0.0042	0.0001	8780704
. Arsenic (As)	mg/L	0.0025	0.0001	8780697
Dissolved Barium (Ba)	mg/L	0.0725	0.0002	8780704
. Barium (Ba)	mg/L	0.143	0.0002	8780697
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8780704
. Beryllium (Be)	mg/L	0.00014	0.00005	8780697
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8780704
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8780697
Dissolved Boron (B)	mg/L	0.062	0.001	8780704
. Boron (B)	mg/L	0.075	0.001	8780697
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8780704
. Cadmium (Cd)	mg/L	0.000248	0.000005	8780697
Dissolved Calcium (Ca)	mg/L	88.6	0.1	8780704
. Calcium (Ca)	mg/L	693	10	8780697
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	8780704
. Cesium (Cs)	mg/L	0.00008	0.00002	8780697
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8780704
. Chromium (Cr)	mg/L	0.0009	0.0005	8780697
Dissolved Cobalt (Co)	mg/L	0.00062	0.00005	8780704
. Cobalt (Co)	mg/L	0.00443	0.00005	8780697
Dissolved Copper (Cu)	mg/L	0.0002	0.0001	8780704
. Copper (Cu)	mg/L	0.0028	0.0001	8780697
Dissolved Iron (Fe)	mg/L	1.97	0.005	8780704
. Iron (Fe)	mg/L	2.48	0.005	8780697
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8780704
. Lead (Pb)	mg/L	0.00015	0.00005	8780697
Dissolved Lithium (Li)	mg/L	0.0100	0.0005	8780704

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF142		
Sampling Date		2023/06/28 13:10		
COC Number		725641		
	UNITS	BH14-15	RDL	QC Batch
. Lithium (Li)	mg/L	0.0138	0.0005	8780697
Dissolved Magnesium (Mg)	mg/L	25.3	0.005	8780704
. Magnesium (Mg)	mg/L	122	0.025	8780697
Dissolved Manganese (Mn)	mg/L	0.0922	0.0002	8780704
. Manganese (Mn)	mg/L	1.03	0.001	8780697
Mercury (Hg)	mg/L	<0.0015	0.0015	8774198
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8774872
Dissolved Molybdenum (Mo)	mg/L	0.00168	0.00005	8780704
. Molybdenum (Mo)	mg/L	0.00188	0.00005	8780697
Dissolved Nickel (Ni)	mg/L	0.0008	0.0001	8780704
. Nickel (Ni)	mg/L	0.0071	0.0001	8780697
Dissolved Phosphorus (P)	mg/L	0.014	0.005	8780704
. Phosphorus (P)	mg/L	0.044	0.005	8780697
Dissolved Potassium (K)	mg/L	3.15	0.02	8780704
. Potassium (K)	mg/L	3.83	0.02	8780697
Dissolved Rubidium (Rb)	mg/L	0.00168	0.00002	8780704
. Rubidium (Rb)	mg/L	0.00573	0.00002	8780697
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8780704
. Selenium (Se)	mg/L	0.00006	0.00005	8780697
Dissolved Silicon (Si)	mg/L	8.87	0.025	8780704
. Silicon (Si)	mg/L	9.67	0.025	8780697
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8780704
. Silver (Ag)	mg/L	<0.00001	0.00001	8780697
Dissolved Sodium (Na)	mg/L	30.6	0.01	8780704
. Sodium (Na)	mg/L	27.7	0.01	8780697
Dissolved Strontium (Sr)	mg/L	0.217	0.0001	8780704
. Strontium (Sr)	mg/L	0.593	0.0001	8780697
Dissolved Sulphur (S)	mg/L	2.0	0.5	8765052
Total Sulphur (S)	mg/L	7.2	0.5	8773967
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8780704
. Tellurium (Te)	mg/L	<0.0001	0.0001	8780697
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8780704

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF142		
Sampling Date		2023/06/28 13:10		
COC Number		725641		
	UNITS	BH14-15	RDL	QC Batch
. Thallium (Tl)	mg/L	0.000040	0.000005	8780697
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8780704
. Thorium (Th)	mg/L	<0.0002	0.0002	8780697
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8780704
. Tin (Sn)	mg/L	<0.0001	0.0001	8780697
Dissolved Titanium (Ti)	mg/L	0.0006	0.0005	8780704
. Titanium (Ti)	mg/L	0.0225	0.0005	8780697
Dissolved Tungsten (W)	mg/L	0.0016	0.0001	8780704
. Tungsten (W)	mg/L	0.0032	0.0001	8780697
Dissolved Uranium (U)	mg/L	0.00043	0.00001	8780704
. Uranium (U)	mg/L	0.00036	0.00001	8780697
Dissolved Vanadium (V)	mg/L	0.00034	0.00005	8780704
. Vanadium (V)	mg/L	0.00303	0.00005	8780697
Dissolved Zinc (Zn)	mg/L	<0.0005	0.0005	8780704
. Zinc (Zn)	mg/L	0.0123	0.0005	8780697
Dissolved Zirconium (Zr)	mg/L	0.0003	0.0001	8780704
. Zirconium (Zr)	mg/L	0.0008	0.0001	8780697

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J6607
Report Date: 2023/07/13

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: SPJ

TEST SUMMARY

Bureau Veritas ID: WHF142
Sample ID: BH14-15
Matrix: Water

Collected: 2023/06/28
Shipped:
Received: 2023/06/29

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8780779	N/A	2023/07/11	Brent Boudreau
Alkalinity	AT	8773322	N/A	2023/07/07	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8769432	N/A	2023/07/10	Automated Statchk
Chloride by Automated Colourimetry	KONE	8773455	N/A	2023/07/07	Massarat Jan
Conductivity	AT	8773324	N/A	2023/07/07	Kien Tran
Fluoride	ISE	8773299	2023/07/06	2023/07/07	Kien Tran
Hardness (calculated as CaCO3)		8768594	N/A	2023/07/11	Automated Statchk
Mercury in Water by CVAA	CV/AA	8774198	2023/07/07	2023/07/07	Japneet Gill
Dissolved Mercury (low level)	CV/AA	8774872	2023/07/07	2023/07/07	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8765052	2023/07/05	2023/07/06	Thuy Linh Nguyen
Dissolved Metals by ICPMS (low level)	ICP1/MS	8780704	N/A	2023/07/11	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8780697	N/A	2023/07/12	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8773967	2023/07/07	2023/07/07	Thuy Linh Nguyen
Cyanide (Free)	SPEC	8780325	N/A	2023/07/10	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8784557	2023/07/10	2023/07/10	Ming Dong
Total Phosphorus Low Level Total	KONE	8784555	2023/07/11	2023/07/12	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8776231	N/A	2023/07/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8773230	N/A	2023/07/07	Chandra Nandlal
pH	AT	8773315	2023/07/06	2023/07/07	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Pardeep Purewal
Sulphate by Automated Turbidimetry	KONE	8773464	N/A	2023/07/07	Massarat Jan
Total Dissolved Solids	BAL	8771237	2023/07/06	2023/07/07	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Pardeep Purewal
Total Kjeldahl Nitrogen in Water	SKAL	8774887	2023/07/07	2023/07/10	Kruti Jitesh Patel
Total Suspended Solids	BAL	8771352	2023/07/06	2023/07/07	Shaneil Hall
Turbidity	AT	8773035	N/A	2023/07/10	Gurparteek KAUR

Bureau Veritas ID: WHF142 Dup
Sample ID: BH14-15
Matrix: Water

Collected: 2023/06/28
Shipped:
Received: 2023/06/29

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	8773455	N/A	2023/07/07	Massarat Jan
Sulphate by Automated Turbidimetry	KONE	8773464	N/A	2023/07/07	Massarat Jan

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	7.7°C

Sample WHF142 [BH14-15] : Acidity sample contained headspace.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8765052	Dissolved Sulphur (S)	2023/07/06	NC	80 - 120	99	80 - 120	<0.5	mg/L	0.47	25		
8771237	Total Dissolved Solids	2023/07/07			98	90 - 110	<10	mg/L	1.1	20		
8771352	Total Suspended Solids	2023/07/07			95	85 - 115	<10	mg/L	NC	20		
8773035	Turbidity	2023/07/10			100	80 - 120	<0.1	NTU	12	20		
8773230	Nitrate (N)	2023/07/07	98	80 - 120	94	80 - 120	<0.10	mg/L	NC	20		
8773230	Nitrite (N)	2023/07/07	104	80 - 120	104	80 - 120	<0.010	mg/L	NC	20		
8773299	Fluoride (F-)	2023/07/07	95	80 - 120	98	80 - 120	<0.10	mg/L	NC	20		
8773315	pH	2023/07/07			102	98 - 103			0.36	N/A		
8773322	Alkalinity (Total as CaCO3)	2023/07/07			95	85 - 115	<1.0	mg/L	8.4	20		
8773324	Conductivity	2023/07/07			102	85 - 115	<0.001	mS/cm	1.2	10		
8773455	Dissolved Chloride (Cl-)	2023/07/07	101	80 - 120	91	80 - 120	<1.0	mg/L	NC	20		
8773464	Dissolved Sulphate (SO4)	2023/07/07	84	75 - 125	93	80 - 120	<1.0	mg/L	13	20		
8773967	Total Sulphur (S)	2023/07/07	103	80 - 120	100	80 - 120	<0.5	mg/L	0.38	25		
8774198	Mercury (Hg)	2023/07/07	92	75 - 125	110	80 - 120	<0.00010	mg/L	NC	20		
8774872	Dissolved Mercury (Hg)	2023/07/07	102	75 - 125	102	80 - 120	<0.01	ug/L	NC	20		
8774887	Total Kjeldahl Nitrogen (TKN)	2023/07/10	93	80 - 120	90	80 - 120	<0.10	mg/L	NC	20	89	80 - 120
8776231	Total Ammonia-N	2023/07/10	102	75 - 125	103	80 - 120	<0.050	mg/L	NC	20		
8780325	Free Cyanide (CN)	2023/07/10	82	80 - 120	89	80 - 120	<2.0	ug/L				
8780697	. Aluminum (Al)	2023/07/11	NC	80 - 120	105	80 - 120	<0.0005	mg/L	0.50 (1)	20		
8780697	. Antimony (Sb)	2023/07/11	112	80 - 120	102	80 - 120	<0.0001	mg/L				
8780697	. Arsenic (As)	2023/07/11	101	80 - 120	97	80 - 120	<0.0001	mg/L				
8780697	. Barium (Ba)	2023/07/11	111	80 - 120	106	80 - 120	<0.0002	mg/L				
8780697	. Beryllium (Be)	2023/07/11	100	80 - 120	95	80 - 120	<0.00005	mg/L				
8780697	. Bismuth (Bi)	2023/07/11	97	80 - 120	94	80 - 120	<0.0001	mg/L				
8780697	. Boron (B)	2023/07/11	93	80 - 120	93	80 - 120	<0.001	mg/L				
8780697	. Cadmium (Cd)	2023/07/11	104	80 - 120	97	80 - 120	<0.000005	mg/L				
8780697	. Calcium (Ca)	2023/07/11	NC	80 - 120	113	80 - 120	<0.02	mg/L				
8780697	. Cesium (Cs)	2023/07/11	105	80 - 120	103	80 - 120	<0.00002	mg/L				
8780697	. Chromium (Cr)	2023/07/11	100	80 - 120	101	80 - 120	<0.0005	mg/L				
8780697	. Cobalt (Co)	2023/07/11	97	80 - 120	99	80 - 120	<0.00005	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8780697	. Copper (Cu)	2023/07/11	106	80 - 120	108	80 - 120	<0.0001	mg/L				
8780697	. Iron (Fe)	2023/07/11	99	80 - 120	100	80 - 120	<0.005	mg/L				
8780697	. Lead (Pb)	2023/07/11	95	80 - 120	95	80 - 120	<0.00005	mg/L				
8780697	. Lithium (Li)	2023/07/11	111	80 - 120	106	80 - 120	<0.0005	mg/L				
8780697	. Magnesium (Mg)	2023/07/11	NC	80 - 120	98	80 - 120	<0.005	mg/L				
8780697	. Manganese (Mn)	2023/07/11	94	80 - 120	94	80 - 120	<0.0002	mg/L				
8780697	. Molybdenum (Mo)	2023/07/11	112	80 - 120	102	80 - 120	<0.00005	mg/L				
8780697	. Nickel (Ni)	2023/07/11	88	80 - 120	92	80 - 120	<0.0001	mg/L				
8780697	. Phosphorus (P)	2023/07/11	112	80 - 120	106	80 - 120	<0.005	mg/L				
8780697	. Potassium (K)	2023/07/11	101	80 - 120	108	80 - 120	<0.02	mg/L				
8780697	. Rubidium (Rb)	2023/07/11	98	80 - 120	100	80 - 120	<0.00002	mg/L				
8780697	. Selenium (Se)	2023/07/11	103	80 - 120	99	80 - 120	<0.00005	mg/L				
8780697	. Silicon (Si)	2023/07/11	105	80 - 120	107	80 - 120	<0.005	mg/L				
8780697	. Silver (Ag)	2023/07/11	99	80 - 120	94	80 - 120	<0.00001	mg/L				
8780697	. Sodium (Na)	2023/07/11	NC	80 - 120	105	80 - 120	<0.01	mg/L				
8780697	. Strontium (Sr)	2023/07/11	NC	80 - 120	91	80 - 120	<0.0001	mg/L				
8780697	. Tellurium (Te)	2023/07/11	111	80 - 120	101	80 - 120	<0.0001	mg/L				
8780697	. Thallium (Tl)	2023/07/11	95	80 - 120	95	80 - 120	<0.000005	mg/L				
8780697	. Thorium (Th)	2023/07/11	96	80 - 120	93	80 - 120	<0.0002	mg/L				
8780697	. Tin (Sn)	2023/07/11	111	80 - 120	102	80 - 120	<0.0001	mg/L				
8780697	. Titanium (Ti)	2023/07/11	104	80 - 120	101	80 - 120	<0.0005	mg/L				
8780697	. Tungsten (W)	2023/07/11	99	80 - 120	98	80 - 120	<0.0001	mg/L				
8780697	. Uranium (U)	2023/07/11	98	80 - 120	97	80 - 120	<0.00001	mg/L				
8780697	. Vanadium (V)	2023/07/11	98	80 - 120	97	80 - 120	<0.00005	mg/L				
8780697	. Zinc (Zn)	2023/07/11	98	80 - 120	96	80 - 120	<0.0005	mg/L				
8780697	. Zirconium (Zr)	2023/07/11	108	80 - 120	100	80 - 120	<0.0001	mg/L				
8780704	Dissolved Aluminum (Al)	2023/07/11	116	80 - 120	102	80 - 120	<0.0005	mg/L	NC	20		
8780704	Dissolved Antimony (Sb)	2023/07/11	112	80 - 120	100	80 - 120	<0.0001	mg/L	0.93	20		
8780704	Dissolved Arsenic (As)	2023/07/11	103	80 - 120	99	80 - 120	<0.0001	mg/L	0.63	20		
8780704	Dissolved Barium (Ba)	2023/07/11	108	80 - 120	102	80 - 120	<0.0002	mg/L	0.88	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8780704	Dissolved Beryllium (Be)	2023/07/11	97	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8780704	Dissolved Bismuth (Bi)	2023/07/11	87	80 - 120	95	80 - 120	<0.0001	mg/L	NC	20		
8780704	Dissolved Boron (B)	2023/07/11	NC	80 - 120	93	80 - 120	<0.001	mg/L	0.88	20		
8780704	Dissolved Cadmium (Cd)	2023/07/11	103	80 - 120	97	80 - 120	<0.00001	mg/L	NC	20		
8780704	Dissolved Calcium (Ca)	2023/07/11	NC	80 - 120	108	80 - 120	<0.02	mg/L	2.4	20		
8780704	Dissolved Cesium (Cs)	2023/07/11	103	80 - 120	99	80 - 120	<0.00002	mg/L	NC	N/A		
8780704	Dissolved Chromium (Cr)	2023/07/11	105	80 - 120	102	80 - 120	<0.0005	mg/L	NC	20		
8780704	Dissolved Cobalt (Co)	2023/07/11	98	80 - 120	96	80 - 120	<0.00005	mg/L	3.7	20		
8780704	Dissolved Copper (Cu)	2023/07/11	112	80 - 120	103	80 - 120	<0.0001	mg/L	7.0	20		
8780704	Dissolved Iron (Fe)	2023/07/11	103	80 - 120	99	80 - 120	<0.005	mg/L	2.8	20		
8780704	Dissolved Lead (Pb)	2023/07/11	86	80 - 120	93	80 - 120	<0.00005	mg/L	NC	20		
8780704	Dissolved Lithium (Li)	2023/07/11	103	80 - 120	100	80 - 120	<0.0005	mg/L	5.2	20		
8780704	Dissolved Magnesium (Mg)	2023/07/11	NC	80 - 120	98	80 - 120	<0.005	mg/L	6.4	20		
8780704	Dissolved Manganese (Mn)	2023/07/11	98	80 - 120	96	80 - 120	<0.0002	mg/L	3.1	20		
8780704	Dissolved Molybdenum (Mo)	2023/07/11	119	80 - 120	103	80 - 120	<0.00005	mg/L	0.42	20		
8780704	Dissolved Nickel (Ni)	2023/07/11	88	80 - 120	91	80 - 120	<0.0001	mg/L	0.31	20		
8780704	Dissolved Phosphorus (P)	2023/07/11	126 (2)	80 - 120	102	80 - 120	<0.005	mg/L	NC	20		
8780704	Dissolved Potassium (K)	2023/07/11	NC	80 - 120	107	80 - 120	<0.02	mg/L	0.73	20		
8780704	Dissolved Rubidium (Rb)	2023/07/11	98	80 - 120	98	80 - 120	<0.00002	mg/L	NC	N/A		
8780704	Dissolved Selenium (Se)	2023/07/11	104	80 - 120	100	80 - 120	<0.0002	mg/L	NC	20		
8780704	Dissolved Silicon (Si)	2023/07/11	NC	80 - 120	101	80 - 120	<0.005	mg/L	1.9	20		
8780704	Dissolved Silver (Ag)	2023/07/11	91	80 - 120	95	80 - 120	<0.00001	mg/L	NC	20		
8780704	Dissolved Sodium (Na)	2023/07/11	NC	80 - 120	107	80 - 120	<0.01	mg/L	3.6	20		
8780704	Dissolved Strontium (Sr)	2023/07/11	NC	80 - 120	92	80 - 120	<0.0001	mg/L	1.2	20		
8780704	Dissolved Tellurium (Te)	2023/07/11	110	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8780704	Dissolved Thallium (Tl)	2023/07/11	90	80 - 120	95	80 - 120	<0.000005	mg/L	NC	20		
8780704	Dissolved Thorium (Th)	2023/07/11	94	80 - 120	94	80 - 120	<0.0002	mg/L	NC	20		
8780704	Dissolved Tin (Sn)	2023/07/11	113	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8780704	Dissolved Titanium (Ti)	2023/07/11	108	80 - 120	98	80 - 120	<0.0005	mg/L	NC	20		
8780704	Dissolved Tungsten (W)	2023/07/11	100	80 - 120	98	80 - 120	<0.0001	mg/L	3.2	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8780704	Dissolved Uranium (U)	2023/07/11	99	80 - 120	99	80 - 120	<0.00001	mg/L	8.5	20		
8780704	Dissolved Vanadium (V)	2023/07/11	109	80 - 120	104	80 - 120	<0.00005	mg/L	2.3	20		
8780704	Dissolved Zinc (Zn)	2023/07/11	95	80 - 120	99	80 - 120	<0.0005	mg/L	2.0	20		
8780704	Dissolved Zirconium (Zr)	2023/07/11	115	80 - 120	97	80 - 120	<0.0001	mg/L	NC	20		
8780779	Acidity	2023/07/11	91	80 - 120	104	80 - 120	<5.0	mg/L	NC	25		
8784555	Total Phosphorus (P)	2023/07/12	109	80 - 120	103	80 - 120	<0.0010	mg/L			89	80 - 120
8784557	Strong Acid Dissoc. Cyanide (CN)	2023/07/10	97	80 - 120	100	80 - 120	<0.00050	mg/L				

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) POTENTIAL EXCEEDANCE FOR PARAMETER

(2) Metal Analysis:Matrix Spike exceeds acceptance limits, probable matrix interference

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Anastassia Hamanov, Scientific Specialist

<original signed by>

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

<original signed by>

Mike MacGillivray, Scientific Specialist (Inorganics)

<original signed by>

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 726370

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/21
Report #: R7729177
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3J6649
Received: 2023/06/30, 15:45

Sample Matrix: Water
Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	10	N/A	2023/07/11	ATL SOP-00205	SM 24 2310B m
Alkalinity	10	N/A	2023/07/07	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	10	N/A	2023/07/10	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	8	N/A	2023/07/07	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	10	N/A	2023/07/07	CAM SOP-00414	SM 23 2510 m
Dissolved Organic Carbon (DOC) (3)	2	N/A	2023/07/11	CAM SOP-00446	SM 23 5310 B m
Dissolved Organic Carbon (DOC) (3)	3	N/A	2023/07/06	CAM SOP-00446	SM 23 5310 B m
Petroleum Hydro. CCME F1 & BTEX in Water	1	N/A	2023/07/06	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydro. CCME F1 & BTEX in Water	2	N/A	2023/07/07	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (4)	5	2023/07/06	2023/07/07	CAM SOP-00316	CCME PHC-CWS m
Fluoride	8	2023/07/06	2023/07/07	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	8	N/A	2023/07/11	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO3)	2	N/A	2023/07/21	CAM SOP 00102/00408/00447	SM 2340 B
Dissolved Mercury (low level)	8	2023/07/07	2023/07/07	CAM SOP-00453	EPA 7470 m
Mercury (low level)	8	2023/07/07	2023/07/07	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	8	2023/07/07	2023/07/12	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	8	N/A	2023/07/11	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS (low level)	2	N/A	2023/07/21	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	8	N/A	2023/07/11	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	2	N/A	2023/07/18	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	8	2023/07/07	2023/07/07	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	8	N/A	2023/07/11	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	8	2023/07/11	2023/07/11	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	8	2023/07/11	2023/07/12	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	2	N/A	2023/07/10	CAM SOP-00441	USGS I-2522-90 m
Total Ammonia-N	8	N/A	2023/07/07	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (5)	8	N/A	2023/07/07	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	10	2023/07/06	2023/07/07	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (6)	8	N/A	2023/07/05		Field pH Meter

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 726370

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/21
Report #: R7729177
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3J6649
Received: 2023/06/30, 15:45

Sample Matrix: Water
Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Sulphate by Automated Turbidimetry	8	N/A	2023/07/07	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	4	2023/07/06	2023/07/07	CAM SOP-00428	SM 23 2540C m
Total Dissolved Solids	4	2023/07/07	2023/07/10	CAM SOP-00428	SM 23 2540C m
Field Temperature (6)	8	N/A	2023/07/05		Field Thermometer
Total Kjeldahl Nitrogen in Water	2	2023/07/07	2023/07/10	CAM SOP-00938	OMOE E3516 m
Total Kjeldahl Nitrogen in Water	6	2023/07/07	2023/07/11	CAM SOP-00938	OMOE E3516 m
Total Organic Carbon (TOC) (7)	2	N/A	2023/07/07	CAM SOP-00446	SM 23 5310B m
Low Level Total Suspended Solids	8	2023/07/06	2023/07/07	CAM SOP-00428	SM 23 2540D m
Turbidity	8	N/A	2023/07/10	CAM SOP-00417	SM 23 2130 B m
Volatile Organic Compounds and F1 PHCs	2	N/A	2023/07/07	CAM SOP-00230	EPA 8260C m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 726370

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/21
Report #: R7729177
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3J6649

Received: 2023/06/30, 15:45

(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
(4) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following “Alberta Environment’s Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003”. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
(5) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(6) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.
(7) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J6649
Report Date: 2023/07/21

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WHF444		WHF445		WHF446		
Sampling Date		2023/06/29 10:53		2023/06/29 11:14		2023/06/29 12:51		
COC Number		726370		726370		726370		
	UNITS	BH14-02	QC Batch	BH14-02A	QC Batch	MW15-OB-14	RDL	QC Batch
Calculated Parameters								
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	430	8771520	330	8771520	210	1.0	8771520
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.1	8771520	1.7	8771520	2.1	1.0	8771520
Hardness (CaCO3)	mg/L	530	8771521	350	8771521	240	1.0	8771521
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	8771520	<1.0	8771520	<1.0	1.0	8771520
Field Measurements								
Field Temperature	Celsius	12.1	ONSITE	6.9	ONSITE	7.3	N/A	ONSITE
Field Measured pH	pH	6.52	ONSITE	7.18	ONSITE	7.51		ONSITE
Inorganics								
Acidity	mg/L	110	8780779	22	8780779	6.2	5.0	8780779
Total Ammonia-N	mg/L	0.45	8773610	0.15	8773610	<0.050	0.050	8774707
Conductivity	mS/cm	0.975	8773324	0.608	8773324	0.418	0.001	8773324
Free Cyanide (CN)	ug/L	3.3 (1)	8785892	2.1 (1)	8785892	<2.0 (1)	2.0	8785892
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050 (2)	8782748	<0.00050 (2)	8782748	<0.00050	0.00050	8785893
Total Dissolved Solids	mg/L	760	8772559	335	8775362	210	10	8775362
Fluoride (F-)	mg/L	<0.10	8773299	<0.10	8773299	<0.10	0.10	8773299
Total Kjeldahl Nitrogen (TKN)	mg/L	0.88	8774656	0.41	8774381	0.10	0.10	8774381
Dissolved Organic Carbon	mg/L	12	8772812	14	8772812	3.9	0.40	8772812
pH	pH	7.44	8773315	7.75	8773315	8.03		8773315
Total Phosphorus (P)	mg/L	0.085	8784555	0.014	8784555	0.032	0.0010	8784555
Total Suspended Solids	mg/L	62	8772540	13	8772540	200	1	8772540
Dissolved Sulphate (SO4)	mg/L	<1.0	8773464	<1.0	8773464	6.9	1.0	8773464
Turbidity	NTU	16	8773035	11	8773035	0.5	0.1	8773035
Alkalinity (Total as CaCO3)	mg/L	430	8773322	330	8773322	210	1.0	8773322
Dissolved Chloride (Cl-)	mg/L	53	8773455	2.6	8773455	1.7	1.0	8773455
Nitrite (N)	mg/L	<0.010	8773230	<0.010	8773230	<0.010	0.010	8773230
Nitrate (N)	mg/L	<0.10	8773230	<0.10	8773230	<0.10	0.10	8773230

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J6649
Report Date: 2023/07/21

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WHF444		WHF445		WHF446		
Sampling Date		2023/06/29 10:53		2023/06/29 11:14		2023/06/29 12:51		
COC Number		726370		726370		726370		
	UNITS	**BH14-02**	**QC Batch**	**BH14-02A**	**QC Batch**	**MW15-OB-14**	**RDL**	**QC Batch**
Nitrate + Nitrite (N)	mg/L	<0.10	8773230	<0.10	8773230	<0.10	0.10	8773230

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J6649
Report Date: 2023/07/21

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WHF446			WHF447			WHF447		
Sampling Date		2023/06/29 12:51			2023/06/29 13:04			2023/06/29 13:04		
COC Number		726370			726370			726370		
	UNITS	MW15-OB-14 Lab-Dup	RDL	QC Batch	MW15-BR-14	RDL	QC Batch	MW15-BR-14 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L				180	1.0	8771520			
Carb. Alkalinity (calc. as CaCO3)	mg/L				1.6	1.0	8771520			
Hardness (CaCO3)	mg/L				190	1.0	8771521			
Hydrox. Alkalinity (calc. as CaCO3)	mg/L				<1.0	1.0	8771520			
Field Measurements										
Field Temperature	Celsius				6.8	N/A	ONSITE			
Field Measured pH	pH				7.46		ONSITE			
Inorganics										
Acidity	mg/L				6.8	5.0	8780779			
Total Ammonia-N	mg/L	<0.050	0.050	8774707	0.16 (1)	0.050	8773610			
Conductivity	mS/cm				0.360	0.001	8773324			
Free Cyanide (CN)	ug/L				2.8 (2)	2.0	8785892			
Strong Acid Dissoc. Cyanide (CN)	mg/L				<0.00050 (3)	0.00050	8785893			
Total Dissolved Solids	mg/L				200	10	8775362	205	10	8775362
Fluoride (F-)	mg/L				0.16	0.10	8773299			
Total Kjeldahl Nitrogen (TKN)	mg/L				0.15 (1)	0.10	8774656			
pH	pH				8.00		8773315			
Total Phosphorus (P)	mg/L				0.0032	0.0010	8784555			
Total Suspended Solids	mg/L	230	1	8772540	4	1	8772540			
Dissolved Sulphate (SO4)	mg/L				10	1.0	8773464			
Turbidity	NTU				0.8	0.1	8773035			
Alkalinity (Total as CaCO3)	mg/L				180	1.0	8773322			
Dissolved Chloride (Cl-)	mg/L				1.5	1.0	8773455			
Nitrite (N)	mg/L				<0.010	0.010	8773230			
Nitrate (N)	mg/L				<0.10	0.10	8773230			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) TKN < NH4: Both values fall within acceptable RPD limits for duplicates and are likely equivalent.
(2) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(3) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com
Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J6649
Report Date: 2023/07/21

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WHF446			WHF447			WHF447		
Sampling Date		2023/06/29 12:51			2023/06/29 13:04			2023/06/29 13:04		
COC Number		726370			726370			726370		
	UNITS	**MW15-OB-14 Lab-Dup**	**RDL**	**QC Batch**	**MW15-BR-14**	**RDL**	**QC Batch**	**MW15-BR-14 Lab-Dup**	**RDL**	**QC Batch**
Nitrate + Nitrite (N)	mg/L				<0.10	0.10	8773230			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J6649
Report Date: 2023/07/21

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WHF448		WHF449		WHF450		
Sampling Date		2023/06/29 13:56		2023/06/29 14:10		2023/06/29 15:47		
COC Number		726370		726370		726370		
	UNITS	MW25-OB-21	RDL	MW25-BR-21	RDL	MW23-OB-21	RDL	QC Batch
Calculated Parameters								
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	220	1.0	230	1.0	250	1.0	8771520
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.3	1.0	3.0	1.0	1.7	1.0	8771520
Hardness (CaCO3)	mg/L	230	1.0	210	1.0	260	1.0	8771521
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	<1.0	1.0	<1.0	1.0	8771520
Field Measurements								
Field Temperature	Celsius	6.4	N/A	5.5	N/A	7.8	N/A	ONSITE
Field Measured pH	pH	7.64		7.99		7.4		ONSITE
Inorganics								
Acidity	mg/L	6.6	5.0	6.4	5.0	12	5.0	8780779
Total Ammonia-N	mg/L	0.053	0.050	0.21 (1)	0.050	0.21	0.050	8773610
Conductivity	mS/cm	0.411	0.001	0.426	0.001	0.480	0.001	8773324
Free Cyanide (CN)	ug/L	<2.0 (2)	2.0	2.1 (2)	2.0	<2.0 (2)	2.0	8785892
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	<0.00050 (3)	0.00050	<0.00050	0.00050	8785893
Total Dissolved Solids	mg/L	215	10	240	10	245	10	8772559
Fluoride (F-)	mg/L	0.14	0.10	0.23	0.10	0.12	0.10	8773299
Total Kjeldahl Nitrogen (TKN)	mg/L	<0.10	0.10	0.19 (1)	0.10	0.34	0.10	8774381
pH	pH	8.06		8.16		7.88		8773315
Total Phosphorus (P)	mg/L	0.097	0.0010	0.014	0.0010	0.43 (4)	0.0050	8784555
Total Suspended Solids	mg/L	850	5	24	1	170	1	8772540
Dissolved Sulphate (SO4)	mg/L	2.4	1.0	<1.0	1.0	5.1	1.0	8773464
Turbidity	NTU	2.3	0.1	3.2	0.1	1.9	0.1	8773035
Alkalinity (Total as CaCO3)	mg/L	220	1.0	230	1.0	250	1.0	8773322
Dissolved Chloride (Cl-)	mg/L	1.1	1.0	1.4	1.0	3.0	1.0	8773455
Nitrite (N)	mg/L	<0.010	0.010	<0.010	0.010	<0.010	0.010	8773230
Nitrate (N)	mg/L	<0.10	0.10	<0.10	0.10	<0.10	0.10	8773230

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) TKN < NH4: Both values fall within acceptable RPD limits for duplicates and are likely equivalent.
(2) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(3) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.
(4) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com
Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J6649
Report Date: 2023/07/21

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WHF448		WHF449		WHF450		
Sampling Date		2023/06/29 13:56		2023/06/29 14:10		2023/06/29 15:47		
COC Number		726370		726370		726370		
	UNITS	**MW25-OB-21**	**RDL**	**MW25-BR-21**	**RDL**	**MW23-OB-21**	**RDL**	**QC Batch**
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	<0.10	0.10	<0.10	0.10	8773230

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J6649
Report Date: 2023/07/21

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WHF451			WHF452	WHF453		
Sampling Date		2023/06/29 16:15			2023/06/29 12:34	2023/06/29 15:20		
COC Number		726370			726370	726370		
	UNITS	MW21-BR-21	RDL	QC Batch	MDP-3/23	MDP-3-23-2	RDL	QC Batch
Calculated Parameters								
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	300	1.0	8771520	200	160	1.0	8771520
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8771520	5.3	2.1	1.0	8771520
Hardness (CaCO3)	mg/L	380	1.0	8771521	40	100	1.0	8771521
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8771520	<1.0	<1.0	1.0	8771520
Field Measurements								
Field Temperature	Celsius	9.3	N/A	ONSITE				
Field Measured pH	pH	6.64		ONSITE				
Inorganics								
Acidity	mg/L	68	5.0	8780779	<5.0	<5.0	5.0	8780779
Total Ammonia-N	mg/L	0.36	0.050	8774707	3.8	2.6	0.050	8773610
Conductivity	mS/cm	0.756	0.001	8773324	0.422	0.356	0.001	8773324
Free Cyanide (CN)	ug/L	3.1 (1)	2.0	8785892				
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.00058 (2)	0.00050	8785893				
Total Dissolved Solids	mg/L	445	10	8775362				
Fluoride (F-)	mg/L	<0.10	0.10	8773299				
Total Kjeldahl Nitrogen (TKN)	mg/L	0.75	0.10	8774381				
Dissolved Organic Carbon	mg/L				7.7	5.0	0.40	8776829
Total Organic Carbon (TOC)	mg/L				7.5	4.1	0.40	8774869
pH	pH	7.37		8773315	8.46	8.14		8773315
Total Phosphorus (P)	mg/L	0.0083	0.0010	8784555				
Total Suspended Solids	mg/L	53	5	8772540				
Dissolved Sulphate (SO4)	mg/L	45	1.0	8773464				
Turbidity	NTU	0.7	0.1	8773035				
Alkalinity (Total as CaCO3)	mg/L	300	1.0	8773322	200	170	1.0	8773322
Dissolved Chloride (Cl-)	mg/L	33	1.0	8773455				
Nitrite (N)	mg/L	<0.010	0.010	8773230				

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J6649
Report Date: 2023/07/21

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WHF451			WHF452	WHF453		
Sampling Date		2023/06/29 16:15			2023/06/29 12:34	2023/06/29 15:20		
COC Number		726370			726370	726370		
	UNITS	**MW21-BR-21**	**RDL**	**QC Batch**	**MDP-3/23**	**MDP-3-23-2**	**RDL**	**QC Batch**
Nitrate (N)	mg/L	<0.10	0.10	8773230				
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8773230				

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF444		WHF445			WHF445		
Sampling Date		2023/06/29 10:53		2023/06/29 11:14			2023/06/29 11:14		
COC Number		726370		726370			726370		
	UNITS	BH14-02	RDL	BH14-02A	RDL	QC Batch	BH14-02A Lab-Dup	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	mg/L	0.0120	0.0025	0.0131	0.0005	8780704			
. Aluminum (Al)	mg/L	0.483	0.0025	0.0965	0.0005	8780697			
Dissolved Antimony (Sb)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8780704			
. Antimony (Sb)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8780697			
Dissolved Arsenic (As)	mg/L	0.0265	0.0005	0.0101	0.0001	8780704			
. Arsenic (As)	mg/L	0.0398	0.0005	0.0102	0.0001	8780697			
Dissolved Barium (Ba)	mg/L	0.035	0.001	0.0117	0.0002	8780704			
. Barium (Ba)	mg/L	0.048	0.001	0.0162	0.0002	8780697			
Dissolved Beryllium (Be)	mg/L	<0.00025	0.00025	<0.00005	0.00005	8780704			
. Beryllium (Be)	mg/L	<0.00025	0.00025	<0.00005	0.00005	8780697			
Dissolved Bismuth (Bi)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8780704			
. Bismuth (Bi)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8780697			
Dissolved Boron (B)	mg/L	0.010	0.005	0.006	0.001	8780704			
. Boron (B)	mg/L	0.011	0.005	0.007	0.001	8780697			
Dissolved Cadmium (Cd)	mg/L	<0.00005	0.00005	<0.00001	0.00001	8780704			
. Cadmium (Cd)	mg/L	0.000027	0.000025	<0.000005	0.000005	8780697			
Dissolved Calcium (Ca)	mg/L	179	0.1	113	0.1	8780704			
. Calcium (Ca)	mg/L	208	0.1	110	0.1	8780697			
Dissolved Cesium (Cs)	mg/L	0.0018	0.0001	0.00020	0.00002	8780704			
. Cesium (Cs)	mg/L	0.0021	0.0001	0.00023	0.00002	8780697			
Dissolved Chromium (Cr)	mg/L	<0.0025	0.0025	<0.0005	0.0005	8780704			
. Chromium (Cr)	mg/L	0.0026	0.0025	0.0006	0.0005	8780697			
Dissolved Cobalt (Co)	mg/L	0.00256	0.00025	<0.00005	0.00005	8780704			
. Cobalt (Co)	mg/L	0.00480	0.00025	0.00011	0.00005	8780697			
Dissolved Copper (Cu)	mg/L	<0.0005	0.0005	0.0003	0.0001	8780704			
. Copper (Cu)	mg/L	0.0061	0.0005	0.0004	0.0001	8780697			
Dissolved Iron (Fe)	mg/L	15.0	0.025	3.17	0.005	8780704			
. Iron (Fe)	mg/L	21.3	0.025	4.39	0.005	8780697			
Dissolved Lead (Pb)	mg/L	<0.00025	0.00025	<0.00005	0.00005	8780704			
. Lead (Pb)	mg/L	0.00196	0.00025	0.00021	0.00005	8780697			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF444		WHF445			WHF445		
Sampling Date		2023/06/29 10:53		2023/06/29 11:14			2023/06/29 11:14		
COC Number		726370		726370			726370		
	UNITS	BH14-02	RDL	BH14-02A	RDL	QC Batch	BH14-02A Lab-Dup	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	<0.0025	0.0025	0.0010	0.0005	8780704			
. Lithium (Li)	mg/L	<0.0025	0.0025	0.0013	0.0005	8780697			
Dissolved Magnesium (Mg)	mg/L	21.5	0.025	16.4	0.005	8780704			
. Magnesium (Mg)	mg/L	25.2	0.025	16.3	0.005	8780697			
Dissolved Manganese (Mn)	mg/L	2.70	0.001	1.02	0.001	8780704			
. Manganese (Mn)	mg/L	3.16	0.001	0.968	0.001	8780697			
Mercury (Hg)	ug/L	<0.01	0.01	<0.01	0.01	8774868			
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	<0.01	0.01	8774872			
Dissolved Molybdenum (Mo)	mg/L	0.00063	0.00025	0.00026	0.00005	8780704			
. Molybdenum (Mo)	mg/L	0.00049	0.00025	0.00025	0.00005	8780697			
Dissolved Nickel (Ni)	mg/L	0.0016	0.0005	0.0002	0.0001	8780704			
. Nickel (Ni)	mg/L	0.0040	0.0005	0.0006	0.0001	8780697			
Dissolved Phosphorus (P)	mg/L	0.035	0.025	0.005	0.005	8780704			
. Phosphorus (P)	mg/L	0.096	0.025	0.016	0.005	8780697			
Dissolved Potassium (K)	mg/L	1.8	0.1	0.92	0.02	8780704			
. Potassium (K)	mg/L	2.2	0.1	1.04	0.02	8780697			
Dissolved Rubidium (Rb)	mg/L	0.0045	0.0001	0.00161	0.00002	8780704			
. Rubidium (Rb)	mg/L	0.0062	0.0001	0.00194	0.00002	8780697			
Dissolved Selenium (Se)	mg/L	<0.001	0.001	<0.0002	0.0002	8780704			
. Selenium (Se)	mg/L	<0.00025	0.00025	0.00005	0.00005	8780697			
Dissolved Silicon (Si)	mg/L	8.24	0.025	7.13	0.025	8780704			
. Silicon (Si)	mg/L	9.05	0.025	7.22	0.025	8780697			
Dissolved Silver (Ag)	mg/L	<0.00005	0.00005	<0.00001	0.00001	8780704			
. Silver (Ag)	mg/L	<0.00005	0.00005	<0.00001	0.00001	8780697			
Dissolved Sodium (Na)	mg/L	7.19	0.05	3.30	0.01	8780704			
. Sodium (Na)	mg/L	8.67	0.05	5.17	0.01	8780697			
Dissolved Strontium (Sr)	mg/L	0.352	0.0005	0.224	0.0001	8780704			
. Strontium (Sr)	mg/L	0.425	0.0005	0.222	0.0001	8780697			
Dissolved Sulphur (S)	mg/L	<0.5	0.5	<0.5	0.5	8774563			
Total Sulphur (S)	mg/L	0.7	0.5	0.7	0.5	8773967	0.7	0.5	8773967
Dissolved Tellurium (Te)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8780704			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF444		WHF445			WHF445		
Sampling Date		2023/06/29 10:53		2023/06/29 11:14			2023/06/29 11:14		
COC Number		726370		726370			726370		
	UNITS	BH14-02	RDL	BH14-02A	RDL	QC Batch	BH14-02A Lab-Dup	RDL	QC Batch
. Tellurium (Te)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8780697			
Dissolved Thallium (Tl)	mg/L	<0.000025	0.000025	<0.000005	0.000005	8780704			
. Thallium (Tl)	mg/L	0.000030	0.000025	<0.000005	0.000005	8780697			
Dissolved Thorium (Th)	mg/L	<0.001	0.001	<0.0002	0.0002	8780704			
. Thorium (Th)	mg/L	<0.001	0.001	<0.0002	0.0002	8780697			
Dissolved Tin (Sn)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8780704			
. Tin (Sn)	mg/L	<0.0005	0.0005	0.0001	0.0001	8780697			
Dissolved Titanium (Ti)	mg/L	<0.0025	0.0025	0.0011	0.0005	8780704			
. Titanium (Ti)	mg/L	0.0213	0.0025	0.0040	0.0005	8780697			
Dissolved Tungsten (W)	mg/L	0.0005	0.0005	0.0008	0.0001	8780704			
. Tungsten (W)	mg/L	<0.0005	0.0005	0.0009	0.0001	8780697			
Dissolved Uranium (U)	mg/L	0.00058	0.00005	0.00022	0.00001	8780704			
. Uranium (U)	mg/L	0.00082	0.00005	0.00029	0.00001	8780697			
Dissolved Vanadium (V)	mg/L	0.00041	0.00025	0.00087	0.00005	8780704			
. Vanadium (V)	mg/L	0.00200	0.00025	0.00127	0.00005	8780697			
Dissolved Zinc (Zn)	mg/L	<0.0025	0.0025	<0.0005	0.0005	8780704			
. Zinc (Zn)	mg/L	0.0066	0.0025	0.0018	0.0005	8780697			
Dissolved Zirconium (Zr)	mg/L	0.0012	0.0005	0.0015	0.0001	8780704			
. Zirconium (Zr)	mg/L	0.0016	0.0005	0.0013	0.0001	8780697			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF446		WHF447		WHF448		
Sampling Date		2023/06/29 12:51		2023/06/29 13:04		2023/06/29 13:56		
COC Number		726370		726370		726370		
	UNITS	MW15-OB-14	RDL	MW15-BR-14	RDL	MW25-OB-21	RDL	QC Batch
Metals								
Dissolved Aluminum (Al)	mg/L	0.0286	0.0005	0.0037	0.0005	0.0010	0.0005	8780704
. Aluminum (Al)	mg/L	0.172	0.0005	0.0204	0.0005	1.18	0.0005	8780697
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	8780704
. Antimony (Sb)	mg/L	<0.0001	0.0001	0.0001	0.0001	<0.0001	0.0001	8780697
Dissolved Arsenic (As)	mg/L	0.0011	0.0001	0.0005	0.0001	0.0012	0.0001	8780704
. Arsenic (As)	mg/L	0.0013	0.0001	0.0006	0.0001	0.0026	0.0001	8780697
Dissolved Barium (Ba)	mg/L	0.0268	0.0002	0.0080	0.0002	0.0353	0.0002	8780704
. Barium (Ba)	mg/L	0.0255	0.0002	0.0089	0.0002	0.0430	0.0002	8780697
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	<0.00005	0.00005	<0.00005	0.00005	8780704
. Beryllium (Be)	mg/L	<0.00005	0.00005	<0.00005	0.00005	0.00008	0.00005	8780697
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	8780704
. Bismuth (Bi)	mg/L	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	8780697
Dissolved Boron (B)	mg/L	0.006	0.001	0.010	0.001	0.011	0.001	8780704
. Boron (B)	mg/L	0.006	0.001	0.009	0.001	0.011	0.001	8780697
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	<0.00001	0.00001	<0.00001	0.00001	8780704
. Cadmium (Cd)	mg/L	0.000008	0.000005	<0.000005	0.000005	0.000047	0.000005	8780697
Dissolved Calcium (Ca)	mg/L	73.1	0.1	57.6	0.1	68.5	0.1	8780704
. Calcium (Ca)	mg/L	77.7	0.1	56.5	0.1	139	0.1	8780697
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	0.00011	0.00002	<0.00002	0.00002	8780704
. Cesium (Cs)	mg/L	0.00003	0.00002	0.00011	0.00002	0.00013	0.00002	8780697
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	8780704
. Chromium (Cr)	mg/L	0.0007	0.0005	<0.0005	0.0005	0.0041	0.0005	8780697
Dissolved Cobalt (Co)	mg/L	0.00027	0.00005	0.00011	0.00005	0.00013	0.00005	8780704
. Cobalt (Co)	mg/L	0.00034	0.00005	0.00014	0.00005	0.00153	0.00005	8780697
Dissolved Copper (Cu)	mg/L	0.0006	0.0001	0.0001	0.0001	0.0007	0.0001	8780704
. Copper (Cu)	mg/L	0.0013	0.0001	0.0002	0.0001	0.0045	0.0001	8780697
Dissolved Iron (Fe)	mg/L	0.049	0.005	0.245	0.005	0.961	0.005	8780704
. Iron (Fe)	mg/L	0.273	0.005	0.268	0.005	9.13	0.005	8780697
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	<0.00005	0.00005	<0.00005	0.00005	8780704
. Lead (Pb)	mg/L	0.00020	0.00005	<0.00005	0.00005	0.00175	0.00005	8780697
Dissolved Lithium (Li)	mg/L	0.0015	0.0005	0.0017	0.0005	0.0016	0.0005	8780704

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF446		WHF447		WHF448		
Sampling Date		2023/06/29 12:51		2023/06/29 13:04		2023/06/29 13:56		
COC Number		726370		726370		726370		
	UNITS	MW15-OB-14	RDL	MW15-BR-14	RDL	MW25-OB-21	RDL	QC Batch
. Lithium (Li)	mg/L	0.0018	0.0005	0.0016	0.0005	0.0029	0.0005	8780697
Dissolved Magnesium (Mg)	mg/L	13.8	0.005	11.3	0.005	14.8	0.005	8780704
. Magnesium (Mg)	mg/L	14.4	0.005	11.5	0.005	32.7	0.005	8780697
Dissolved Manganese (Mn)	mg/L	0.0158	0.0002	0.0600	0.0002	0.110	0.0002	8780704
. Manganese (Mn)	mg/L	0.0164	0.0002	0.0604	0.0002	0.246	0.0002	8780697
Mercury (Hg)	ug/L	<0.01	0.01	<0.01	0.01	<0.01	0.01	8774868
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	<0.01	0.01	<0.01	0.01	8774872
Dissolved Molybdenum (Mo)	mg/L	0.00051	0.00005	0.00063	0.00005	0.00111	0.00005	8780704
. Molybdenum (Mo)	mg/L	0.00050	0.00005	0.00063	0.00005	0.00019	0.00005	8780697
Dissolved Nickel (Ni)	mg/L	0.0004	0.0001	<0.0001	0.0001	0.0002	0.0001	8780704
. Nickel (Ni)	mg/L	0.0009	0.0001	0.0001	0.0001	0.0027	0.0001	8780697
Dissolved Phosphorus (P)	mg/L	0.009	0.005	<0.005	0.005	<0.005	0.005	8780704
. Phosphorus (P)	mg/L	0.031	0.005	<0.005	0.005	0.276	0.005	8780697
Dissolved Potassium (K)	mg/L	1.69	0.02	1.69	0.02	1.58	0.02	8780704
. Potassium (K)	mg/L	1.64	0.02	1.61	0.02	1.67	0.02	8780697
Dissolved Rubidium (Rb)	mg/L	0.00253	0.00002	0.00285	0.00002	0.00224	0.00002	8780704
. Rubidium (Rb)	mg/L	0.00250	0.00002	0.00298	0.00002	0.00397	0.00002	8780697
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	8780704
. Selenium (Se)	mg/L	<0.00005	0.00005	<0.00005	0.00005	<0.00005	0.00005	8780697
Dissolved Silicon (Si)	mg/L	4.70	0.005	6.89	0.025	5.76	0.025	8780704
. Silicon (Si)	mg/L	4.85	0.025	6.80	0.025	7.35	0.025	8780697
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	<0.00001	0.00001	<0.00001	0.00001	8780704
. Silver (Ag)	mg/L	<0.00001	0.00001	<0.00001	0.00001	<0.00001	0.00001	8780697
Dissolved Sodium (Na)	mg/L	1.84	0.01	3.34	0.01	3.88	0.01	8780704
. Sodium (Na)	mg/L	1.80	0.01	3.13	0.01	4.16	0.01	8780697
Dissolved Strontium (Sr)	mg/L	0.0584	0.0001	0.155	0.0001	0.0573	0.0001	8780704
. Strontium (Sr)	mg/L	0.0609	0.0001	0.162	0.0001	0.0927	0.0001	8780697
Dissolved Sulphur (S)	mg/L	2.7	0.5	4.0	0.5	1.3	0.5	8774563
Total Sulphur (S)	mg/L	2.6	0.5	4.1	0.5	1.2	0.5	8773967
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	8780704
. Tellurium (Te)	mg/L	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	8780697
Dissolved Thallium (Tl)	mg/L	0.000007	0.000005	<0.000005	0.000005	<0.000005	0.000005	8780704

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF446		WHF447		WHF448		
Sampling Date		2023/06/29 12:51		2023/06/29 13:04		2023/06/29 13:56		
COC Number		726370		726370		726370		
	UNITS	MW15-OB-14	RDL	MW15-BR-14	RDL	MW25-OB-21	RDL	QC Batch
. Thallium (Tl)	mg/L	0.000009	0.000005	<0.000005	0.000005	0.000043	0.000005	8780697
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	8780704
. Thorium (Th)	mg/L	<0.0002	0.0002	<0.0002	0.0002	0.0008	0.0002	8780697
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	8780704
. Tin (Sn)	mg/L	<0.0001	0.0001	<0.0001	0.0001	0.0002	0.0001	8780697
Dissolved Titanium (Ti)	mg/L	0.0022	0.0005	<0.0005	0.0005	<0.0005	0.0005	8780704
. Titanium (Ti)	mg/L	0.0111	0.0005	0.0016	0.0005	0.0625	0.0025	8780697
Dissolved Tungsten (W)	mg/L	0.0003	0.0001	0.0005	0.0001	<0.0001	0.0001	8780704
. Tungsten (W)	mg/L	0.0001	0.0001	0.0005	0.0001	<0.0001	0.0001	8780697
Dissolved Uranium (U)	mg/L	0.00057	0.00001	0.00023	0.00001	0.00019	0.00001	8780704
. Uranium (U)	mg/L	0.00062	0.00001	0.00025	0.00001	0.00042	0.00001	8780697
Dissolved Vanadium (V)	mg/L	0.00041	0.00005	0.00006	0.00005	<0.00005	0.00005	8780704
. Vanadium (V)	mg/L	0.00075	0.00005	0.00018	0.00005	0.00331	0.00005	8780697
Dissolved Zinc (Zn)	mg/L	0.0023	0.0005	<0.0005	0.0005	0.0106	0.0005	8780704
. Zinc (Zn)	mg/L	0.0070	0.0005	0.0009	0.0005	1.06	0.0005	8780697
Dissolved Zirconium (Zr)	mg/L	<0.0001	0.0001	0.0002	0.0001	<0.0001	0.0001	8780704
. Zirconium (Zr)	mg/L	0.0002	0.0001	0.0002	0.0001	0.0006	0.0001	8780697

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF449			WHF449			WHF450		
Sampling Date		2023/06/29 14:10			2023/06/29 14:10			2023/06/29 15:47		
COC Number		726370			726370			726370		
	UNITS	MW25-BR-21	RDL	QC Batch	MW25-BR-21 Lab-Dup	RDL	QC Batch	MW23-OB-21	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0012	0.0005	8780704				0.0030	0.0005	8780704
. Aluminum (Al)	mg/L	0.0482	0.0005	8780697				4.92	0.0025	8780697
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8780704				<0.0001	0.0001	8780704
. Antimony (Sb)	mg/L	0.0001	0.0001	8780697				<0.0001	0.0001	8780697
Dissolved Arsenic (As)	mg/L	0.0003	0.0001	8780704				0.0016	0.0001	8780704
. Arsenic (As)	mg/L	0.0006	0.0001	8780697				0.0056	0.0001	8780697
Dissolved Barium (Ba)	mg/L	0.0341	0.0002	8780704				0.0361	0.0002	8780704
. Barium (Ba)	mg/L	0.0444	0.0002	8780697				0.0869	0.0002	8780697
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8780704				<0.00005	0.00005	8780704
. Beryllium (Be)	mg/L	<0.00005	0.00005	8780697				0.00048	0.00005	8780697
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8780704				<0.0001	0.0001	8780704
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8780697				<0.0001	0.0001	8780697
Dissolved Boron (B)	mg/L	0.028	0.001	8780704				0.011	0.001	8780704
. Boron (B)	mg/L	0.027	0.001	8780697				0.011	0.001	8780697
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8780704				<0.00001	0.00001	8780704
. Cadmium (Cd)	mg/L	0.000008	0.000005	8780697				0.000088	0.000005	8780697
Dissolved Calcium (Ca)	mg/L	56.7	0.1	8780704				79.3	0.1	8780704
. Calcium (Ca)	mg/L	58.4	0.1	8780697				117	0.1	8780697
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	8780704				0.00005	0.00002	8780704
. Cesium (Cs)	mg/L	<0.00002	0.00002	8780697				0.00032	0.00002	8780697
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8780704				<0.0005	0.0005	8780704
. Chromium (Cr)	mg/L	<0.0005	0.0005	8780697				0.0164	0.0005	8780697
Dissolved Cobalt (Co)	mg/L	<0.00005	0.00005	8780704				0.00050	0.00005	8780704
. Cobalt (Co)	mg/L	<0.00005	0.00005	8780697				0.00376	0.00005	8780697
Dissolved Copper (Cu)	mg/L	<0.0001	0.0001	8780704				0.0004	0.0001	8780704
. Copper (Cu)	mg/L	0.0002	0.0001	8780697				0.0128	0.0001	8780697
Dissolved Iron (Fe)	mg/L	3.96	0.005	8780704				2.18	0.005	8780704
. Iron (Fe)	mg/L	6.18	0.005	8780697				12.7	0.025	8780697
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8780704				<0.00005	0.00005	8780704
. Lead (Pb)	mg/L	0.00016	0.00005	8780697				0.00600	0.00005	8780697

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF449			WHF449			WHF450		
Sampling Date		2023/06/29 14:10			2023/06/29 14:10			2023/06/29 15:47		
COC Number		726370			726370			726370		
	UNITS	MW25-BR-21	RDL	QC Batch	MW25-BR-21 Lab-Dup	RDL	QC Batch	MW23-OB-21	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0052	0.0005	8780704				0.0024	0.0005	8780704
. Lithium (Li)	mg/L	0.0052	0.0005	8780697				0.0063	0.0005	8780697
Dissolved Magnesium (Mg)	mg/L	17.4	0.005	8780704				15.2	0.005	8780704
. Magnesium (Mg)	mg/L	17.2	0.005	8780697				24.7	0.005	8780697
Dissolved Manganese (Mn)	mg/L	0.385	0.0002	8780704				0.403	0.0002	8780704
. Manganese (Mn)	mg/L	0.481	0.0002	8780697				0.555	0.0002	8780697
Mercury (Hg)	ug/L	<0.01	0.01	8774868				0.01	0.01	8774868
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8774872				<0.01	0.01	8774872
Dissolved Molybdenum (Mo)	mg/L	0.00030	0.00005	8780704				0.00103	0.00005	8780704
. Molybdenum (Mo)	mg/L	0.00034	0.00005	8780697				0.00024	0.00005	8780697
Dissolved Nickel (Ni)	mg/L	<0.0001	0.0001	8780704				0.0009	0.0001	8780704
. Nickel (Ni)	mg/L	0.0002	0.0001	8780697				0.0121	0.0001	8780697
Dissolved Phosphorus (P)	mg/L	<0.005	0.005	8780704				0.005	0.005	8780704
. Phosphorus (P)	mg/L	0.022	0.005	8780697				0.387	0.005	8780697
Dissolved Potassium (K)	mg/L	3.36	0.02	8780704				0.97	0.02	8780704
. Potassium (K)	mg/L	3.03	0.02	8780697				1.35	0.02	8780697
Dissolved Rubidium (Rb)	mg/L	0.00368	0.00002	8780704				0.00113	0.00002	8780704
. Rubidium (Rb)	mg/L	0.00340	0.00002	8780697				0.00405	0.00002	8780697
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8780704				<0.0002	0.0002	8780704
. Selenium (Se)	mg/L	<0.00005	0.00005	8780697				0.00006	0.00005	8780697
Dissolved Silicon (Si)	mg/L	3.56	0.005	8780704				5.03	0.025	8780704
. Silicon (Si)	mg/L	5.27	0.025	8780697				12.6	0.025	8780697
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8780704				<0.00001	0.00001	8780704
. Silver (Ag)	mg/L	<0.00001	0.00001	8780697				<0.00001	0.00001	8780697
Dissolved Sodium (Na)	mg/L	9.70	0.01	8780704				8.79	0.01	8780704
. Sodium (Na)	mg/L	9.20	0.01	8780697				8.36	0.01	8780697
Dissolved Strontium (Sr)	mg/L	0.489	0.0001	8780704				0.183	0.0001	8780704
. Strontium (Sr)	mg/L	0.510	0.0001	8780697				0.210	0.0001	8780697
Dissolved Sulphur (S)	mg/L	<0.5	0.5	8774563	<0.5	0.5	8774563	1.9	0.5	8774563
Total Sulphur (S)	mg/L	<0.5	0.5	8773967				3.1	0.5	8773967
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8780704				<0.0001	0.0001	8780704

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF449			WHF449			WHF450		
Sampling Date		2023/06/29 14:10			2023/06/29 14:10			2023/06/29 15:47		
COC Number		726370			726370			726370		
	UNITS	MW25-BR-21	RDL	QC Batch	MW25-BR-21 Lab-Dup	RDL	QC Batch	MW23-OB-21	RDL	QC Batch
. Tellurium (Te)	mg/L	<0.0001	0.0001	8780697				<0.0001	0.0001	8780697
Dissolved Thallium (Tl)	mg/L	0.000005	0.000005	8780704				<0.000005	0.000005	8780704
. Thallium (Tl)	mg/L	0.000010	0.000005	8780697				0.000109	0.000005	8780697
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8780704				<0.0002	0.0002	8780704
. Thorium (Th)	mg/L	<0.0002	0.0002	8780697				0.0006	0.0002	8780697
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8780704				<0.0001	0.0001	8780704
. Tin (Sn)	mg/L	0.0003	0.0001	8780697				0.0003	0.0001	8780697
Dissolved Titanium (Ti)	mg/L	<0.0005	0.0005	8780704				<0.0005	0.0005	8780704
. Titanium (Ti)	mg/L	0.0023	0.0005	8780697				0.0546	0.0025	8780697
Dissolved Tungsten (W)	mg/L	0.0032	0.0001	8780704				0.0012	0.0001	8780704
. Tungsten (W)	mg/L	0.0036	0.0001	8780697				0.0011	0.0001	8780697
Dissolved Uranium (U)	mg/L	0.00004	0.00001	8780704				0.00045	0.00001	8780704
. Uranium (U)	mg/L	0.00011	0.00001	8780697				0.00124	0.00001	8780697
Dissolved Vanadium (V)	mg/L	<0.00005	0.00005	8780704				0.00015	0.00005	8780704
. Vanadium (V)	mg/L	0.00013	0.00005	8780697				0.0118	0.00005	8780697
Dissolved Zinc (Zn)	mg/L	0.117	0.0005	8780704				0.0083	0.0005	8780704
. Zinc (Zn)	mg/L	1.38	0.0005	8780697				2.74	0.0025	8780697
Dissolved Zirconium (Zr)	mg/L	<0.0001	0.0001	8780704				0.0005	0.0001	8780704
. Zirconium (Zr)	mg/L	<0.0001	0.0001	8780697				0.0030	0.0001	8780697

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J6649
Report Date: 2023/07/21

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF451			WHF452			WHF452		
Sampling Date		2023/06/29 16:15			2023/06/29 12:34			2023/06/29 12:34		
COC Number		726370			726370			726370		
	UNITS	MW21-BR-21	RDL	QC Batch	MDP-3/23	RDL	QC Batch	MDP-3/23 Lab-Dup	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0605	0.0005	8780704	0.0060	0.0005	8800631	0.0066	0.0005	8800631
. Aluminum (Al)	mg/L	0.119	0.0005	8780697	3.62	0.0025	8795285			
Dissolved Antimony (Sb)	mg/L	0.0002	0.0001	8780704	0.0009	0.0001	8800631	0.0009	0.0001	8800631
. Antimony (Sb)	mg/L	0.0014	0.0001	8780697	0.0013	0.0005	8795285			
Dissolved Arsenic (As)	mg/L	0.0226	0.0001	8780704	0.0565	0.0005	8800631	0.0558	0.0005	8800631
. Arsenic (As)	mg/L	0.0132	0.0001	8780697	0.209	0.0005	8795285			
Dissolved Barium (Ba)	mg/L	0.0144	0.0002	8780704	0.0209	0.0002	8800631	0.0213	0.0002	8800631
. Barium (Ba)	mg/L	0.0135	0.0002	8780697	0.039	0.001	8795285			
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8780704	<0.00005	0.00005	8800631	<0.00005	0.00005	8800631
. Beryllium (Be)	mg/L	0.00005	0.00005	8780697	<0.00025	0.00025	8795285			
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8780704	<0.0001	0.0001	8800631	<0.0001	0.0001	8800631
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8780697	<0.0005	0.0005	8795285			
Dissolved Boron (B)	mg/L	0.004	0.001	8780704	0.281	0.001	8800631	0.326	0.001	8800631
. Boron (B)	mg/L	0.004	0.001	8780697	0.289	0.005	8795285			
Dissolved Cadmium (Cd)	mg/L	0.00005	0.00001	8780704	<0.00001	0.00001	8800631	<0.00001	0.00001	8800631
. Cadmium (Cd)	mg/L	0.000199	0.000005	8780697	0.000061	0.000025	8795285			
Dissolved Calcium (Ca)	mg/L	117	0.1	8780704	6.62	0.02	8800631	6.72	0.02	8800631
. Calcium (Ca)	mg/L	113	0.1	8780697	40.3	0.1	8795285			
Dissolved Cesium (Cs)	mg/L	0.00007	0.00002	8780704	0.00007	0.00002	8800631	0.00007	0.00002	8800631
. Cesium (Cs)	mg/L	0.00007	0.00002	8780697	0.0007	0.0001	8795285			
Dissolved Chromium (Cr)	mg/L	0.0007	0.0005	8780704	<0.0005	0.0005	8800631	<0.0005	0.0005	8800631
. Chromium (Cr)	mg/L	0.0013	0.0005	8780697	0.0230	0.0025	8795285			
Dissolved Cobalt (Co)	mg/L	0.261	0.00005	8780704	0.00153	0.00005	8800631	0.00155	0.00005	8800631
. Cobalt (Co)	mg/L	0.158	0.00005	8780697	0.00428	0.00025	8795285			
Dissolved Copper (Cu)	mg/L	0.0042	0.0001	8780704	0.0005	0.0001	8800631	0.0005	0.0001	8800631
. Copper (Cu)	mg/L	0.0197	0.0001	8780697	0.0039	0.0005	8795285			
Dissolved Iron (Fe)	mg/L	5.74	0.005	8780704	0.017	0.005	8800631	0.017	0.005	8800631
. Iron (Fe)	mg/L	21.6	0.025	8780697	21.6	0.025	8795285			
Dissolved Lead (Pb)	mg/L	0.00027	0.00005	8780704	<0.00005	0.00005	8800631	<0.00005	0.00005	8800631
. Lead (Pb)	mg/L	0.00070	0.00005	8780697	0.0217	0.00025	8795285			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF451			WHF452			WHF452		
Sampling Date		2023/06/29 16:15			2023/06/29 12:34			2023/06/29 12:34		
COC Number		726370			726370			726370		
	UNITS	MW21-BR-21	RDL	QC Batch	MDP-3/23	RDL	QC Batch	MDP-3/23 Lab-Dup	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	<0.0005	0.0005	8780704	0.0093	0.0005	8800631	0.0090	0.0005	8800631
. Lithium (Li)	mg/L	0.0005	0.0005	8780697	0.0106	0.0025	8795285			
Dissolved Magnesium (Mg)	mg/L	20.6	0.005	8780704	5.60	0.005	8800631	5.76	0.005	8800631
. Magnesium (Mg)	mg/L	18.2	0.005	8780697	17.2	0.025	8795285			
Dissolved Manganese (Mn)	mg/L	9.99	0.002	8780704	0.0039	0.0002	8800631	0.0040	0.0002	8800631
. Manganese (Mn)	mg/L	6.75	0.002	8780697	0.783	0.001	8795285			
Mercury (Hg)	ug/L	0.02	0.01	8774868						
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8774872						
Dissolved Molybdenum (Mo)	mg/L	0.00189	0.00005	8780704	0.0134	0.00005	8800631	0.0135	0.00005	8800631
. Molybdenum (Mo)	mg/L	0.00076	0.00005	8780697	0.0121	0.00025	8795285			
Dissolved Nickel (Ni)	mg/L	0.0364	0.0001	8780704	0.0073	0.0001	8800631	0.0073	0.0001	8800631
. Nickel (Ni)	mg/L	0.0335	0.0001	8780697	0.0361	0.0005	8795285			
Dissolved Phosphorus (P)	mg/L	0.010	0.005	8780704	0.019	0.005	8800631	0.020	0.005	8800631
. Phosphorus (P)	mg/L	0.013	0.005	8780697	0.582	0.025	8795285			
Dissolved Potassium (K)	mg/L	0.51	0.02	8780704	27.5	0.1	8800631	28.3	0.1	8800631
. Potassium (K)	mg/L	0.46	0.02	8780697	27.9	0.1	8795285			
Dissolved Rubidium (Rb)	mg/L	0.00129	0.00002	8780704	0.00304	0.00002	8800631	0.00307	0.00002	8800631
. Rubidium (Rb)	mg/L	0.00107	0.00002	8780697	0.0099	0.0001	8795285			
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8780704	<0.0002	0.0002	8800631	<0.0002	0.0002	8800631
. Selenium (Se)	mg/L	0.00017	0.00005	8780697	<0.00025	0.00025	8795285			
Dissolved Silicon (Si)	mg/L	5.49	0.025	8780704	2.66	0.005	8800631	2.79	0.005	8800631
. Silicon (Si)	mg/L	6.10	0.025	8780697	7.19	0.025	8795285			
Dissolved Silver (Ag)	mg/L	0.00003	0.00001	8780704	<0.00001	0.00001	8800631	<0.00001	0.00001	8800631
. Silver (Ag)	mg/L	0.00006	0.00001	8780697	<0.00005	0.00005	8795285			
Dissolved Sodium (Na)	mg/L	16.7	0.01	8780704	62.2	0.05	8800631	62.6	0.05	8800631
. Sodium (Na)	mg/L	15.1	0.01	8780697	64.2	0.05	8795285			
Dissolved Strontium (Sr)	mg/L	0.142	0.0001	8780704	0.332	0.0001	8800631	0.334	0.0001	8800631
. Strontium (Sr)	mg/L	0.139	0.0001	8780697	0.455	0.0005	8795285			
Dissolved Sulphur (S)	mg/L	16	0.5	8774563						
Total Sulphur (S)	mg/L	17	0.5	8773967						
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8780704	<0.0001	0.0001	8800631	<0.0001	0.0001	8800631

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF451			WHF452			WHF452		
Sampling Date		2023/06/29 16:15			2023/06/29 12:34			2023/06/29 12:34		
COC Number		726370			726370			726370		
	UNITS	MW21-BR-21	RDL	QC Batch	MDP-3/23	RDL	QC Batch	MDP-3/23 Lab-Dup	RDL	QC Batch
. Tellurium (Te)	mg/L	<0.0001	0.0001	8780697	<0.0005	0.0005	8795285			
Dissolved Thallium (Tl)	mg/L	0.000009	0.000005	8780704	<0.000005	0.000005	8800631	<0.000005	0.000005	8800631
. Thallium (Tl)	mg/L	0.000021	0.000005	8780697	0.000052	0.000025	8795285			
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8780704						
. Thorium (Th)	mg/L	<0.0002	0.0002	8780697						
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8780704	0.0002	0.0001	8800631	0.0002	0.0001	8800631
. Tin (Sn)	mg/L	0.0002	0.0001	8780697	<0.0005	0.0005	8795285			
Dissolved Titanium (Ti)	mg/L	0.0011	0.0005	8780704	<0.0005	0.0005	8800631	<0.0005	0.0005	8800631
. Titanium (Ti)	mg/L	0.0019	0.0005	8780697	0.128	0.0025	8795285			
Dissolved Tungsten (W)	mg/L	0.0026	0.0001	8780704	0.155	0.0005	8800631	0.154	0.0005	8800631
. Tungsten (W)	mg/L	0.0006	0.0001	8780697	0.119	0.0005	8795285			
Dissolved Uranium (U)	mg/L	0.00149	0.00001	8780704	0.00001	0.00001	8800631	0.00001	0.00001	8800631
. Uranium (U)	mg/L	0.00295	0.00001	8780697	0.00021	0.00005	8795285			
Dissolved Vanadium (V)	mg/L	0.00084	0.00005	8780704	<0.00005	0.00005	8800631	<0.00005	0.00005	8800631
. Vanadium (V)	mg/L	0.00074	0.00005	8780697	0.0114	0.00025	8795285			
Dissolved Zinc (Zn)	mg/L	0.0358	0.0005	8780704	<0.0005	0.0005	8800631	<0.0005	0.0005	8800631
. Zinc (Zn)	mg/L	0.119	0.0005	8780697	0.0312	0.0025	8795285			
Dissolved Zirconium (Zr)	mg/L	0.0020	0.0001	8780704	<0.0001	0.0001	8800631	<0.0001	0.0001	8800631
. Zirconium (Zr)	mg/L	0.0018	0.0001	8780697	0.0020	0.0005	8795285			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF453		
Sampling Date		2023/06/29 15:20		
COC Number		726370		
	UNITS	MDP-3-23-2	RDL	QC Batch
Metals				
Dissolved Aluminum (Al)	mg/L	0.235	0.0005	8800631
. Aluminum (Al)	mg/L	2.77	0.0025	8795285
Dissolved Antimony (Sb)	mg/L	0.0006	0.0001	8800631
. Antimony (Sb)	mg/L	0.0009	0.0005	8795285
Dissolved Arsenic (As)	mg/L	0.0676	0.0005	8800631
. Arsenic (As)	mg/L	0.208	0.0005	8795285
Dissolved Barium (Ba)	mg/L	0.0177	0.0002	8800631
. Barium (Ba)	mg/L	0.032	0.001	8795285
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8800631
. Beryllium (Be)	mg/L	<0.00025	0.00025	8795285
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8800631
. Bismuth (Bi)	mg/L	<0.0005	0.0005	8795285
Dissolved Boron (B)	mg/L	0.079	0.001	8800631
. Boron (B)	mg/L	0.074	0.005	8795285
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8800631
. Cadmium (Cd)	mg/L	0.000030	0.000025	8795285
Dissolved Calcium (Ca)	mg/L	23.6	0.02	8800631
. Calcium (Ca)	mg/L	36.8	0.1	8795285
Dissolved Cesium (Cs)	mg/L	0.00010	0.00002	8800631
. Cesium (Cs)	mg/L	0.0006	0.0001	8795285
Dissolved Chromium (Cr)	mg/L	0.0013	0.0005	8800631
. Chromium (Cr)	mg/L	0.0143	0.0025	8795285
Dissolved Cobalt (Co)	mg/L	0.00076	0.00005	8800631
. Cobalt (Co)	mg/L	0.00238	0.00025	8795285
Dissolved Copper (Cu)	mg/L	0.0005	0.0001	8800631
. Copper (Cu)	mg/L	0.0024	0.0005	8795285
Dissolved Iron (Fe)	mg/L	0.852	0.005	8800631
. Iron (Fe)	mg/L	12.1	0.025	8795285
Dissolved Lead (Pb)	mg/L	0.00033	0.00005	8800631
. Lead (Pb)	mg/L	0.00688	0.00025	8795285
Dissolved Lithium (Li)	mg/L	0.0098	0.0005	8800631

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF453		
Sampling Date		2023/06/29 15:20		
COC Number		726370		
	UNITS	MDP-3-23-2	RDL	QC Batch
. Lithium (Li)	mg/L	0.0102	0.0025	8795285
Dissolved Magnesium (Mg)	mg/L	10.8	0.005	8800631
. Magnesium (Mg)	mg/L	15.7	0.025	8795285
Dissolved Manganese (Mn)	mg/L	0.0306	0.0002	8800631
. Manganese (Mn)	mg/L	0.331	0.001	8795285
Dissolved Molybdenum (Mo)	mg/L	0.00018	0.00005	8800631
. Molybdenum (Mo)	mg/L	<0.00025	0.00025	8795285
Dissolved Nickel (Ni)	mg/L	0.0038	0.0001	8800631
. Nickel (Ni)	mg/L	0.0164	0.0005	8795285
Dissolved Phosphorus (P)	mg/L	0.024	0.005	8800631
. Phosphorus (P)	mg/L	0.317	0.025	8795285
Dissolved Potassium (K)	mg/L	15.5	0.02	8800631
. Potassium (K)	mg/L	15.5	0.1	8795285
Dissolved Rubidium (Rb)	mg/L	0.00281	0.00002	8800631
. Rubidium (Rb)	mg/L	0.0082	0.0001	8795285
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8800631
. Selenium (Se)	mg/L	<0.00025	0.00025	8795285
Dissolved Silicon (Si)	mg/L	4.76	0.005	8800631
. Silicon (Si)	mg/L	7.66	0.025	8795285
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8800631
. Silver (Ag)	mg/L	<0.00005	0.00005	8795285
Dissolved Sodium (Na)	mg/L	25.7	0.01	8800631
. Sodium (Na)	mg/L	25.7	0.05	8795285
Dissolved Strontium (Sr)	mg/L	0.439	0.0001	8800631
. Strontium (Sr)	mg/L	0.450	0.0005	8795285
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8800631
. Tellurium (Te)	mg/L	<0.0005	0.0005	8795285
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8800631
. Thallium (Tl)	mg/L	0.000041	0.000025	8795285
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8800631
. Tin (Sn)	mg/L	<0.0005	0.0005	8795285
Dissolved Titanium (Ti)	mg/L	0.0123	0.0005	8800631

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WHF453		
Sampling Date		2023/06/29 15:20		
COC Number		726370		
	UNITS	MDP-3-23-2	RDL	QC Batch
. Titanium (Ti)	mg/L	0.112	0.0025	8795285
Dissolved Tungsten (W)	mg/L	0.0633	0.0005	8800631
. Tungsten (W)	mg/L	0.0459	0.0005	8795285
Dissolved Uranium (U)	mg/L	0.00002	0.00001	8800631
. Uranium (U)	mg/L	0.00012	0.00005	8795285
Dissolved Vanadium (V)	mg/L	0.00080	0.00005	8800631
. Vanadium (V)	mg/L	0.00863	0.00025	8795285
Dissolved Zinc (Zn)	mg/L	0.0019	0.0005	8800631
. Zinc (Zn)	mg/L	0.0208	0.0025	8795285
Dissolved Zirconium (Zr)	mg/L	0.0002	0.0001	8800631
. Zirconium (Zr)	mg/L	0.0010	0.0005	8795285

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VOLATILE ORGANICS BY GC/MS (WATER)

Bureau Veritas ID		WHF450	WHF451		
Sampling Date		2023/06/29 15:47	2023/06/29 16:15		
COC Number		726370	726370		
	UNITS	MW23-OB-21	MW21-BR-21	RDL	QC Batch
Volatile Organics					
Benzene	ug/L	<0.17	<0.17	0.17	8772760
Chloroform	ug/L	<0.20	<0.20	0.20	8772760
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	8772760
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	8772760
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	8772760
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	0.40	8772760
Ethylbenzene	ug/L	<0.20	0.20	0.20	8772760
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	2.0	8772760
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	8772760
Tetrachloroethylene	ug/L	<0.20	<0.20	0.20	8772760
Toluene	ug/L	<0.20	2.4	0.20	8772760
Trichloroethylene	ug/L	<0.20	<0.20	0.20	8772760
p+m-Xylene	ug/L	<0.20	<0.20	0.20	8772760
o-Xylene	ug/L	<0.20	<0.20	0.20	8772760
Total Xylenes	ug/L	<0.20	<0.20	0.20	8772760
F1 (C6-C10)	ug/L	<25	<25	25	8772760
F1 (C6-C10) - BTEX	ug/L	<25	<25	25	8772760
Surrogate Recovery (%)					
4-Bromofluorobenzene	%	96	96		8772760
D4-1,2-Dichloroethane	%	106	99		8772760
D8-Toluene	%	98	99		8772760

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		WHF444	WHF445	WHF446			WHF450	WHF451		
Sampling Date		2023/06/29 10:53	2023/06/29 11:14	2023/06/29 12:51			2023/06/29 15:47	2023/06/29 16:15		
COC Number		726370	726370	726370			726370	726370		
	UNITS	**BH14-02**	**BH14-02A**	**MW15-OB-14**	**RDL**	**QC Batch**	**MW23-OB-21**	**MW21-BR-21**	**RDL**	**QC Batch**
BTEX & F1 Hydrocarbons										
F1 (C6-C10)	ug/L	<25	<25	<25	25	8772859				
F2-F4 Hydrocarbons										
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	8773774	<100	<100	100	8773774
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	8773774	460	<200	200	8773774
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	8773774	<200	<200	200	8773774
Reached Baseline at C50	ug/L	Yes	Yes	Yes		8773774	Yes	Yes		8773774
Surrogate Recovery (%)										
1,4-Difluorobenzene	%	108	104	107		8772859				
4-Bromofluorobenzene	%	95	96	95		8772859				
D10-o-Xylene	%	102	102	102		8772859				
D4-1,2-Dichloroethane	%	96	102	96		8772859				
o-Terphenyl	%	110	108	105		8773774	106	104		8773774

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WHF444
Sample ID: BH14-02
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8780779	N/A	2023/07/11	Brent Boudreau
Alkalinity	AT	8773322	N/A	2023/07/07	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8771520	N/A	2023/07/10	Automated Statchk
Chloride by Automated Colourimetry	KONE	8773455	N/A	2023/07/07	Massarat Jan
Conductivity	AT	8773324	N/A	2023/07/07	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	8772812	N/A	2023/07/06	Gyulshen Idriz
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	8772859	N/A	2023/07/07	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8773774	2023/07/06	2023/07/07	(Kent) Maolin Li
Fluoride	ISE	8773299	2023/07/06	2023/07/07	Kien Tran
Hardness (calculated as CaCO3)		8771521	N/A	2023/07/11	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8774872	2023/07/07	2023/07/07	Japneet Gill
Mercury (low level)	CV/AA	8774868	2023/07/07	2023/07/07	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8774563	2023/07/07	2023/07/12	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8780704	N/A	2023/07/11	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8780697	N/A	2023/07/11	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8773967	2023/07/07	2023/07/07	Thuy Linh Nguyen
Cyanide (Free)	SPEC	8785892	N/A	2023/07/11	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8782748	2023/07/11	2023/07/11	Ming Dong
Total Phosphorus Low Level Total	KONE	8784555	2023/07/11	2023/07/12	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8773610	N/A	2023/07/07	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8773230	N/A	2023/07/07	Chandra Nandlal
pH	AT	8773315	2023/07/06	2023/07/07	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Aneri Pandya
Sulphate by Automated Turbidimetry	KONE	8773464	N/A	2023/07/07	Massarat Jan
Total Dissolved Solids	BAL	8772559	2023/07/06	2023/07/07	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Aneri Pandya
Total Kjeldahl Nitrogen in Water	SKAL	8774656	2023/07/07	2023/07/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8772540	2023/07/06	2023/07/07	Shaneil Hall
Turbidity	AT	8773035	N/A	2023/07/10	Gurparteek KAUR

Bureau Veritas ID: WHF445
Sample ID: BH14-02A
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8780779	N/A	2023/07/11	Brent Boudreau
Alkalinity	AT	8773322	N/A	2023/07/07	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8771520	N/A	2023/07/10	Automated Statchk
Chloride by Automated Colourimetry	KONE	8773455	N/A	2023/07/07	Massarat Jan
Conductivity	AT	8773324	N/A	2023/07/07	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	8772812	N/A	2023/07/06	Gyulshen Idriz
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	8772859	N/A	2023/07/07	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8773774	2023/07/06	2023/07/07	(Kent) Maolin Li
Fluoride	ISE	8773299	2023/07/06	2023/07/07	Kien Tran

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J6649
Report Date: 2023/07/21

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

TEST SUMMARY

Bureau Veritas ID: WHF445
Sample ID: BH14-02A
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hardness (calculated as CaCO3)		8771521	N/A	2023/07/11	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8774872	2023/07/07	2023/07/07	Japneet Gill
Mercury (low level)	CV/AA	8774868	2023/07/07	2023/07/07	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8774563	2023/07/07	2023/07/12	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8780704	N/A	2023/07/11	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8780697	N/A	2023/07/11	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8773967	2023/07/07	2023/07/07	Thuy Linh Nguyen
Cyanide (Free)	SPEC	8785892	N/A	2023/07/11	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8782748	2023/07/11	2023/07/11	Ming Dong
Total Phosphorus Low Level Total	KONE	8784555	2023/07/11	2023/07/12	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8773610	N/A	2023/07/07	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8773230	N/A	2023/07/07	Chandra Nandlal
pH	AT	8773315	2023/07/06	2023/07/07	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Aneri Pandya
Sulphate by Automated Turbidimetry	KONE	8773464	N/A	2023/07/07	Massarat Jan
Total Dissolved Solids	BAL	8775362	2023/07/07	2023/07/10	Razieh Tabesh
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Aneri Pandya
Total Kjeldahl Nitrogen in Water	SKAL	8774381	2023/07/07	2023/07/11	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8772540	2023/07/06	2023/07/07	Shaneil Hall
Turbidity	AT	8773035	N/A	2023/07/10	Gurparteek KAUR

Bureau Veritas ID: WHF445 Dup
Sample ID: BH14-02A
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals Analysis by ICP	ICP	8773967	2023/07/07	2023/07/07	Thuy Linh Nguyen

Bureau Veritas ID: WHF446
Sample ID: MW15-OB-14
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8780779	N/A	2023/07/11	Brent Boudreau
Alkalinity	AT	8773322	N/A	2023/07/07	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8771520	N/A	2023/07/10	Automated Statchk
Chloride by Automated Colourimetry	KONE	8773455	N/A	2023/07/07	Massarat Jan
Conductivity	AT	8773324	N/A	2023/07/07	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	8772812	N/A	2023/07/06	Gyulshen Idriz
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	8772859	N/A	2023/07/06	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8773774	2023/07/06	2023/07/07	(Kent) Maolin Li
Fluoride	ISE	8773299	2023/07/06	2023/07/07	Kien Tran
Hardness (calculated as CaCO3)		8771521	N/A	2023/07/11	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8774872	2023/07/07	2023/07/07	Japneet Gill

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J6649
Report Date: 2023/07/21

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

TEST SUMMARY

Bureau Veritas ID: WHF446
Sample ID: MW15-OB-14
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury (low level)	CV/AA	8774868	2023/07/07	2023/07/07	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8774563	2023/07/07	2023/07/12	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8780704	N/A	2023/07/11	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8780697	N/A	2023/07/11	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8773967	2023/07/07	2023/07/07	Thuy Linh Nguyen
Cyanide (Free)	SPEC	8785892	N/A	2023/07/11	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8785893	2023/07/11	2023/07/11	Ming Dong
Total Phosphorus Low Level Total	KONE	8784555	2023/07/11	2023/07/12	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8774707	N/A	2023/07/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8773230	N/A	2023/07/07	Chandra Nandlal
pH	AT	8773315	2023/07/06	2023/07/07	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Aneri Pandya
Sulphate by Automated Turbidimetry	KONE	8773464	N/A	2023/07/07	Massarat Jan
Total Dissolved Solids	BAL	8775362	2023/07/07	2023/07/10	Razieh Tabesh
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Aneri Pandya
Total Kjeldahl Nitrogen in Water	SKAL	8774381	2023/07/07	2023/07/11	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8772540	2023/07/06	2023/07/07	Shaneil Hall
Turbidity	AT	8773035	N/A	2023/07/10	Gurparteek KAUR

Bureau Veritas ID: WHF446 Dup
Sample ID: MW15-OB-14
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Ammonia-N	LACH/NH4	8774707	N/A	2023/07/10	Prabhjot Kaur
Low Level Total Suspended Solids	BAL	8772540	2023/07/06	2023/07/07	Shaneil Hall

Bureau Veritas ID: WHF447
Sample ID: MW15-BR-14
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8780779	N/A	2023/07/11	Brent Boudreau
Alkalinity	AT	8773322	N/A	2023/07/07	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8771520	N/A	2023/07/10	Automated Statchk
Chloride by Automated Colourimetry	KONE	8773455	N/A	2023/07/07	Massarat Jan
Conductivity	AT	8773324	N/A	2023/07/07	Kien Tran
Fluoride	ISE	8773299	2023/07/06	2023/07/07	Kien Tran
Hardness (calculated as CaCO3)		8771521	N/A	2023/07/11	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8774872	2023/07/07	2023/07/07	Japneet Gill
Mercury (low level)	CV/AA	8774868	2023/07/07	2023/07/07	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8774563	2023/07/07	2023/07/12	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8780704	N/A	2023/07/11	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8780697	N/A	2023/07/11	Arefa Dabhad

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WHF447
Sample ID: MW15-BR-14
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals Analysis by ICP	ICP	8773967	2023/07/07	2023/07/07	Thuy Linh Nguyen
Cyanide (Free)	SPEC	8785892	N/A	2023/07/11	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8785893	2023/07/11	2023/07/11	Ming Dong
Total Phosphorus Low Level Total	KONE	8784555	2023/07/11	2023/07/12	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8773610	N/A	2023/07/07	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8773230	N/A	2023/07/07	Chandra Nandlal
pH	AT	8773315	2023/07/06	2023/07/07	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Aneri Pandya
Sulphate by Automated Turbidimetry	KONE	8773464	N/A	2023/07/07	Massarat Jan
Total Dissolved Solids	BAL	8775362	2023/07/07	2023/07/10	Razieh Tabesh
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Aneri Pandya
Total Kjeldahl Nitrogen in Water	SKAL	8774656	2023/07/07	2023/07/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8772540	2023/07/06	2023/07/07	Shaneil Hall
Turbidity	AT	8773035	N/A	2023/07/10	Gurparteek KAUR

Bureau Veritas ID: WHF447 Dup
Sample ID: MW15-BR-14
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Dissolved Solids	BAL	8775362	2023/07/07	2023/07/10	Razieh Tabesh

Bureau Veritas ID: WHF448
Sample ID: MW25-OB-21
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8780779	N/A	2023/07/11	Brent Boudreau
Alkalinity	AT	8773322	N/A	2023/07/07	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8771520	N/A	2023/07/10	Automated Statchk
Chloride by Automated Colourimetry	KONE	8773455	N/A	2023/07/07	Massarat Jan
Conductivity	AT	8773324	N/A	2023/07/07	Kien Tran
Fluoride	ISE	8773299	2023/07/06	2023/07/07	Kien Tran
Hardness (calculated as CaCO3)		8771521	N/A	2023/07/11	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8774872	2023/07/07	2023/07/07	Japneet Gill
Mercury (low level)	CV/AA	8774868	2023/07/07	2023/07/07	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8774563	2023/07/07	2023/07/12	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8780704	N/A	2023/07/11	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8780697	N/A	2023/07/11	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8773967	2023/07/07	2023/07/07	Thuy Linh Nguyen
Cyanide (Free)	SPEC	8785892	N/A	2023/07/11	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8785893	2023/07/11	2023/07/11	Ming Dong
Total Phosphorus Low Level Total	KONE	8784555	2023/07/11	2023/07/12	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8773610	N/A	2023/07/07	Prabhjot Kaur

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J6649
Report Date: 2023/07/21

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

TEST SUMMARY

Bureau Veritas ID: WHF448
Sample ID: MW25-OB-21
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrate & Nitrite as Nitrogen in Water	LACH	8773230	N/A	2023/07/07	Chandra Nandlal
pH	AT	8773315	2023/07/06	2023/07/07	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Aneri Pandya
Sulphate by Automated Turbidimetry	KONE	8773464	N/A	2023/07/07	Massarat Jan
Total Dissolved Solids	BAL	8772559	2023/07/06	2023/07/07	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Aneri Pandya
Total Kjeldahl Nitrogen in Water	SKAL	8774381	2023/07/07	2023/07/11	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8772540	2023/07/06	2023/07/07	Shaneil Hall
Turbidity	AT	8773035	N/A	2023/07/10	Gurparteek KAUR

Bureau Veritas ID: WHF449
Sample ID: MW25-BR-21
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8780779	N/A	2023/07/11	Brent Boudreau
Alkalinity	AT	8773322	N/A	2023/07/07	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8771520	N/A	2023/07/10	Automated Statchk
Chloride by Automated Colourimetry	KONE	8773455	N/A	2023/07/07	Massarat Jan
Conductivity	AT	8773324	N/A	2023/07/07	Kien Tran
Fluoride	ISE	8773299	2023/07/06	2023/07/07	Kien Tran
Hardness (calculated as CaCO3)		8771521	N/A	2023/07/11	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8774872	2023/07/07	2023/07/07	Japneet Gill
Mercury (low level)	CV/AA	8774868	2023/07/07	2023/07/07	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8774563	2023/07/07	2023/07/12	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8780704	N/A	2023/07/11	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8780697	N/A	2023/07/11	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8773967	2023/07/07	2023/07/07	Thuy Linh Nguyen
Cyanide (Free)	SPEC	8785892	N/A	2023/07/11	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8785893	2023/07/11	2023/07/11	Ming Dong
Total Phosphorus Low Level Total	KONE	8784555	2023/07/11	2023/07/12	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8773610	N/A	2023/07/07	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8773230	N/A	2023/07/07	Chandra Nandlal
pH	AT	8773315	2023/07/06	2023/07/07	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Aneri Pandya
Sulphate by Automated Turbidimetry	KONE	8773464	N/A	2023/07/07	Massarat Jan
Total Dissolved Solids	BAL	8772559	2023/07/06	2023/07/07	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Aneri Pandya
Total Kjeldahl Nitrogen in Water	SKAL	8774381	2023/07/07	2023/07/11	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8772540	2023/07/06	2023/07/07	Shaneil Hall
Turbidity	AT	8773035	N/A	2023/07/10	Gurparteek KAUR

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WHF449 Dup
Sample ID: MW25-BR-21
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals Analysis by ICP	ICP	8774563	2023/07/07	2023/07/12	Suban Kanapathippllai

Bureau Veritas ID: WHF450
Sample ID: MW23-OB-21
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8780779	N/A	2023/07/11	Brent Boudreau
Alkalinity	AT	8773322	N/A	2023/07/07	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8771520	N/A	2023/07/10	Automated Statchk
Chloride by Automated Colourimetry	KONE	8773455	N/A	2023/07/07	Massarat Jan
Conductivity	AT	8773324	N/A	2023/07/07	Kien Tran
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8773774	2023/07/06	2023/07/07	(Kent) Maolin Li
Fluoride	ISE	8773299	2023/07/06	2023/07/07	Kien Tran
Hardness (calculated as CaCO3)		8771521	N/A	2023/07/11	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8774872	2023/07/07	2023/07/07	Japneet Gill
Mercury (low level)	CV/AA	8774868	2023/07/07	2023/07/07	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8774563	2023/07/07	2023/07/12	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8780704	N/A	2023/07/11	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8780697	N/A	2023/07/11	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8773967	2023/07/07	2023/07/07	Thuy Linh Nguyen
Cyanide (Free)	SPEC	8785892	N/A	2023/07/11	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8785893	2023/07/11	2023/07/11	Ming Dong
Total Phosphorus Low Level Total	KONE	8784555	2023/07/11	2023/07/12	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8773610	N/A	2023/07/07	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8773230	N/A	2023/07/07	Chandra Nandlal
pH	AT	8773315	2023/07/06	2023/07/07	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Aneri Pandya
Sulphate by Automated Turbidimetry	KONE	8773464	N/A	2023/07/07	Massarat Jan
Total Dissolved Solids	BAL	8772559	2023/07/06	2023/07/07	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Aneri Pandya
Total Kjeldahl Nitrogen in Water	SKAL	8774381	2023/07/07	2023/07/11	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8772540	2023/07/06	2023/07/07	Shaneil Hall
Turbidity	AT	8773035	N/A	2023/07/10	Gurparteek KAUR
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8772760	N/A	2023/07/07	Dina Wang

Bureau Veritas ID: WHF451
Sample ID: MW21-BR-21
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8780779	N/A	2023/07/11	Brent Boudreau
Alkalinity	AT	8773322	N/A	2023/07/07	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8771520	N/A	2023/07/10	Automated Statchk

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WHF451
Sample ID: MW21-BR-21
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	8773455	N/A	2023/07/07	Massarat Jan
Conductivity	AT	8773324	N/A	2023/07/07	Kien Tran
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8773774	2023/07/06	2023/07/07	(Kent) Maolin Li
Fluoride	ISE	8773299	2023/07/06	2023/07/07	Kien Tran
Hardness (calculated as CaCO3)		8771521	N/A	2023/07/11	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8774872	2023/07/07	2023/07/07	Japneet Gill
Mercury (low level)	CV/AA	8774868	2023/07/07	2023/07/07	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8774563	2023/07/07	2023/07/12	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8780704	N/A	2023/07/11	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8780697	N/A	2023/07/11	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8773967	2023/07/07	2023/07/07	Thuy Linh Nguyen
Cyanide (Free)	SPEC	8785892	N/A	2023/07/11	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8785893	2023/07/11	2023/07/11	Ming Dong
Total Phosphorus Low Level Total	KONE	8784555	2023/07/11	2023/07/12	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8774707	N/A	2023/07/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8773230	N/A	2023/07/07	Chandra Nandlal
pH	AT	8773315	2023/07/06	2023/07/07	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Aneri Pandya
Sulphate by Automated Turbidimetry	KONE	8773464	N/A	2023/07/07	Massarat Jan
Total Dissolved Solids	BAL	8775362	2023/07/07	2023/07/10	Razieh Tabesh
Field Measured pH	PH	ONSITE	N/A	2023/07/05	Aneri Pandya
Total Kjeldahl Nitrogen in Water	SKAL	8774381	2023/07/07	2023/07/11	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8772540	2023/07/06	2023/07/07	Shaneil Hall
Turbidity	AT	8773035	N/A	2023/07/10	Gurparteek KAUR
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8772760	N/A	2023/07/07	Dina Wang

Bureau Veritas ID: WHF452
Sample ID: MDP-3/23
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8780779	N/A	2023/07/11	Brent Boudreau
Alkalinity	AT	8773322	N/A	2023/07/07	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8771520	N/A	2023/07/10	Automated Statchk
Conductivity	AT	8773324	N/A	2023/07/07	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	8776829	N/A	2023/07/11	Gyulshen Idriz
Hardness (calculated as CaCO3)		8771521	N/A	2023/07/21	Automated Statchk
Dissolved Metals by ICPMS (low level)	ICP1/MS	8800631	N/A	2023/07/21	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8795285	N/A	2023/07/18	Nan Raykha
Total Ammonia-N	LACH/NH4	8773610	N/A	2023/07/07	Prabhjot Kaur
pH	AT	8773315	2023/07/06	2023/07/07	Kien Tran
Total Organic Carbon (TOC)	TOCV/NDIR	8774869	N/A	2023/07/07	Gyulshen Idriz

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WHF452 Dup
Sample ID: MDP-3/23
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals by ICPMS (low level)	ICP1/MS	8800631	N/A	2023/07/21	Arefa Dabhad

Bureau Veritas ID: WHF453
Sample ID: MDP-3-23-2
Matrix: Water

Collected: 2023/06/29
Shipped:
Received: 2023/06/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8780779	N/A	2023/07/11	Brent Boudreau
Alkalinity	AT	8773322	N/A	2023/07/07	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8771520	N/A	2023/07/10	Automated Statchk
Conductivity	AT	8773324	N/A	2023/07/07	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	8776829	N/A	2023/07/11	Gyulshen Idriz
Hardness (calculated as CaCO3)		8771521	N/A	2023/07/21	Automated Statchk
Dissolved Metals by ICPMS (low level)	ICP1/MS	8800631	N/A	2023/07/21	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8795285	N/A	2023/07/18	Nan Raykha
Total Ammonia-N	LACH/NH4	8773610	N/A	2023/07/07	Prabhjot Kaur
pH	AT	8773315	2023/07/06	2023/07/07	Kien Tran
Total Organic Carbon (TOC)	TOCV/NDIR	8774869	N/A	2023/07/07	Gyulshen Idriz

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	6.7°C
Package 2	7.3°C
Package 3	15.7°C

Acidity samples in job contained headspace.

Sample WHF444 [BH14-02] : Metals Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample WHF447 [MW15-BR-14] : TKN < Ammonia: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample WHF448 [MW25-OB-21] : TKN < Ammonia: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample WHF449 [MW25-BR-21] : TKN < Ammonia: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample WHF452 [MDP-3/23] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Metal Analysis:Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Sample WHF453 [MDP-3-23-2] : TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Metal Analysis:Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8772760	4-Bromofluorobenzene	2023/07/07	96	70 - 130	97	70 - 130	95	%				
8772760	D4-1,2-Dichloroethane	2023/07/07	96	70 - 130	93	70 - 130	94	%				
8772760	D8-Toluene	2023/07/07	104	70 - 130	105	70 - 130	101	%				
8772859	1,4-Difluorobenzene	2023/07/06	104	70 - 130	98	70 - 130	107	%				
8772859	4-Bromofluorobenzene	2023/07/06	96	70 - 130	99	70 - 130	97	%				
8772859	D10-o-Xylene	2023/07/06	96	70 - 130	98	70 - 130	101	%				
8772859	D4-1,2-Dichloroethane	2023/07/06	91	70 - 130	99	70 - 130	95	%				
8773774	o-Terphenyl	2023/07/07	108	60 - 130	110	60 - 130	106	%				
8772540	Total Suspended Solids	2023/07/07			95	85 - 115	<1	mg/L	12	20		
8772559	Total Dissolved Solids	2023/07/07			97	90 - 110	<10	mg/L	1.2	20		
8772760	1,1,2,2-Tetrachloroethane	2023/07/07	105	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
8772760	1,2-Dichlorobenzene	2023/07/07	103	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
8772760	1,4-Dichlorobenzene	2023/07/07	120	70 - 130	121	70 - 130	<0.50	ug/L	NC	30		
8772760	Benzene	2023/07/07	100	70 - 130	98	70 - 130	<0.17	ug/L	NC	30		
8772760	Chloroform	2023/07/07	96	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
8772760	cis-1,2-Dichloroethylene	2023/07/07	101	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
8772760	Ethylbenzene	2023/07/07	99	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
8772760	F1 (C6-C10) - BTEX	2023/07/07					<25	ug/L	NC	30		
8772760	F1 (C6-C10)	2023/07/07	95	60 - 140	89	60 - 140	<25	ug/L	NC	30		
8772760	Methylene Chloride(Dichloromethane)	2023/07/07	105	70 - 130	101	70 - 130	<2.0	ug/L	NC	30		
8772760	o-Xylene	2023/07/07	87	70 - 130	88	70 - 130	<0.20	ug/L	NC	30		
8772760	p+m-Xylene	2023/07/07	98	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
8772760	Tetrachloroethylene	2023/07/07	91	70 - 130	93	70 - 130	<0.20	ug/L	NC	30		
8772760	Toluene	2023/07/07	103	70 - 130	104	70 - 130	<0.20	ug/L	NC	30		
8772760	Total Xylenes	2023/07/07					<0.20	ug/L	NC	30		
8772760	trans-1,3-Dichloropropene	2023/07/07	99	70 - 130	96	70 - 130	<0.40	ug/L	NC	30		
8772760	Trichloroethylene	2023/07/07	100	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
8772812	Dissolved Organic Carbon	2023/07/06	98	80 - 120	99	80 - 120	<0.40	mg/L	0.73	20		
8772859	F1 (C6-C10)	2023/07/06	112	60 - 140	107	60 - 140	<25	ug/L	NC	30		
8773035	Turbidity	2023/07/10			100	80 - 120	<0.1	NTU	12	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8773230	Nitrate (N)	2023/07/07	98	80 - 120	94	80 - 120	<0.10	mg/L	NC	20		
8773230	Nitrite (N)	2023/07/07	104	80 - 120	104	80 - 120	<0.010	mg/L	NC	20		
8773299	Fluoride (F-)	2023/07/07	95	80 - 120	98	80 - 120	<0.10	mg/L	NC	20		
8773315	pH	2023/07/07			102	98 - 103			0.36	N/A		
8773322	Alkalinity (Total as CaCO3)	2023/07/07			95	85 - 115	<1.0	mg/L	8.4	20		
8773324	Conductivity	2023/07/07			102	85 - 115	<0.001	mS/cm	1.2	10		
8773455	Dissolved Chloride (Cl-)	2023/07/07	101	80 - 120	91	80 - 120	<1.0	mg/L	NC	20		
8773464	Dissolved Sulphate (SO4)	2023/07/07	84	75 - 125	93	80 - 120	<1.0	mg/L	13	20		
8773610	Total Ammonia-N	2023/07/07	100	75 - 125	100	80 - 120	<0.050	mg/L	NC	20		
8773774	F2 (C10-C16 Hydrocarbons)	2023/07/07	101	60 - 130	106	60 - 130	<100	ug/L	NC	30		
8773774	F3 (C16-C34 Hydrocarbons)	2023/07/07	118	60 - 130	123	60 - 130	<200	ug/L	NC	30		
8773774	F4 (C34-C50 Hydrocarbons)	2023/07/07	122	60 - 130	123	60 - 130	<200	ug/L	NC	30		
8773967	Total Sulphur (S)	2023/07/07	103	80 - 120	100	80 - 120	<0.5	mg/L	0.38	25		
8774381	Total Kjeldahl Nitrogen (TKN)	2023/07/10	NC	80 - 120	96	80 - 120	<0.10	mg/L	6.5	20	95	80 - 120
8774563	Dissolved Sulphur (S)	2023/07/12	97	80 - 120	93	80 - 120	<0.5	mg/L	NC	25		
8774656	Total Kjeldahl Nitrogen (TKN)	2023/07/10	NC	80 - 120	99	80 - 120	<0.10	mg/L	3.7	20	103	80 - 120
8774707	Total Ammonia-N	2023/07/10	102	75 - 125	98	80 - 120	<0.050	mg/L	NC	20		
8774868	Mercury (Hg)	2023/07/07	100	75 - 125	102	80 - 120	<0.01	ug/L	NC	20		
8774869	Total Organic Carbon (TOC)	2023/07/07	101	80 - 120	103	80 - 120	<0.40	mg/L	0.073	20		
8774872	Dissolved Mercury (Hg)	2023/07/07	102	75 - 125	102	80 - 120	<0.01	ug/L	NC	20		
8775362	Total Dissolved Solids	2023/07/10			98	90 - 110	<10	mg/L	2.5	20		
8776829	Dissolved Organic Carbon	2023/07/11	93	80 - 120	98	80 - 120	<0.40	mg/L	11	20		
8780697	. Aluminum (Al)	2023/07/11	NC	80 - 120	105	80 - 120	<0.0005	mg/L	0.50 (1)	20		
8780697	. Antimony (Sb)	2023/07/11	112	80 - 120	102	80 - 120	<0.0001	mg/L				
8780697	. Arsenic (As)	2023/07/11	101	80 - 120	97	80 - 120	<0.0001	mg/L				
8780697	. Barium (Ba)	2023/07/11	111	80 - 120	106	80 - 120	<0.0002	mg/L				
8780697	. Beryllium (Be)	2023/07/11	100	80 - 120	95	80 - 120	<0.00005	mg/L				
8780697	. Bismuth (Bi)	2023/07/11	97	80 - 120	94	80 - 120	<0.0001	mg/L				
8780697	. Boron (B)	2023/07/11	93	80 - 120	93	80 - 120	<0.001	mg/L				
8780697	. Cadmium (Cd)	2023/07/11	104	80 - 120	97	80 - 120	<0.000005	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8780697	. Calcium (Ca)	2023/07/11	NC	80 - 120	113	80 - 120	<0.02	mg/L				
8780697	. Cesium (Cs)	2023/07/11	105	80 - 120	103	80 - 120	<0.00002	mg/L				
8780697	. Chromium (Cr)	2023/07/11	100	80 - 120	101	80 - 120	<0.0005	mg/L				
8780697	. Cobalt (Co)	2023/07/11	97	80 - 120	99	80 - 120	<0.00005	mg/L				
8780697	. Copper (Cu)	2023/07/11	106	80 - 120	108	80 - 120	<0.0001	mg/L				
8780697	. Iron (Fe)	2023/07/11	99	80 - 120	100	80 - 120	<0.005	mg/L				
8780697	. Lead (Pb)	2023/07/11	95	80 - 120	95	80 - 120	<0.00005	mg/L				
8780697	. Lithium (Li)	2023/07/11	111	80 - 120	106	80 - 120	<0.0005	mg/L				
8780697	. Magnesium (Mg)	2023/07/11	NC	80 - 120	98	80 - 120	<0.005	mg/L				
8780697	. Manganese (Mn)	2023/07/11	94	80 - 120	94	80 - 120	<0.0002	mg/L				
8780697	. Molybdenum (Mo)	2023/07/11	112	80 - 120	102	80 - 120	<0.00005	mg/L				
8780697	. Nickel (Ni)	2023/07/11	88	80 - 120	92	80 - 120	<0.0001	mg/L				
8780697	. Phosphorus (P)	2023/07/11	112	80 - 120	106	80 - 120	<0.005	mg/L				
8780697	. Potassium (K)	2023/07/11	101	80 - 120	108	80 - 120	<0.02	mg/L				
8780697	. Rubidium (Rb)	2023/07/11	98	80 - 120	100	80 - 120	<0.00002	mg/L				
8780697	. Selenium (Se)	2023/07/11	103	80 - 120	99	80 - 120	<0.00005	mg/L				
8780697	. Silicon (Si)	2023/07/11	105	80 - 120	107	80 - 120	<0.005	mg/L				
8780697	. Silver (Ag)	2023/07/11	99	80 - 120	94	80 - 120	<0.00001	mg/L				
8780697	. Sodium (Na)	2023/07/11	NC	80 - 120	105	80 - 120	<0.01	mg/L				
8780697	. Strontium (Sr)	2023/07/11	NC	80 - 120	91	80 - 120	<0.0001	mg/L				
8780697	. Tellurium (Te)	2023/07/11	111	80 - 120	101	80 - 120	<0.0001	mg/L				
8780697	. Thallium (Tl)	2023/07/11	95	80 - 120	95	80 - 120	<0.000005	mg/L				
8780697	. Thorium (Th)	2023/07/11	96	80 - 120	93	80 - 120	<0.0002	mg/L				
8780697	. Tin (Sn)	2023/07/11	111	80 - 120	102	80 - 120	<0.0001	mg/L				
8780697	. Titanium (Ti)	2023/07/11	104	80 - 120	101	80 - 120	<0.0005	mg/L				
8780697	. Tungsten (W)	2023/07/11	99	80 - 120	98	80 - 120	<0.0001	mg/L				
8780697	. Uranium (U)	2023/07/11	98	80 - 120	97	80 - 120	<0.00001	mg/L				
8780697	. Vanadium (V)	2023/07/11	98	80 - 120	97	80 - 120	<0.00005	mg/L				
8780697	. Zinc (Zn)	2023/07/11	98	80 - 120	96	80 - 120	<0.0005	mg/L				
8780697	. Zirconium (Zr)	2023/07/11	108	80 - 120	100	80 - 120	<0.0001	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8780704	Dissolved Aluminum (Al)	2023/07/11	116	80 - 120	102	80 - 120	<0.0005	mg/L	NC	20		
8780704	Dissolved Antimony (Sb)	2023/07/11	112	80 - 120	100	80 - 120	<0.0001	mg/L	0.93	20		
8780704	Dissolved Arsenic (As)	2023/07/11	103	80 - 120	99	80 - 120	<0.0001	mg/L	0.63	20		
8780704	Dissolved Barium (Ba)	2023/07/11	108	80 - 120	102	80 - 120	<0.0002	mg/L	0.88	20		
8780704	Dissolved Beryllium (Be)	2023/07/11	97	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8780704	Dissolved Bismuth (Bi)	2023/07/11	87	80 - 120	95	80 - 120	<0.0001	mg/L	NC	20		
8780704	Dissolved Boron (B)	2023/07/11	NC	80 - 120	93	80 - 120	<0.001	mg/L	0.88	20		
8780704	Dissolved Cadmium (Cd)	2023/07/11	103	80 - 120	97	80 - 120	<0.00001	mg/L	NC	20		
8780704	Dissolved Calcium (Ca)	2023/07/11	NC	80 - 120	108	80 - 120	<0.02	mg/L	2.4	20		
8780704	Dissolved Cesium (Cs)	2023/07/11	103	80 - 120	99	80 - 120	<0.00002	mg/L	NC	N/A		
8780704	Dissolved Chromium (Cr)	2023/07/11	105	80 - 120	102	80 - 120	<0.0005	mg/L	NC	20		
8780704	Dissolved Cobalt (Co)	2023/07/11	98	80 - 120	96	80 - 120	<0.00005	mg/L	3.7	20		
8780704	Dissolved Copper (Cu)	2023/07/11	112	80 - 120	103	80 - 120	<0.0001	mg/L	7.0	20		
8780704	Dissolved Iron (Fe)	2023/07/11	103	80 - 120	99	80 - 120	<0.005	mg/L	2.8	20		
8780704	Dissolved Lead (Pb)	2023/07/11	86	80 - 120	93	80 - 120	<0.00005	mg/L	NC	20		
8780704	Dissolved Lithium (Li)	2023/07/11	103	80 - 120	100	80 - 120	<0.0005	mg/L	5.2	20		
8780704	Dissolved Magnesium (Mg)	2023/07/11	NC	80 - 120	98	80 - 120	<0.005	mg/L	6.4	20		
8780704	Dissolved Manganese (Mn)	2023/07/11	98	80 - 120	96	80 - 120	<0.0002	mg/L	3.1	20		
8780704	Dissolved Molybdenum (Mo)	2023/07/11	119	80 - 120	103	80 - 120	<0.00005	mg/L	0.42	20		
8780704	Dissolved Nickel (Ni)	2023/07/11	88	80 - 120	91	80 - 120	<0.0001	mg/L	0.31	20		
8780704	Dissolved Phosphorus (P)	2023/07/11	126 (2)	80 - 120	102	80 - 120	<0.005	mg/L	NC	20		
8780704	Dissolved Potassium (K)	2023/07/11	NC	80 - 120	107	80 - 120	<0.02	mg/L	0.73	20		
8780704	Dissolved Rubidium (Rb)	2023/07/11	98	80 - 120	98	80 - 120	<0.00002	mg/L	NC	N/A		
8780704	Dissolved Selenium (Se)	2023/07/11	104	80 - 120	100	80 - 120	<0.0002	mg/L	NC	20		
8780704	Dissolved Silicon (Si)	2023/07/11	NC	80 - 120	101	80 - 120	<0.005	mg/L	1.9	20		
8780704	Dissolved Silver (Ag)	2023/07/11	91	80 - 120	95	80 - 120	<0.00001	mg/L	NC	20		
8780704	Dissolved Sodium (Na)	2023/07/11	NC	80 - 120	107	80 - 120	<0.01	mg/L	3.6	20		
8780704	Dissolved Strontium (Sr)	2023/07/11	NC	80 - 120	92	80 - 120	<0.0001	mg/L	1.2	20		
8780704	Dissolved Tellurium (Te)	2023/07/11	110	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8780704	Dissolved Thallium (Tl)	2023/07/11	90	80 - 120	95	80 - 120	<0.000005	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8780704	Dissolved Thorium (Th)	2023/07/11	94	80 - 120	94	80 - 120	<0.0002	mg/L	NC	20		
8780704	Dissolved Tin (Sn)	2023/07/11	113	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8780704	Dissolved Titanium (Ti)	2023/07/11	108	80 - 120	98	80 - 120	<0.0005	mg/L	NC	20		
8780704	Dissolved Tungsten (W)	2023/07/11	100	80 - 120	98	80 - 120	<0.0001	mg/L	3.2	20		
8780704	Dissolved Uranium (U)	2023/07/11	99	80 - 120	99	80 - 120	<0.00001	mg/L	8.5	20		
8780704	Dissolved Vanadium (V)	2023/07/11	109	80 - 120	104	80 - 120	<0.00005	mg/L	2.3	20		
8780704	Dissolved Zinc (Zn)	2023/07/11	95	80 - 120	99	80 - 120	<0.0005	mg/L	2.0	20		
8780704	Dissolved Zirconium (Zr)	2023/07/11	115	80 - 120	97	80 - 120	<0.0001	mg/L	NC	20		
8780779	Acidity	2023/07/11	91	80 - 120	104	80 - 120	<5.0	mg/L	NC	25		
8782748	Strong Acid Dissoc. Cyanide (CN)	2023/07/11	NC	80 - 120	102	80 - 120	<0.00050	mg/L				
8784555	Total Phosphorus (P)	2023/07/12	109	80 - 120	103	80 - 120	<0.0010	mg/L			89	80 - 120
8785892	Free Cyanide (CN)	2023/07/11	89	80 - 120	91	80 - 120	<2.0	ug/L				
8785893	Strong Acid Dissoc. Cyanide (CN)	2023/07/11	98	80 - 120	100	80 - 120	<0.00050	mg/L				
8795285	. Aluminum (Al)	2023/07/18	NC	80 - 120	102	80 - 120	<0.0005	mg/L	1.5	20		
8795285	. Antimony (Sb)	2023/07/18	115	80 - 120	105	80 - 120	<0.0001	mg/L				
8795285	. Arsenic (As)	2023/07/18	106	80 - 120	100	80 - 120	<0.0001	mg/L				
8795285	. Barium (Ba)	2023/07/18	109	80 - 120	102	80 - 120	<0.0002	mg/L				
8795285	. Beryllium (Be)	2023/07/18	108	80 - 120	100	80 - 120	<0.00005	mg/L				
8795285	. Bismuth (Bi)	2023/07/18	99	80 - 120	99	80 - 120	<0.0001	mg/L				
8795285	. Boron (B)	2023/07/18	102	80 - 120	92	80 - 120	<0.001	mg/L				
8795285	. Cadmium (Cd)	2023/07/18	108	80 - 120	100	80 - 120	<0.000005	mg/L				
8795285	. Calcium (Ca)	2023/07/18	NC	80 - 120	100	80 - 120	<0.02	mg/L				
8795285	. Cesium (Cs)	2023/07/18	104	80 - 120	101	80 - 120	<0.00002	mg/L				
8795285	. Chromium (Cr)	2023/07/18	102	80 - 120	99	80 - 120	<0.0005	mg/L				
8795285	. Cobalt (Co)	2023/07/18	101	80 - 120	98	80 - 120	<0.00005	mg/L				
8795285	. Copper (Cu)	2023/07/18	108	80 - 120	105	80 - 120	<0.0001	mg/L				
8795285	. Iron (Fe)	2023/07/18	104	80 - 120	101	80 - 120	<0.005	mg/L				
8795285	. Lead (Pb)	2023/07/18	103	80 - 120	100	80 - 120	<0.00005	mg/L				
8795285	. Lithium (Li)	2023/07/18	111	80 - 120	104	80 - 120	<0.0005	mg/L				
8795285	. Magnesium (Mg)	2023/07/18	NC	80 - 120	100	80 - 120	<0.005	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8795285	. Manganese (Mn)	2023/07/18	102	80 - 120	100	80 - 120	<0.0002	mg/L				
8795285	. Molybdenum (Mo)	2023/07/18	115	80 - 120	106	80 - 120	<0.00005	mg/L				
8795285	. Nickel (Ni)	2023/07/18	98	80 - 120	98	80 - 120	<0.0001	mg/L				
8795285	. Phosphorus (P)	2023/07/18	119	80 - 120	102	80 - 120	<0.005	mg/L				
8795285	. Potassium (K)	2023/07/18	105	80 - 120	103	80 - 120	<0.02	mg/L				
8795285	. Rubidium (Rb)	2023/07/18	104	80 - 120	101	80 - 120	<0.00002	mg/L				
8795285	. Selenium (Se)	2023/07/18	107	80 - 120	99	80 - 120	<0.00005	mg/L				
8795285	. Silicon (Si)	2023/07/18	106	80 - 120	100	80 - 120	<0.005	mg/L				
8795285	. Silver (Ag)	2023/07/18	105	80 - 120	103	80 - 120	<0.00001	mg/L				
8795285	. Sodium (Na)	2023/07/18	NC	80 - 120	101	80 - 120	<0.01	mg/L				
8795285	. Strontium (Sr)	2023/07/18	NC	80 - 120	99	80 - 120	<0.0001	mg/L				
8795285	. Tellurium (Te)	2023/07/18	111	80 - 120	101	80 - 120	<0.0001	mg/L				
8795285	. Thallium (Tl)	2023/07/18	103	80 - 120	101	80 - 120	<0.000005	mg/L				
8795285	. Tin (Sn)	2023/07/18	111	80 - 120	104	80 - 120	<0.0001	mg/L				
8795285	. Titanium (Ti)	2023/07/18	101	80 - 120	97	80 - 120	<0.0005	mg/L				
8795285	. Tungsten (W)	2023/07/18	110	80 - 120	104	80 - 120	<0.0001	mg/L				
8795285	. Uranium (U)	2023/07/18	107	80 - 120	101	80 - 120	<0.00001	mg/L				
8795285	. Vanadium (V)	2023/07/18	103	80 - 120	98	80 - 120	<0.00005	mg/L				
8795285	. Zinc (Zn)	2023/07/18	105	80 - 120	99	80 - 120	<0.0005	mg/L				
8795285	. Zirconium (Zr)	2023/07/18	114	80 - 120	104	80 - 120	<0.0001	mg/L				
8800631	Dissolved Aluminum (Al)	2023/07/21	108	80 - 120	102	80 - 120	<0.0005	mg/L	8.7	20		
8800631	Dissolved Antimony (Sb)	2023/07/21	120	80 - 120	105	80 - 120	<0.0001	mg/L	0.66	20		
8800631	Dissolved Arsenic (As)	2023/07/21	NC	80 - 120	99	80 - 120	<0.0001	mg/L	1.2	20		
8800631	Dissolved Barium (Ba)	2023/07/21	110	80 - 120	101	80 - 120	<0.0002	mg/L	1.6	20		
8800631	Dissolved Beryllium (Be)	2023/07/21	107	80 - 120	104	80 - 120	<0.00005	mg/L	NC	20		
8800631	Dissolved Bismuth (Bi)	2023/07/21	97	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8800631	Dissolved Boron (B)	2023/07/21	NC	80 - 120	99	80 - 120	<0.001	mg/L	15	20		
8800631	Dissolved Cadmium (Cd)	2023/07/21	112	80 - 120	101	80 - 120	<0.00001	mg/L	NC	20		
8800631	Dissolved Calcium (Ca)	2023/07/21	NC	80 - 120	107	80 - 120	<0.02	mg/L	1.6	20		
8800631	Dissolved Cesium (Cs)	2023/07/21	106	80 - 120	98	80 - 120	<0.00002	mg/L	0	N/A		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8800631	Dissolved Chromium (Cr)	2023/07/21	101	80 - 120	102	80 - 120	<0.0005	mg/L	NC	20		
8800631	Dissolved Cobalt (Co)	2023/07/21	101	80 - 120	103	80 - 120	<0.00005	mg/L	1.4	20		
8800631	Dissolved Copper (Cu)	2023/07/21	110	80 - 120	105	80 - 120	<0.0001	mg/L	4.0	20		
8800631	Dissolved Iron (Fe)	2023/07/21	103	80 - 120	102	80 - 120	<0.005	mg/L	1.9	20		
8800631	Dissolved Lead (Pb)	2023/07/21	103	80 - 120	102	80 - 120	<0.00005	mg/L	NC	20		
8800631	Dissolved Lithium (Li)	2023/07/21	116	80 - 120	120	80 - 120	<0.0005	mg/L	3.1	20		
8800631	Dissolved Magnesium (Mg)	2023/07/21	NC	80 - 120	101	80 - 120	<0.005	mg/L	2.7	20		
8800631	Dissolved Manganese (Mn)	2023/07/21	106	80 - 120	100	80 - 120	<0.0002	mg/L	0.61	20		
8800631	Dissolved Molybdenum (Mo)	2023/07/21	129 (2)	80 - 120	107	80 - 120	<0.00005	mg/L	0.81	20		
8800631	Dissolved Nickel (Ni)	2023/07/21	98	80 - 120	97	80 - 120	<0.0001	mg/L	0.52	20		
8800631	Dissolved Phosphorus (P)	2023/07/21	126 (2)	80 - 120	108	80 - 120	<0.005	mg/L	7.3	20		
8800631	Dissolved Potassium (K)	2023/07/21	NC	80 - 120	106	80 - 120	<0.02	mg/L	2.7	20		
8800631	Dissolved Rubidium (Rb)	2023/07/21	106	80 - 120	102	80 - 120	<0.00002	mg/L	NC	N/A		
8800631	Dissolved Selenium (Se)	2023/07/21	103	80 - 120	102	80 - 120	<0.0002	mg/L	NC	20		
8800631	Dissolved Silicon (Si)	2023/07/21	NC	80 - 120	108	80 - 120	<0.005	mg/L	4.9	20		
8800631	Dissolved Silver (Ag)	2023/07/21	55 (2)	80 - 120	104	80 - 120	<0.00001	mg/L	NC	20		
8800631	Dissolved Sodium (Na)	2023/07/21	NC	80 - 120	99	80 - 120	<0.01	mg/L	0.74	20		
8800631	Dissolved Strontium (Sr)	2023/07/21	NC	80 - 120	101	80 - 120	<0.0001	mg/L	0.55	20		
8800631	Dissolved Tellurium (Te)	2023/07/21	120	80 - 120	106	80 - 120	<0.0001	mg/L	NC	20		
8800631	Dissolved Thallium (Tl)	2023/07/21	105	80 - 120	103	80 - 120	<0.000005	mg/L	NC	20		
8800631	Dissolved Tin (Sn)	2023/07/21	121 (2)	80 - 120	105	80 - 120	<0.0001	mg/L	5.1	20		
8800631	Dissolved Titanium (Ti)	2023/07/21	108	80 - 120	104	80 - 120	<0.0005	mg/L	NC	20		
8800631	Dissolved Tungsten (W)	2023/07/21	NC	80 - 120	102	80 - 120	<0.0001	mg/L	0.36	20		
8800631	Dissolved Uranium (U)	2023/07/21	105	80 - 120	101	80 - 120	<0.00001	mg/L	8.7	20		
8800631	Dissolved Vanadium (V)	2023/07/21	105	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8800631	Dissolved Zinc (Zn)	2023/07/21	107	80 - 120	101	80 - 120	<0.0005	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8800631	Dissolved Zirconium (Zr)	2023/07/21	119	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) POTENTIAL EXCEEDANCE FOR PARAMETER

(2) Metal Analysis:Matrix Spike exceeds acceptance limits, probable matrix interference

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Colleen Acker, B.Sc, Scientific Service Specialist

<original signed by>

Cristina Carriere, Senior Scientific Specialist

<original signed by>

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

<original signed by>

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 727135

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/25
Report #: R7734240
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3J8805
Received: 2023/07/04, 15:37

Sample Matrix: Ground Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	3	N/A	2023/07/12	ATL SOP-00205	SM 24 2310B m
Alkalinity	3	N/A	2023/07/07	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	3	N/A	2023/07/10	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	3	N/A	2023/07/07	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	3	N/A	2023/07/07	CAM SOP-00414	SM 23 2510 m
Fluoride	3	2023/07/07	2023/07/07	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	3	N/A	2023/07/13	CAM SOP 00102/00408/00447	SM 2340 B
Dissolved Mercury (low level)	3	2023/07/07	2023/07/07	CAM SOP-00453	EPA 7470 m
Mercury (low level)	3	2023/07/07	2023/07/07	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	3	2023/07/18	2023/07/19	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	3	N/A	2023/07/13	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	3	N/A	2023/07/12	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	3	2023/07/19	2023/07/20	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	3	N/A	2023/07/11	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	3	2023/07/11	2023/07/11	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	3	2023/07/11	2023/07/12	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	3	N/A	2023/07/10	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (3)	3	N/A	2023/07/10	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	3	2023/07/07	2023/07/07	CAM SOP-00413	SM 4500H+ B m
Sulphate by Automated Turbidimetry	3	N/A	2023/07/07	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	3	2023/07/10	2023/07/11	CAM SOP-00428	SM 23 2540C m
Total Kjeldahl Nitrogen in Water	3	2023/07/07	2023/07/10	CAM SOP-00938	OMOE E3516 m
Low Level Total Suspended Solids	3	2023/07/11	2023/07/11	CAM SOP-00428	SM 23 2540D m
Turbidity	3	N/A	2023/07/08	CAM SOP-00417	SM 23 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 727135

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/25
Report #: R7734240
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3J8805
Received: 2023/07/04, 15:37

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J8805
Report Date: 2023/07/25

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WHR236			WHR236			WHR237		
Sampling Date		2023/06/30 10:19			2023/06/30 10:19			2023/06/30 11:12		
COC Number		727135			727135			727135		
	UNITS	MWS-14-04	RDL	QC Batch	MWS-14-04 Lab-Dup	RDL	QC Batch	MWS-14-02-BR	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	320	1.0	8771520				280	1.0	8771520
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.8	1.0	8771520				2.2	1.0	8771520
Hardness (CaCO3)	mg/L	330	1.0	8771521				280	1.0	8771521
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8771520				<1.0	1.0	8771520
Inorganics										
Acidity	mg/L	11	5.0	8783204				6.0	5.0	8783204
Total Ammonia-N	mg/L	<0.050	0.050	8776472				0.23	0.050	8778301
Conductivity	mS/cm	0.614	0.001	8774334				0.531	0.001	8774334
Free Cyanide (CN)	ug/L	2.8 (1)	2.0	8785892				2.6 (1)	2.0	8785892
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050 (2)	0.00050	8785949				<0.00050 (2)	0.00050	8785949
Total Dissolved Solids	mg/L	360	10	8778071				305	10	8778071
Fluoride (F-)	mg/L	0.17	0.10	8774337				0.31	0.10	8774337
Total Kjeldahl Nitrogen (TKN)	mg/L	0.12	0.10	8776394				0.31	0.10	8776394
pH	pH	7.97		8774339				7.93		8774339
Total Phosphorus (P)	mg/L	0.0023	0.0010	8785950				0.025	0.0010	8785950
Total Suspended Solids	mg/L	3	1	8778143	4	1	8778143	7	1	8778143
Dissolved Sulphate (SO4)	mg/L	16	1.0	8774382				3.8	1.0	8774382
Turbidity	NTU	0.3	0.1	8774855	0.3	0.1	8774855	12	0.1	8774855
Alkalinity (Total as CaCO3)	mg/L	320	1.0	8774336				280	1.0	8774336
Dissolved Chloride (Cl-)	mg/L	1.4	1.0	8774367				<1.0	1.0	8774367
Nitrite (N)	mg/L	<0.010	0.010	8774327				<0.010	0.010	8774327
Nitrate (N)	mg/L	0.21	0.10	8774327				<0.10	0.10	8774327
Nitrate + Nitrite (N)	mg/L	0.21	0.10	8774327				<0.10	0.10	8774327

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J8805
Report Date: 2023/07/25

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WHR237			WHR238			WHR238		
Sampling Date		2023/06/30 11:12			2023/06/30 11:25			2023/06/30 11:25		
COC Number		727135			727135			727135		
	UNITS	MWS-14-02-BR Lab-Dup	RDL	QC Batch	MWS-14-02-OB	RDL	QC Batch	MWS-14-02-OB Lab-Dup	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L				260	1.0	8771520			
Carb. Alkalinity (calc. as CaCO3)	mg/L				2.3	1.0	8771520			
Hardness (CaCO3)	mg/L				290	1.0	8771521			
Hydrox. Alkalinity (calc. as CaCO3)	mg/L				<1.0	1.0	8771520			
Inorganics										
Acidity	mg/L				<5.0	5.0	8783204			
Total Ammonia-N	mg/L				<0.050	0.050	8778301			
Conductivity	mS/cm				0.491	0.001	8774334	0.505	0.001	8774334
Free Cyanide (CN)	ug/L				2.8 (1)	2.0	8785892			
Strong Acid Dissoc. Cyanide (CN)	mg/L				<0.00050 (2)	0.00050	8785949			
Total Dissolved Solids	mg/L				290	10	8778071	280	10	8778071
Fluoride (F-)	mg/L				0.33	0.10	8774337	0.32	0.10	8774337
Total Kjeldahl Nitrogen (TKN)	mg/L				0.14	0.10	8776394			
pH	pH				7.97		8774339	7.97		8774339
Total Phosphorus (P)	mg/L				0.24	0.0010	8785950			
Total Suspended Solids	mg/L				1500	3	8778143			
Dissolved Sulphate (SO4)	mg/L	3.7	1.0	8774382	8.8	1.0	8774382			
Turbidity	NTU				5.8	0.1	8774855			
Alkalinity (Total as CaCO3)	mg/L				260	1.0	8774336	260	1.0	8774336
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	8774367	3.9	1.0	8774367			
Nitrite (N)	mg/L				<0.010	0.010	8774327			
Nitrate (N)	mg/L				0.11	0.10	8774327			
Nitrate + Nitrite (N)	mg/L				0.11	0.10	8774327			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com
Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J8805
Report Date: 2023/07/25

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WHR236			WHR236			WHR237		
Sampling Date		2023/06/30 10:19			2023/06/30 10:19			2023/06/30 11:12		
COC Number		727135			727135			727135		
	UNITS	MWS-14-04	RDL	QC Batch	MWS-14-04 Lab-Dup	RDL	QC Batch	MWS-14-02-BR	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0021	0.0005	8785527				0.0021	0.0005	8785527
. Aluminum (Al)	mg/L	0.0048	0.0005	8784619	0.0051	0.0005	8784619	0.0110	0.0005	8784619
Dissolved Antimony (Sb)	mg/L	0.0004	0.0001	8785527				<0.0001	0.0001	8785527
. Antimony (Sb)	mg/L	0.0003	0.0001	8784619	0.0002	0.0001	8784619	<0.0001	0.0001	8784619
Dissolved Arsenic (As)	mg/L	0.0014	0.0001	8785527				0.0020	0.0001	8785527
. Arsenic (As)	mg/L	0.0014	0.0001	8784619	0.0015	0.0001	8784619	0.0041	0.0001	8784619
Dissolved Barium (Ba)	mg/L	0.135	0.0002	8785527				0.0306	0.0002	8785527
. Barium (Ba)	mg/L	0.139	0.0002	8784619	0.137	0.0002	8784619	0.0289	0.0002	8784619
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8785527				<0.00005	0.00005	8785527
. Beryllium (Be)	mg/L	<0.00005	0.00005	8784619	<0.00005	0.00005	8784619	<0.00005	0.00005	8784619
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8785527				<0.0001	0.0001	8785527
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8784619	<0.0001	0.0001	8784619	<0.0001	0.0001	8784619
Dissolved Boron (B)	mg/L	0.018	0.001	8785527				0.019	0.001	8785527
. Boron (B)	mg/L	0.017	0.001	8784619	0.017	0.001	8784619	0.019	0.001	8784619
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8785527				<0.00001	0.00001	8785527
. Cadmium (Cd)	mg/L	<0.000005	0.000005	8784619	<0.000005	0.000005	8784619	<0.000005	0.000005	8784619
Dissolved Calcium (Ca)	mg/L	92.2	0.1	8785527				77.3	0.1	8785527
. Calcium (Ca)	mg/L	95.8	0.1	8784619	94.6	0.1	8784619	77.7	0.1	8784619
Dissolved Cesium (Cs)	mg/L	0.00027	0.00002	8785527				0.00003	0.00002	8785527
. Cesium (Cs)	mg/L	0.00026	0.00002	8784619	0.00025	0.00002	8784619	0.00005	0.00002	8784619
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8785527				<0.0005	0.0005	8785527
. Chromium (Cr)	mg/L	<0.0005	0.0005	8784619	<0.0005	0.0005	8784619	<0.0005	0.0005	8784619
Dissolved Cobalt (Co)	mg/L	0.00006	0.00005	8785527				0.00007	0.00005	8785527
. Cobalt (Co)	mg/L	0.00011	0.00005	8784619	0.00012	0.00005	8784619	0.00020	0.00005	8784619
Dissolved Copper (Cu)	mg/L	0.0009	0.0001	8785527				<0.0001	0.0001	8785527
. Copper (Cu)	mg/L	0.0003	0.0001	8784619	0.0003	0.0001	8784619	0.0001	0.0001	8784619
Dissolved Iron (Fe)	mg/L	0.073	0.005	8785527				1.55	0.005	8785527
. Iron (Fe)	mg/L	0.230	0.005	8784619	0.237	0.005	8784619	2.66	0.005	8784619
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8785527				<0.00005	0.00005	8785527
. Lead (Pb)	mg/L	<0.00005	0.00005	8784619	<0.00005	0.00005	8784619	<0.00005	0.00005	8784619

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J8805
Report Date: 2023/07/25

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WHR236			WHR236			WHR237		
Sampling Date		2023/06/30 10:19			2023/06/30 10:19			2023/06/30 11:12		
COC Number		727135			727135			727135		
	UNITS	MWS-14-04	RDL	QC Batch	MWS-14-04 Lab-Dup	RDL	QC Batch	MWS-14-02-BR	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0039	0.0005	8785527				0.0075	0.0005	8785527
. Lithium (Li)	mg/L	0.0038	0.0005	8784619	0.0039	0.0005	8784619	0.0060	0.0005	8784619
Dissolved Magnesium (Mg)	mg/L	23.0	0.005	8785527				19.9	0.005	8785527
. Magnesium (Mg)	mg/L	23.2	0.005	8784619	23.5	0.005	8784619	20.6	0.005	8784619
Dissolved Manganese (Mn)	mg/L	0.0189	0.0002	8785527				0.139	0.0002	8785527
. Manganese (Mn)	mg/L	0.0463	0.0002	8784619	0.0465	0.0002	8784619	0.228	0.0002	8784619
Mercury (Hg)	ug/L	<0.01	0.01	8774868				<0.01	0.01	8774868
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8774872	<0.01	0.01	8774872	<0.01	0.01	8774872
Dissolved Molybdenum (Mo)	mg/L	0.00303	0.00005	8785527				0.00129	0.00005	8785527
. Molybdenum (Mo)	mg/L	0.00351	0.00005	8784619	0.00350	0.00005	8784619	0.00167	0.00005	8784619
Dissolved Nickel (Ni)	mg/L	0.0006	0.0001	8785527				0.0001	0.0001	8785527
. Nickel (Ni)	mg/L	0.0006	0.0001	8784619	0.0006	0.0001	8784619	0.0002	0.0001	8784619
Dissolved Phosphorus (P)	mg/L	<0.005	0.005	8785527				0.019	0.005	8785527
. Phosphorus (P)	mg/L	<0.005	0.005	8784619	<0.005	0.005	8784619	0.025	0.005	8784619
Dissolved Potassium (K)	mg/L	0.98	0.02	8785527				2.09	0.02	8785527
. Potassium (K)	mg/L	0.87	0.02	8784619	0.88	0.02	8784619	2.34	0.02	8784619
Dissolved Rubidium (Rb)	mg/L	0.00147	0.00002	8785527				0.00110	0.00002	8785527
. Rubidium (Rb)	mg/L	0.00150	0.00002	8784619	0.00145	0.00002	8784619	0.00105	0.00002	8784619
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8785527				<0.0002	0.0002	8785527
. Selenium (Se)	mg/L	<0.00005	0.00005	8784619	<0.00005	0.00005	8784619	0.00020	0.00005	8784619
Dissolved Silicon (Si)	mg/L	7.60	0.025	8785527				7.73	0.025	8785527
. Silicon (Si)	mg/L	7.33	0.025	8784619	7.19	0.025	8784619	7.41	0.025	8784619
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8785527				<0.00001	0.00001	8785527
. Silver (Ag)	mg/L	<0.00001	0.00001	8784619	<0.00001	0.00001	8784619	<0.00001	0.00001	8784619
Dissolved Sodium (Na)	mg/L	6.19	0.01	8785527				7.18	0.01	8785527
. Sodium (Na)	mg/L	5.95	0.01	8784619	6.13	0.01	8784619	8.07	0.01	8784619
Dissolved Strontium (Sr)	mg/L	0.259	0.0001	8785527				0.164	0.0001	8785527
. Strontium (Sr)	mg/L	0.294	0.0001	8784619	0.294	0.0001	8784619	0.165	0.0001	8784619
Dissolved Sulphur (S)	mg/L	6.0	0.5	8796731				2.2	0.5	8796731
Total Sulphur (S)	mg/L	6.0	0.5	8798373				2.0	0.5	8798373
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8785527				<0.0001	0.0001	8785527

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J8805
Report Date: 2023/07/25

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WHR236			WHR236			WHR237		
Sampling Date		2023/06/30 10:19			2023/06/30 10:19			2023/06/30 11:12		
COC Number		727135			727135			727135		
	UNITS	MWS-14-04	RDL	QC Batch	MWS-14-04 Lab-Dup	RDL	QC Batch	MWS-14-02-BR	RDL	QC Batch
. Tellurium (Te)	mg/L	<0.0001	0.0001	8784619	<0.0001	0.0001	8784619	<0.0001	0.0001	8784619
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8785527				<0.000005	0.000005	8785527
. Thallium (Tl)	mg/L	<0.000005	0.000005	8784619	<0.000005	0.000005	8784619	<0.000005	0.000005	8784619
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8785527				<0.0001	0.0001	8785527
. Tin (Sn)	mg/L	0.0001	0.0001	8784619	0.0001	0.0001	8784619	<0.0001	0.0001	8784619
Dissolved Titanium (Ti)	mg/L	<0.0005	0.0005	8785527				0.0006	0.0005	8785527
. Titanium (Ti)	mg/L	0.0007	0.0005	8784619	0.0008	0.0005	8784619	0.0013	0.0005	8784619
Dissolved Tungsten (W)	mg/L	0.0004	0.0001	8785527				0.0006	0.0001	8785527
. Tungsten (W)	mg/L	0.0005	0.0001	8784619	0.0006	0.0001	8784619	0.0004	0.0001	8784619
Dissolved Uranium (U)	mg/L	0.00238	0.00001	8785527				0.00034	0.00001	8785527
. Uranium (U)	mg/L	0.00255	0.00001	8784619	0.00256	0.00001	8784619	0.00019	0.00001	8784619
Dissolved Vanadium (V)	mg/L	<0.00005	0.00005	8785527				0.00034	0.00005	8785527
. Vanadium (V)	mg/L	<0.00005	0.00005	8784619	<0.00005	0.00005	8784619	0.00087	0.00005	8784619
Dissolved Zinc (Zn)	mg/L	0.0023	0.0005	8785527				<0.0005	0.0005	8785527
. Zinc (Zn)	mg/L	0.0024	0.0005	8784619	0.0024	0.0005	8784619	0.0008	0.0005	8784619
Dissolved Zirconium (Zr)	mg/L	0.0003	0.0001	8785527				0.0004	0.0001	8785527
. Zirconium (Zr)	mg/L	0.0005	0.0001	8784619	0.0005	0.0001	8784619	0.0008	0.0001	8784619

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WHR237			WHR238			WHR238		
Sampling Date		2023/06/30 11:12			2023/06/30 11:25			2023/06/30 11:25		
COC Number		727135			727135			727135		
	UNITS	MWS-14-02-BR Lab-Dup	RDL	QC Batch	MWS-14-02-OB	RDL	QC Batch	MWS-14-02-OB Lab-Dup	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0022	0.0005	8785527	0.0006	0.0005	8785527			
. Aluminum (Al)	mg/L				0.700	0.0025	8784619			
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8785527	<0.0001	0.0001	8785527			
. Antimony (Sb)	mg/L				0.0002	0.0001	8784619			
Dissolved Arsenic (As)	mg/L	0.0020	0.0001	8785527	0.0004	0.0001	8785527			
. Arsenic (As)	mg/L				0.0015	0.0001	8784619			
Dissolved Barium (Ba)	mg/L	0.0315	0.0002	8785527	0.0332	0.0002	8785527			
. Barium (Ba)	mg/L				0.0442	0.0002	8784619			
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8785527	<0.00005	0.00005	8785527			
. Beryllium (Be)	mg/L				<0.00005	0.00005	8784619			
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8785527	<0.0001	0.0001	8785527			
. Bismuth (Bi)	mg/L				<0.0001	0.0001	8784619			
Dissolved Boron (B)	mg/L	0.020	0.001	8785527	0.011	0.001	8785527			
. Boron (B)	mg/L				0.013	0.001	8784619			
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8785527	<0.00001	0.00001	8785527			
. Cadmium (Cd)	mg/L				0.000022	0.000005	8784619			
Dissolved Calcium (Ca)	mg/L	80.4	0.1	8785527	82.4	0.1	8785527			
. Calcium (Ca)	mg/L				115	0.1	8784619			
Dissolved Cesium (Cs)	mg/L	0.00002	0.00002	8785527	<0.00002	0.00002	8785527			
. Cesium (Cs)	mg/L				0.00009	0.00002	8784619			
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8785527	<0.0005	0.0005	8785527			
. Chromium (Cr)	mg/L				0.0028	0.0005	8784619			
Dissolved Cobalt (Co)	mg/L	0.00006	0.00005	8785527	<0.00005	0.00005	8785527			
. Cobalt (Co)	mg/L				0.00081	0.00005	8784619			
Dissolved Copper (Cu)	mg/L	<0.0001	0.0001	8785527	<0.0001	0.0001	8785527			
. Copper (Cu)	mg/L				0.0026	0.0001	8784619			
Dissolved Iron (Fe)	mg/L	1.52	0.005	8785527	0.486	0.005	8785527			
. Iron (Fe)	mg/L				1.56	0.005	8784619			
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8785527	<0.00005	0.00005	8785527			
. Lead (Pb)	mg/L				0.00106	0.00005	8784619			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J8805
Report Date: 2023/07/25

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WHR237			WHR238			WHR238		
Sampling Date		2023/06/30 11:12			2023/06/30 11:25			2023/06/30 11:25		
COC Number		727135			727135			727135		
	UNITS	MWS-14-02-BR Lab-Dup	RDL	QC Batch	MWS-14-02-OB	RDL	QC Batch	MWS-14-02-OB Lab-Dup	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0075	0.0005	8785527	0.0067	0.0005	8785527			
. Lithium (Li)	mg/L				0.0074	0.0005	8784619			
Dissolved Magnesium (Mg)	mg/L	20.5	0.005	8785527	20.2	0.005	8785527			
. Magnesium (Mg)	mg/L				30.9	0.005	8784619			
Dissolved Manganese (Mn)	mg/L	0.144	0.0002	8785527	0.0417	0.0002	8785527			
. Manganese (Mn)	mg/L				0.0996	0.0002	8784619			
Mercury (Hg)	ug/L				<0.01	0.01	8774868			
Dissolved Mercury (Hg)	ug/L				<0.01	0.01	8774872			
Dissolved Molybdenum (Mo)	mg/L	0.00126	0.00005	8785527	0.00115	0.00005	8785527			
. Molybdenum (Mo)	mg/L				0.00150	0.00005	8784619			
Dissolved Nickel (Ni)	mg/L	0.0001	0.0001	8785527	0.0001	0.0001	8785527			
. Nickel (Ni)	mg/L				0.0022	0.0001	8784619			
Dissolved Phosphorus (P)	mg/L	0.019	0.005	8785527	0.012	0.005	8785527			
. Phosphorus (P)	mg/L				0.195	0.005	8784619			
Dissolved Potassium (K)	mg/L	2.16	0.02	8785527	2.20	0.02	8785527			
. Potassium (K)	mg/L				2.55	0.02	8784619			
Dissolved Rubidium (Rb)	mg/L	0.00112	0.00002	8785527	0.00124	0.00002	8785527			
. Rubidium (Rb)	mg/L				0.00317	0.00002	8784619			
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8785527	<0.0002	0.0002	8785527			
. Selenium (Se)	mg/L				<0.00005	0.00005	8784619			
Dissolved Silicon (Si)	mg/L	8.07	0.025	8785527	6.97	0.025	8785527			
. Silicon (Si)	mg/L				6.74	0.025	8784619			
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8785527	<0.00001	0.00001	8785527			
. Silver (Ag)	mg/L				<0.00001	0.00001	8784619			
Dissolved Sodium (Na)	mg/L	7.23	0.01	8785527	4.40	0.01	8785527			
. Sodium (Na)	mg/L				6.12	0.01	8784619			
Dissolved Strontium (Sr)	mg/L	0.165	0.0001	8785527	0.124	0.0001	8785527			
. Strontium (Sr)	mg/L				0.149	0.0001	8784619			
Dissolved Sulphur (S)	mg/L				2.8	0.5	8796731	2.8	0.5	8796731
Total Sulphur (S)	mg/L				3.7	0.5	8798373	3.6	0.5	8798373
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8785527	<0.0001	0.0001	8785527			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J8805
Report Date: 2023/07/25

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WHR237			WHR238			WHR238		
Sampling Date		2023/06/30 11:12			2023/06/30 11:25			2023/06/30 11:25		
COC Number		727135			727135			727135		
	UNITS	MWS-14-02-BR Lab-Dup	RDL	QC Batch	MWS-14-02-OB	RDL	QC Batch	MWS-14-02-OB Lab-Dup	RDL	QC Batch
. Tellurium (Te)	mg/L				<0.0001	0.0001	8784619			
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8785527	<0.000005	0.000005	8785527			
. Thallium (Tl)	mg/L				0.000023	0.000005	8784619			
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8785527	<0.0001	0.0001	8785527			
. Tin (Sn)	mg/L				0.0002	0.0001	8784619			
Dissolved Titanium (Ti)	mg/L	0.0007	0.0005	8785527	<0.0005	0.0005	8785527			
. Titanium (Ti)	mg/L				0.0482	0.0005	8784619			
Dissolved Tungsten (W)	mg/L	0.0006	0.0001	8785527	<0.0001	0.0001	8785527			
. Tungsten (W)	mg/L				<0.0001	0.0001	8784619			
Dissolved Uranium (U)	mg/L	0.00035	0.00001	8785527	0.00045	0.00001	8785527			
. Uranium (U)	mg/L				0.00169	0.00001	8784619			
Dissolved Vanadium (V)	mg/L	0.00034	0.00005	8785527	<0.00005	0.00005	8785527			
. Vanadium (V)	mg/L				0.00230	0.00005	8784619			
Dissolved Zinc (Zn)	mg/L	<0.0005	0.0005	8785527	<0.0005	0.0005	8785527			
. Zinc (Zn)	mg/L				0.0086	0.0005	8784619			
Dissolved Zirconium (Zr)	mg/L	0.0004	0.0001	8785527	<0.0001	0.0001	8785527			
. Zirconium (Zr)	mg/L				0.0008	0.0001	8784619			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J8805
Report Date: 2023/07/25

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

TEST SUMMARY

Bureau Veritas ID: WHR236
Sample ID: MWS-14-04
Matrix: Ground Water

Collected: 2023/06/30
Shipped:
Received: 2023/07/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8783204	N/A	2023/07/12	Brent Boudreau
Alkalinity	AT	8774336	N/A	2023/07/07	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8771520	N/A	2023/07/10	Automated Statchk
Chloride by Automated Colourimetry	KONE	8774367	N/A	2023/07/07	Massarat Jan
Conductivity	AT	8774334	N/A	2023/07/07	Kien Tran
Fluoride	ISE	8774337	2023/07/07	2023/07/07	Kien Tran
Hardness (calculated as CaCO3)		8771521	N/A	2023/07/13	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8774872	2023/07/07	2023/07/07	Japneet Gill
Mercury (low level)	CV/AA	8774868	2023/07/07	2023/07/07	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8796731	2023/07/18	2023/07/19	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8785527	N/A	2023/07/13	Daniel Teclu
Metals in Water by ICPMS (low level)	ICP1/MS	8784619	N/A	2023/07/12	Nan Raykha
Total Metals Analysis by ICP	ICP	8798373	2023/07/19	2023/07/20	Suban Kanapathippllai
Cyanide (Free)	SPEC	8785892	N/A	2023/07/11	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8785949	2023/07/11	2023/07/11	Ming Dong
Total Phosphorus Low Level Total	KONE	8785950	2023/07/11	2023/07/12	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8776472	N/A	2023/07/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8774327	N/A	2023/07/10	Chandra Nandlal
pH	AT	8774339	2023/07/07	2023/07/07	Kien Tran
Sulphate by Automated Turbidimetry	KONE	8774382	N/A	2023/07/07	Massarat Jan
Total Dissolved Solids	BAL	8778071	2023/07/10	2023/07/11	Shaneil Hall
Total Kjeldahl Nitrogen in Water	SKAL	8776394	2023/07/07	2023/07/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8778143	2023/07/11	2023/07/11	Shaneil Hall
Turbidity	AT	8774855	N/A	2023/07/08	Gurparteek KAUR

Bureau Veritas ID: WHR236 Dup
Sample ID: MWS-14-04
Matrix: Ground Water

Collected: 2023/06/30
Shipped:
Received: 2023/07/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Mercury (low level)	CV/AA	8774872	2023/07/07	2023/07/07	Japneet Gill
Metals in Water by ICPMS (low level)	ICP1/MS	8784619	N/A	2023/07/12	Nan Raykha
Low Level Total Suspended Solids	BAL	8778143	2023/07/11	2023/07/11	Shaneil Hall
Turbidity	AT	8774855	N/A	2023/07/08	Gurparteek KAUR

Bureau Veritas ID: WHR237
Sample ID: MWS-14-02-BR
Matrix: Ground Water

Collected: 2023/06/30
Shipped:
Received: 2023/07/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8783204	N/A	2023/07/12	Brent Boudreau
Alkalinity	AT	8774336	N/A	2023/07/07	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8771520	N/A	2023/07/10	Automated Statchk
Chloride by Automated Colourimetry	KONE	8774367	N/A	2023/07/07	Massarat Jan

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J8805
Report Date: 2023/07/25

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

TEST SUMMARY

Bureau Veritas ID: WHR237
Sample ID: MWS-14-02-BR
Matrix: Ground Water

Collected: 2023/06/30
Shipped:
Received: 2023/07/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Conductivity	AT	8774334	N/A	2023/07/07	Kien Tran
Fluoride	ISE	8774337	2023/07/07	2023/07/07	Kien Tran
Hardness (calculated as CaCO3)		8771521	N/A	2023/07/13	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8774872	2023/07/07	2023/07/07	Japneet Gill
Mercury (low level)	CV/AA	8774868	2023/07/07	2023/07/07	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8796731	2023/07/18	2023/07/19	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8785527	N/A	2023/07/13	Daniel Teclu
Metals in Water by ICPMS (low level)	ICP1/MS	8784619	N/A	2023/07/12	Nan Raykha
Total Metals Analysis by ICP	ICP	8798373	2023/07/19	2023/07/20	Suban Kanapathippllai
Cyanide (Free)	SPEC	8785892	N/A	2023/07/11	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8785949	2023/07/11	2023/07/11	Ming Dong
Total Phosphorus Low Level Total	KONE	8785950	2023/07/11	2023/07/12	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8778301	N/A	2023/07/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8774327	N/A	2023/07/10	Chandra Nandlal
pH	AT	8774339	2023/07/07	2023/07/07	Kien Tran
Sulphate by Automated Turbidimetry	KONE	8774382	N/A	2023/07/07	Massarat Jan
Total Dissolved Solids	BAL	8778071	2023/07/10	2023/07/11	Shaneil Hall
Total Kjeldahl Nitrogen in Water	SKAL	8776394	2023/07/07	2023/07/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8778143	2023/07/11	2023/07/11	Shaneil Hall
Turbidity	AT	8774855	N/A	2023/07/08	Gurparteek KAUR

Bureau Veritas ID: WHR237 Dup
Sample ID: MWS-14-02-BR
Matrix: Ground Water

Collected: 2023/06/30
Shipped:
Received: 2023/07/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	8774367	N/A	2023/07/07	Massarat Jan
Dissolved Metals by ICPMS (low level)	ICP1/MS	8785527	N/A	2023/07/13	Daniel Teclu
Sulphate by Automated Turbidimetry	KONE	8774382	N/A	2023/07/07	Massarat Jan

Bureau Veritas ID: WHR238
Sample ID: MWS-14-02-OB
Matrix: Ground Water

Collected: 2023/06/30
Shipped:
Received: 2023/07/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8783204	N/A	2023/07/12	Brent Boudreau
Alkalinity	AT	8774336	N/A	2023/07/07	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8771520	N/A	2023/07/10	Automated Statchk
Chloride by Automated Colourimetry	KONE	8774367	N/A	2023/07/07	Massarat Jan
Conductivity	AT	8774334	N/A	2023/07/07	Kien Tran
Fluoride	ISE	8774337	2023/07/07	2023/07/07	Kien Tran
Hardness (calculated as CaCO3)		8771521	N/A	2023/07/13	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8774872	2023/07/07	2023/07/07	Japneet Gill
Mercury (low level)	CV/AA	8774868	2023/07/07	2023/07/07	Japneet Gill

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J8805
Report Date: 2023/07/25

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

TEST SUMMARY

Bureau Veritas ID: WHR238
Sample ID: MWS-14-02-OB
Matrix: Ground Water

Collected: 2023/06/30
Shipped:
Received: 2023/07/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals Analysis by ICP	ICP	8796731	2023/07/18	2023/07/19	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8785527	N/A	2023/07/13	Daniel Teclu
Metals in Water by ICPMS (low level)	ICP1/MS	8784619	N/A	2023/07/12	Nan Raykha
Total Metals Analysis by ICP	ICP	8798373	2023/07/19	2023/07/20	Suban Kanapathippllai
Cyanide (Free)	SPEC	8785892	N/A	2023/07/11	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8785949	2023/07/11	2023/07/11	Ming Dong
Total Phosphorus Low Level Total	KONE	8785950	2023/07/11	2023/07/12	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8778301	N/A	2023/07/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8774327	N/A	2023/07/10	Chandra Nandlal
pH	AT	8774339	2023/07/07	2023/07/07	Kien Tran
Sulphate by Automated Turbidimetry	KONE	8774382	N/A	2023/07/07	Massarat Jan
Total Dissolved Solids	BAL	8778071	2023/07/10	2023/07/11	Shaneil Hall
Total Kjeldahl Nitrogen in Water	SKAL	8776394	2023/07/07	2023/07/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8778143	2023/07/11	2023/07/11	Shaneil Hall
Turbidity	AT	8774855	N/A	2023/07/08	Gurparteek KAUR

Bureau Veritas ID: WHR238 Dup
Sample ID: MWS-14-02-OB
Matrix: Ground Water

Collected: 2023/06/30
Shipped:
Received: 2023/07/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8774336	N/A	2023/07/07	Kien Tran
Conductivity	AT	8774334	N/A	2023/07/07	Kien Tran
Fluoride	ISE	8774337	2023/07/07	2023/07/07	Kien Tran
Dissolved Metals Analysis by ICP	ICP	8796731	2023/07/18	2023/07/19	Suban Kanapathippllai
Total Metals Analysis by ICP	ICP	8798373	2023/07/19	2023/07/20	Suban Kanapathippllai
pH	AT	8774339	2023/07/07	2023/07/07	Kien Tran
Total Dissolved Solids	BAL	8778071	2023/07/10	2023/07/11	Shaneil Hall

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	6.3°C

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3J8805
Report Date: 2023/07/25

QUALITY ASSURANCE REPORT

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8774327	Nitrate (N)	2023/07/07	NC	80 - 120	94	80 - 120	<0.10	mg/L	0.52	20		
8774327	Nitrite (N)	2023/07/07	104	80 - 120	104	80 - 120	<0.010	mg/L	NC	20		
8774334	Conductivity	2023/07/07			99	85 - 115	<0.001	mS/cm	2.8	10		
8774336	Alkalinity (Total as CaCO3)	2023/07/07			95	85 - 115	<1.0	mg/L	0.42	20		
8774337	Fluoride (F-)	2023/07/07	99	80 - 120	100	80 - 120	<0.10	mg/L	0.49	20		
8774339	pH	2023/07/07			102	98 - 103			0.024	N/A		
8774367	Dissolved Chloride (Cl-)	2023/07/07	90	80 - 120	97	80 - 120	<1.0	mg/L	NC	20		
8774382	Dissolved Sulphate (SO4)	2023/07/07	88	75 - 125	93	80 - 120	<1.0	mg/L	4.0	20		
8774855	Turbidity	2023/07/08			99	80 - 120	<0.1	NTU	3.0	20		
8774868	Mercury (Hg)	2023/07/07	100	75 - 125	102	80 - 120	<0.01	ug/L	NC	20		
8774872	Dissolved Mercury (Hg)	2023/07/07	102	75 - 125	102	80 - 120	<0.01	ug/L	NC	20		
8776394	Total Kjeldahl Nitrogen (TKN)	2023/07/10	NC	80 - 120	104	80 - 120	<0.10	mg/L	20	20	100	80 - 120
8776472	Total Ammonia-N	2023/07/10	102	75 - 125	100	80 - 120	<0.050	mg/L	NC	20		
8778071	Total Dissolved Solids	2023/07/11			100	90 - 110	<10	mg/L	3.5	20		
8778143	Total Suspended Solids	2023/07/11			99	85 - 115	<1	mg/L	12	20		
8778301	Total Ammonia-N	2023/07/10	103	75 - 125	101	80 - 120	<0.050	mg/L	14	20		
8783204	Acidity	2023/07/12	68 (1)	80 - 120	104	80 - 120	<5.0	mg/L	NC	25		
8784619	. Aluminum (Al)	2023/07/12	105	80 - 120	102	80 - 120	<0.0005	mg/L	5.9	20		
8784619	. Antimony (Sb)	2023/07/12	118	80 - 120	108	80 - 120	<0.0001	mg/L	9.2	20		
8784619	. Arsenic (As)	2023/07/12	109	80 - 120	99	80 - 120	<0.0001	mg/L	7.0	20		
8784619	. Barium (Ba)	2023/07/12	NC	80 - 120	102	80 - 120	<0.0002	mg/L	1.7	20		
8784619	. Beryllium (Be)	2023/07/12	101	80 - 120	101	80 - 120	<0.00005	mg/L	NC	20		
8784619	. Bismuth (Bi)	2023/07/12	89	80 - 120	97	80 - 120	<0.0001	mg/L	NC	20		
8784619	. Boron (B)	2023/07/12	98	80 - 120	99	80 - 120	<0.001	mg/L	2.4	20		
8784619	. Cadmium (Cd)	2023/07/12	109	80 - 120	101	80 - 120	<0.000005	mg/L	NC	20		
8784619	. Calcium (Ca)	2023/07/12	NC	80 - 120	102	80 - 120	<0.02	mg/L	1.2	20		
8784619	. Cesium (Cs)	2023/07/12	98	80 - 120	103	80 - 120	<0.00002	mg/L	NC	N/A		
8784619	. Chromium (Cr)	2023/07/12	97	80 - 120	98	80 - 120	<0.0005	mg/L	NC	20		
8784619	. Cobalt (Co)	2023/07/12	100	80 - 120	97	80 - 120	<0.00005	mg/L	3.5	20		
8784619	. Copper (Cu)	2023/07/12	104	80 - 120	104	80 - 120	<0.0001	mg/L	1.0	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8784619	. Iron (Fe)	2023/07/12	101	80 - 120	99	80 - 120	<0.005	mg/L	3.0	20		
8784619	. Lead (Pb)	2023/07/12	98	80 - 120	99	80 - 120	<0.00005	mg/L	NC	20		
8784619	. Lithium (Li)	2023/07/12	104	80 - 120	104	80 - 120	<0.0005	mg/L	3.8	20		
8784619	. Magnesium (Mg)	2023/07/12	NC	80 - 120	97	80 - 120	<0.005	mg/L	1.5	20		
8784619	. Manganese (Mn)	2023/07/12	97	80 - 120	98	80 - 120	<0.0002	mg/L	0.36	20		
8784619	. Molybdenum (Mo)	2023/07/12	119	80 - 120	107	80 - 120	<0.00005	mg/L	0.26	20		
8784619	. Nickel (Ni)	2023/07/12	91	80 - 120	92	80 - 120	<0.0001	mg/L	3.6	20		
8784619	. Phosphorus (P)	2023/07/12	113	80 - 120	104	80 - 120	<0.005	mg/L	NC	20		
8784619	. Potassium (K)	2023/07/12	107	80 - 120	102	80 - 120	<0.02	mg/L	1.9	20		
8784619	. Rubidium (Rb)	2023/07/12	104	80 - 120	102	80 - 120	<0.00002	mg/L	3.2	N/A		
8784619	. Selenium (Se)	2023/07/12	111	80 - 120	98	80 - 120	<0.00005	mg/L	NC	20		
8784619	. Silicon (Si)	2023/07/12	NC	80 - 120	102	80 - 120	<0.005	mg/L	1.9	20		
8784619	. Silver (Ag)	2023/07/12	103	80 - 120	103	80 - 120	<0.00001	mg/L	NC	20		
8784619	. Sodium (Na)	2023/07/12	NC	80 - 120	98	80 - 120	<0.01	mg/L	3.0	20		
8784619	. Strontium (Sr)	2023/07/12	NC	80 - 120	100	80 - 120	<0.0001	mg/L	0.29	20		
8784619	. Tellurium (Te)	2023/07/12	113	80 - 120	104	80 - 120	<0.0001	mg/L	NC	20		
8784619	. Thallium (Tl)	2023/07/12	102	80 - 120	100	80 - 120	<0.000005	mg/L	NC	20		
8784619	. Tin (Sn)	2023/07/12	114	80 - 120	105	80 - 120	<0.0001	mg/L	5.7	20		
8784619	. Titanium (Ti)	2023/07/12	106	80 - 120	101	80 - 120	<0.0005	mg/L	14	20		
8784619	. Tungsten (W)	2023/07/12	108	80 - 120	99	80 - 120	<0.0001	mg/L	2.5	20		
8784619	. Uranium (U)	2023/07/12	104	80 - 120	97	80 - 120	<0.00001	mg/L	0.31	20		
8784619	. Vanadium (V)	2023/07/12	101	80 - 120	96	80 - 120	<0.00005	mg/L	NC	20		
8784619	. Zinc (Zn)	2023/07/12	98	80 - 120	98	80 - 120	<0.0005	mg/L	0.99	20		
8784619	. Zirconium (Zr)	2023/07/12	115	80 - 120	104	80 - 120	<0.0001	mg/L	2.5	20		
8785527	Dissolved Aluminum (Al)	2023/07/13	99	80 - 120	107	80 - 120	<0.0005	mg/L	5.7	20		
8785527	Dissolved Antimony (Sb)	2023/07/13	103	80 - 120	106	80 - 120	<0.0001	mg/L	NC	20		
8785527	Dissolved Arsenic (As)	2023/07/13	99	80 - 120	100	80 - 120	<0.0001	mg/L	0.15	20		
8785527	Dissolved Barium (Ba)	2023/07/13	98	80 - 120	98	80 - 120	<0.0002	mg/L	2.9	20		
8785527	Dissolved Beryllium (Be)	2023/07/13	100	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8785527	Dissolved Bismuth (Bi)	2023/07/13	86	80 - 120	98	80 - 120	<0.0001	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8785527	Dissolved Boron (B)	2023/07/13	93	80 - 120	99	80 - 120	<0.001	mg/L	2.2	20		
8785527	Dissolved Cadmium (Cd)	2023/07/13	98	80 - 120	102	80 - 120	<0.00001	mg/L	NC	20		
8785527	Dissolved Calcium (Ca)	2023/07/13	NC	80 - 120	105	80 - 120	<0.02	mg/L	3.9	20		
8785527	Dissolved Cesium (Cs)	2023/07/13	91	80 - 120	97	80 - 120	<0.00002	mg/L	NC	N/A		
8785527	Dissolved Chromium (Cr)	2023/07/13	97	80 - 120	96	80 - 120	<0.0005	mg/L	NC	20		
8785527	Dissolved Cobalt (Co)	2023/07/13	93	80 - 120	95	80 - 120	<0.00005	mg/L	6.1	20		
8785527	Dissolved Copper (Cu)	2023/07/13	96	80 - 120	98	80 - 120	<0.0001	mg/L	NC	20		
8785527	Dissolved Iron (Fe)	2023/07/13	94	80 - 120	99	80 - 120	<0.005	mg/L	1.8	20		
8785527	Dissolved Lead (Pb)	2023/07/13	95	80 - 120	100	80 - 120	<0.00005	mg/L	NC	20		
8785527	Dissolved Lithium (Li)	2023/07/13	113	80 - 120	106	80 - 120	<0.0005	mg/L	0.72	20		
8785527	Dissolved Magnesium (Mg)	2023/07/13	NC	80 - 120	96	80 - 120	<0.005	mg/L	2.8	20		
8785527	Dissolved Manganese (Mn)	2023/07/13	NC	80 - 120	97	80 - 120	<0.0002	mg/L	3.4	20		
8785527	Dissolved Molybdenum (Mo)	2023/07/13	106	80 - 120	102	80 - 120	<0.00005	mg/L	2.2	20		
8785527	Dissolved Nickel (Ni)	2023/07/13	90	80 - 120	95	80 - 120	<0.0001	mg/L	0.94	20		
8785527	Dissolved Phosphorus (P)	2023/07/13	59 (2)	80 - 120	110	80 - 120	<0.005	mg/L	2.3	20		
8785527	Dissolved Potassium (K)	2023/07/13	100	80 - 120	103	80 - 120	<0.02	mg/L	3.4	20		
8785527	Dissolved Rubidium (Rb)	2023/07/13	99	80 - 120	98	80 - 120	<0.00002	mg/L	NC	N/A		
8785527	Dissolved Selenium (Se)	2023/07/13	100	80 - 120	100	80 - 120	<0.0002	mg/L	NC	20		
8785527	Dissolved Silicon (Si)	2023/07/13	NC	80 - 120	111	80 - 120	<0.005	mg/L	4.4	20		
8785527	Dissolved Silver (Ag)	2023/07/13	94	80 - 120	101	80 - 120	<0.00001	mg/L	NC	20		
8785527	Dissolved Sodium (Na)	2023/07/13	NC	80 - 120	101	80 - 120	<0.01	mg/L	0.58	20		
8785527	Dissolved Strontium (Sr)	2023/07/13	NC	80 - 120	96	80 - 120	<0.0001	mg/L	0.52	20		
8785527	Dissolved Tellurium (Te)	2023/07/13	101	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		
8785527	Dissolved Thallium (Tl)	2023/07/13	97	80 - 120	102	80 - 120	<0.000005	mg/L	NC	20		
8785527	Dissolved Tin (Sn)	2023/07/13	103	80 - 120	104	80 - 120	<0.0001	mg/L	NC	20		
8785527	Dissolved Titanium (Ti)	2023/07/13	103	80 - 120	108	80 - 120	<0.0005	mg/L	4.5	20		
8785527	Dissolved Tungsten (W)	2023/07/13	99	80 - 120	101	80 - 120	<0.0001	mg/L	0.16	20		
8785527	Dissolved Uranium (U)	2023/07/13	101	80 - 120	103	80 - 120	<0.00001	mg/L	2.0	20		
8785527	Dissolved Vanadium (V)	2023/07/13	91	80 - 120	93	80 - 120	<0.00005	mg/L	0	20		
8785527	Dissolved Zinc (Zn)	2023/07/13	93	80 - 120	96	80 - 120	<0.0005	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8785527	Dissolved Zirconium (Zr)	2023/07/13	100	80 - 120	101	80 - 120	<0.0001	mg/L	5.1	20		
8785892	Free Cyanide (CN)	2023/07/11	89	80 - 120	91	80 - 120	<2.0	ug/L				
8785949	Strong Acid Dissoc. Cyanide (CN)	2023/07/11	96	80 - 120	99	80 - 120	<0.00050	mg/L				
8785950	Total Phosphorus (P)	2023/07/12	116	80 - 120	104	80 - 120	<0.0010	mg/L			90	80 - 120
8796731	Dissolved Sulphur (S)	2023/07/19	NC	80 - 120	101	80 - 120	<0.5	mg/L	0.25	25		
8798373	Total Sulphur (S)	2023/07/20	96	80 - 120	97	80 - 120	<0.5	mg/L	1.7	25		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike exceeds acceptance limits, probable matrix interference.

(2) Metal Analysis:Matrix Spike exceeds acceptance limits, probable matrix interference

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Cristina Carriere, Senior Scientific Specialist

<original signed by>

Mike MacGillivray, Scientific Specialist (Inorganics)

<original signed by>

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 728784

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/23
Report #: R7730521
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3K1437
Received: 2023/07/07, 10:49

Sample Matrix: Water
Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	9	N/A	2023/07/14	ATL SOP-00205	SM 24 2310B m
Alkalinity	9	N/A	2023/07/13	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	9	N/A	2023/07/14	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	9	N/A	2023/07/12	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	9	N/A	2023/07/13	CAM SOP-00414	SM 23 2510 m
Dissolved Organic Carbon (DOC) (3)	1	N/A	2023/07/12	CAM SOP-00446	SM 23 5310 B m
Petroleum Hydro. CCME F1 & BTEX in Water	1	N/A	2023/07/12	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (4)	1	2023/07/12	2023/07/13	CAM SOP-00316	CCME PHC-CWS m
Fluoride	9	2023/07/11	2023/07/13	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	5	N/A	2023/07/13	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO3)	4	N/A	2023/07/21	CAM SOP 00102/00408/00447	SM 2340 B
Dissolved Mercury (low level)	8	2023/07/13	2023/07/13	CAM SOP-00453	EPA 7470 m
Mercury (low level)	9	2023/07/13	2023/07/13	CAM SOP-00453	EPA 7470 m
Lab Filtered Metals Analysis by ICP	1	2023/07/12	2023/07/14	CAM SOP-00408	EPA 6010D m
Dissolved Metals Analysis by ICP	8	2023/07/12	2023/07/14	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	5	N/A	2023/07/13	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS (low level)	4	N/A	2023/07/21	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	9	N/A	2023/07/21	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	9	2023/07/13	2023/07/13	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	9	N/A	2023/07/18	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	9	2023/07/14	2023/07/14	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	7	2023/07/14	2023/07/17	AB SOP-00024	SM 24 4500-P A,B,F m
Total Phosphorus Low Level Total (2)	2	2023/07/14	2023/07/18	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	9	N/A	2023/07/13	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (5)	9	N/A	2023/07/14	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	9	2023/07/11	2023/07/13	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (6)	8	N/A	2023/07/08		Field pH Meter
Sulphate by Automated Turbidimetry	9	N/A	2023/07/12	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	9	2023/07/11	2023/07/12	CAM SOP-00428	SM 23 2540C m

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 728784

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/23
Report #: R7730521
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3K1437
Received: 2023/07/07, 10:49

Sample Matrix: Water
Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Field Temperature (6)	8	N/A	2023/07/08		Field Thermometer
Total Kjeldahl Nitrogen in Water	9	2023/07/12	2023/07/13	CAM SOP-00938	OMOE E3516 m
Low Level Total Suspended Solids	9	2023/07/11	2023/07/12	CAM SOP-00428	SM 23 2540D m
Turbidity	9	N/A	2023/07/12	CAM SOP-00417	SM 23 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
(4) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following “Alberta Environment’s Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003”. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
(5) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(6) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3K1437
Report Date: 2023/07/23

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: TP

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WIE411		WIE412		WIE413		
Sampling Date		2023/07/05 14:26		2023/07/05 14:04		2023/07/05 11:18		
COC Number		728784		728784		728784		
	UNITS	MWS-14-03-OB1	RDL	MWS-14-03-OB2	RDL	G6-OB-14	RDL	QC Batch
Calculated Parameters								
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	160	1.0	240	1.0	130	1.0	8781399
Carb. Alkalinity (calc. as CaCO3)	mg/L	11	1.0	2.5	1.0	1.1	1.0	8781399
Hardness (CaCO3)	mg/L	110	1.0	160	1.0	130	1.0	8781400
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	<1.0	1.0	<1.0	1.0	8781399
Field Measurements								
Field Temperature	Celsius	6.9	N/A	9.0	N/A	10.6	N/A	ONSITE
Field Measured pH	pH	8.05		7.57		7.72		ONSITE
Inorganics								
Acidity	mg/L	<5.0	5.0	8.6	5.0	<5.0	5.0	8788760
Total Ammonia-N	mg/L	0.23	0.050	0.24	0.050	<0.050	0.050	8786171
Conductivity	mS/cm	0.305	0.001	0.451	0.001	0.252	0.001	8782916
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	<2.0 (1)	2.0	<2.0 (1)	2.0	8797630
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	<0.00050	0.00050	<0.00050	0.00050	8807094
Total Dissolved Solids	mg/L	175	10	260	10	130	10	8782145
Fluoride (F-)	mg/L	0.59	0.10	0.43	0.10	<0.10	0.10	8782918
Total Kjeldahl Nitrogen (TKN)	mg/L	0.44	0.10	0.32	0.10	0.13	0.10	8783695
pH	pH	8.84		8.04		7.95		8782919
Total Phosphorus (P)	mg/L	0.056	0.0010	0.51	0.010	0.10	0.0010	8807093
Total Suspended Solids	mg/L	44	1	850	5	330	1	8783329
Dissolved Sulphate (SO4)	mg/L	<1.0	1.0	1.4	1.0	1.9	1.0	8782836
Turbidity	NTU	2.9	0.1	2.0	0.1	3.3	0.1	8782904
Alkalinity (Total as CaCO3)	mg/L	170	1.0	240	1.0	130	1.0	8782907
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	<1.0	1.0	<1.0	1.0	8782810
Nitrite (N)	mg/L	<0.010	0.010	<0.010	0.010	<0.010	0.010	8782804
Nitrate (N)	mg/L	<0.10	0.10	0.24	0.10	<0.10	0.10	8782804
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	0.24	0.10	<0.10	0.10	8782804

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3K1437
Report Date: 2023/07/23

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: TP

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WIE414		WIE415	WIE416		
Sampling Date		2023/07/05 11:42		2023/07/05 13:35	2023/07/05 14:00		
COC Number		728784		728784	728784		
	UNITS	G6-BR-14	RDL	MW20-OB-21	MW20-BR-21	RDL	QC Batch
Calculated Parameters							
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	290	1.0	180	1.3	1.0	8781399
Carb. Alkalinity (calc. as CaCO3)	mg/L	3.0	1.0	2.1	210	1.0	8781399
Hardness (CaCO3)	mg/L	260	1.0	220	760	1.0	8781400
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	<1.0	870	1.0	8781399
Field Measurements							
Field Temperature	Celsius	9.7	N/A	15.7	15.8	N/A	ONSITE
Field Measured pH	pH	7.34		7.60	11.96		ONSITE
Inorganics							
Acidity	mg/L	10	5.0	<5.0	<5.0	5.0	8788760
Total Ammonia-N	mg/L	0.43	0.050	<0.050	1.8	0.050	8786171
Conductivity	mS/cm	0.522	0.001	0.415	4.69	0.001	8782916
Free Cyanide (CN)	ug/L	2.1 (1)	2.0	<2.0 (1)	2.1 (1)	2.0	8797630
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050 (2)	0.00050	<0.00050	<0.00050 (2)	0.00050	8807094
Total Dissolved Solids	mg/L	280	10	240	1040	10	8782145
Fluoride (F-)	mg/L	0.33	0.10	0.11	0.21	0.10	8782918
Total Kjeldahl Nitrogen (TKN)	mg/L	0.54	0.10	<0.10	2.2	0.10	8783695
pH	pH	8.04		8.09	12.2		8782919
Total Phosphorus (P)	mg/L	0.54	0.010	0.047	0.0077	0.0010	8807093
Total Suspended Solids	mg/L	4700	5	180	20	1	8783329
Dissolved Sulphate (SO4)	mg/L	<1.0	1.0	26	4.5	1.0	8782836
Turbidity	NTU	2.0	0.1	3.5	0.3	0.1	8782904
Alkalinity (Total as CaCO3)	mg/L	290	1.0	190	1100	1.0	8782907
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	<1.0	2.6	1.0	8782810
Nitrite (N)	mg/L	0.015	0.010	<0.010	<0.010	0.010	8782804
Nitrate (N)	mg/L	<0.10	0.10	1.36	<0.10	0.10	8782804

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3K1437
Report Date: 2023/07/23

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: TP

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WIE414		WIE415	WIE416		
Sampling Date		2023/07/05 11:42		2023/07/05 13:35	2023/07/05 14:00		
COC Number		728784		728784	728784		
	UNITS	**G6-BR-14**	**RDL**	**MW20-OB-21**	**MW20-BR-21**	**RDL**	**QC Batch**
Nitrate + Nitrite (N)	mg/L	0.11	0.10	1.36	<0.10	0.10	8782804

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3K1437
Report Date: 2023/07/23

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: TP

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WIE417			WIE417			WIE418		
Sampling Date		2023/07/05 14:53			2023/07/05 14:53			2023/07/05 15:22		
COC Number		728784			728784			728784		
	UNITS	MWS-14-07-OB	RDL	QC Batch	MWS-14-07-OB Lab-Dup	RDL	QC Batch	MWS-14-07-BR	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	280	1.0	8781399				370	1.0	8781399
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.1	1.0	8781399				2.5	1.0	8781399
Hardness (CaCO3)	mg/L	280	1.0	8781400				260	1.0	8781400
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8781399				<1.0	1.0	8781399
Field Measurements										
Field Temperature	Celsius	11.8	N/A	ONSITE				11.0	N/A	ONSITE
Field Measured pH	pH	7.18		ONSITE				7.41		ONSITE
Inorganics										
Acidity	mg/L	22	5.0	8788760	23	5.0	8788760	16	5.0	8788760
Total Ammonia-N	mg/L	<0.050	0.050	8786171				0.089	0.050	8786171
Conductivity	mS/cm	0.517	0.001	8782916				0.686	0.001	8782916
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	8797630				2.1 (1)	2.0	8797630
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8807094				<0.00050 (2)	0.00050	8807094
Total Dissolved Solids	mg/L	290	10	8782145				350	10	8782145
Fluoride (F-)	mg/L	<0.10	0.10	8782918				0.10	0.10	8782918
Total Kjeldahl Nitrogen (TKN)	mg/L	<0.10	0.10	8783695				0.20	0.10	8783695
Dissolved Organic Carbon	mg/L	2.5	0.40	8784250						
pH	pH	7.92		8782919				7.86		8782919
Total Phosphorus (P)	mg/L	0.0028	0.0010	8807093				0.0024	0.0010	8807093
Total Suspended Solids	mg/L	56	1	8783329				22	1	8783329
Dissolved Sulphate (SO4)	mg/L	4.7	1.0	8782836				16	1.0	8782836
Turbidity	NTU	0.4	0.1	8782904				3.1	0.1	8782904
Alkalinity (Total as CaCO3)	mg/L	280	1.0	8782907				370	1.0	8782907
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	8782810				<1.0	1.0	8782810
Nitrite (N)	mg/L	<0.010	0.010	8782804				<0.010	0.010	8782804

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com
Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3K1437
Report Date: 2023/07/23

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: TP

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WIE417			WIE417			WIE418		
Sampling Date		2023/07/05 14:53			2023/07/05 14:53			2023/07/05 15:22		
COC Number		728784			728784			728784		
	UNITS	**MWS-14-07-OB**	**RDL**	**QC Batch**	**MWS-14-07-OB Lab-Dup**	**RDL**	**QC Batch**	**MWS-14-07-BR**	**RDL**	**QC Batch**
Nitrate (N)	mg/L	<0.10	0.10	8782804				<0.10	0.10	8782804
Nitrite + Nitrite (N)	mg/L	<0.10	0.10	8782804				<0.10	0.10	8782804

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WIE419			WIE419		
Sampling Date		2023/07/05 08:00			2023/07/05 08:00		
COC Number		728784			728784		
	UNITS	DUPLICATE 2	RDL	QC Batch	DUPLICATE 2 Lab-Dup	RDL	QC Batch
Calculated Parameters							
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	1.8	1.0	8781399			
Carb. Alkalinity (calc. as CaCO3)	mg/L	240	1.0	8781399			
Hardness (CaCO3)	mg/L	770	1.0	8781400			
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	740	1.0	8781399			
Inorganics							
Acidity	mg/L	<5.0	5.0	8788760			
Total Ammonia-N	mg/L	1.8	0.050	8786181	1.8	0.050	8786181
Conductivity	mS/cm	4.30	0.001	8782916			
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	8797630			
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8807094			
Total Dissolved Solids	mg/L	1080	10	8782145			
Fluoride (F-)	mg/L	0.25	0.10	8782918			
Total Kjeldahl Nitrogen (TKN)	mg/L	2.1	0.10	8783695			
pH	pH	12.2		8782919			
Total Phosphorus (P)	mg/L	0.0053	0.0010	8807093			
Total Suspended Solids	mg/L	18	1	8783329	19	1	8783329
Dissolved Sulphate (SO4)	mg/L	3.2	1.0	8782836			
Turbidity	NTU	0.3	0.1	8782904			
Alkalinity (Total as CaCO3)	mg/L	990	1.0	8782907			
Dissolved Chloride (Cl-)	mg/L	3.4	1.0	8782810			
Nitrite (N)	mg/L	<0.010	0.010	8782804			
Nitrate (N)	mg/L	<0.10	0.10	8782804			
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8782804			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WIE411			WIE411		
Sampling Date		2023/07/05 14:26			2023/07/05 14:26		
COC Number		728784			728784		
	UNITS	MWS-14-03-OB1	RDL	QC Batch	MWS-14-03-OB1 Lab-Dup	RDL	QC Batch
Metals							
Dissolved Aluminum (Al)	mg/L	0.0164	0.0005	8786351			
. Aluminum (Al)	mg/L	0.467	0.0005	8800616	0.429	0.0005	8800616
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8786351			
. Antimony (Sb)	mg/L	<0.0001	0.0001	8800616	<0.0001	0.0001	8800616
Dissolved Arsenic (As)	mg/L	0.0003	0.0001	8786351			
. Arsenic (As)	mg/L	0.0004	0.0001	8800616	0.0004	0.0001	8800616
Dissolved Barium (Ba)	mg/L	0.0236	0.0002	8786351			
. Barium (Ba)	mg/L	0.0302	0.0002	8800616	0.0301	0.0002	8800616
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8786351			
. Beryllium (Be)	mg/L	<0.00005	0.00005	8800616	<0.00005	0.00005	8800616
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8786351			
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8800616	<0.0001	0.0001	8800616
Dissolved Boron (B)	mg/L	0.029	0.001	8786351			
. Boron (B)	mg/L	0.028	0.001	8800616	0.028	0.001	8800616
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8786351			
. Cadmium (Cd)	mg/L	0.000009	0.000005	8800616	0.000007	0.000005	8800616
Dissolved Calcium (Ca)	mg/L	24.1	0.02	8786351			
. Calcium (Ca)	mg/L	28.3	0.02	8800616	28.8	0.02	8800616
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	8786351			
. Cesium (Cs)	mg/L	0.00004	0.00002	8800616	0.00004	0.00002	8800616
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8786351			
. Chromium (Cr)	mg/L	0.0010	0.0005	8800616	0.0010	0.0005	8800616
Dissolved Cobalt (Co)	mg/L	0.00018	0.00005	8786351			
. Cobalt (Co)	mg/L	0.00037	0.00005	8800616	0.00038	0.00005	8800616
Dissolved Copper (Cu)	mg/L	0.0002	0.0001	8786351			
. Copper (Cu)	mg/L	0.0014	0.0001	8800616	0.0014	0.0001	8800616
Dissolved Iron (Fe)	mg/L	0.445	0.005	8786351			
. Iron (Fe)	mg/L	1.53	0.005	8800616	1.60	0.005	8800616
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8786351			
. Lead (Pb)	mg/L	0.00051	0.00005	8800616	0.00061	0.00005	8800616

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WIE411			WIE411		
Sampling Date		2023/07/05 14:26			2023/07/05 14:26		
COC Number		728784			728784		
	UNITS	MWS-14-03-OB1	RDL	QC Batch	MWS-14-03-OB1 Lab-Dup	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0043	0.0005	8786351			
. Lithium (Li)	mg/L	0.0051	0.0005	8800616	0.0051	0.0005	8800616
Dissolved Magnesium (Mg)	mg/L	12.7	0.005	8786351			
. Magnesium (Mg)	mg/L	13.8	0.005	8800616	13.3	0.005	8800616
Dissolved Manganese (Mn)	mg/L	0.0317	0.0002	8786351			
. Manganese (Mn)	mg/L	0.0610	0.0002	8800616	0.0610	0.0002	8800616
Mercury (Hg)	ug/L	<0.01	0.01	8786920			
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8786899			
Dissolved Molybdenum (Mo)	mg/L	0.0289	0.00005	8786351			
. Molybdenum (Mo)	mg/L	0.0139	0.00005	8800616	0.0139	0.00005	8800616
Dissolved Nickel (Ni)	mg/L	0.0003	0.0001	8786351			
. Nickel (Ni)	mg/L	0.0009	0.0001	8800616	0.0009	0.0001	8800616
Dissolved Phosphorus (P)	mg/L	0.010	0.005	8786351			
. Phosphorus (P)	mg/L	0.064	0.005	8800616	0.064	0.005	8800616
Dissolved Potassium (K)	mg/L	1.84	0.02	8786351			
. Potassium (K)	mg/L	1.99	0.02	8800616	2.08	0.02	8800616
Dissolved Rubidium (Rb)	mg/L	0.00078	0.00002	8786351			
. Rubidium (Rb)	mg/L	0.00147	0.00002	8800616	0.00148	0.00002	8800616
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8786351			
. Selenium (Se)	mg/L	<0.00005	0.00005	8800616	<0.00005	0.00005	8800616
Dissolved Silicon (Si)	mg/L	2.26	0.005	8786351			
. Silicon (Si)	mg/L	3.49	0.005	8800616	3.60	0.005	8800616
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8786351			
. Silver (Ag)	mg/L	<0.00001	0.00001	8800616	<0.00001	0.00001	8800616
Dissolved Sodium (Na)	mg/L	27.7	0.01	8786351			
. Sodium (Na)	mg/L	26.5	0.01	8800616	27.5	0.01	8800616
Dissolved Strontium (Sr)	mg/L	0.160	0.0001	8786351			
. Strontium (Sr)	mg/L	0.170	0.0001	8800616	0.173	0.0001	8800616
Dissolved Sulphur (S)	mg/L	<0.5	0.5	8785425	<0.5	0.5	8785425
Total Sulphur (S)	mg/L	<0.5	0.5	8786325			
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8786351			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WIE411			WIE411		
Sampling Date		2023/07/05 14:26			2023/07/05 14:26		
COC Number		728784			728784		
	UNITS	MWS-14-03-OB1	RDL	QC Batch	MWS-14-03-OB1 Lab-Dup	RDL	QC Batch
. Tellurium (Te)	mg/L	<0.0001	0.0001	8800616	<0.0001	0.0001	8800616
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8786351			
. Thallium (Tl)	mg/L	0.000007	0.000005	8800616	0.000006	0.000005	8800616
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8786351			
. Thorium (Th)	mg/L	<0.0002	0.0002	8800616	0.0002	0.0002	8800616
Dissolved Tin (Sn)	mg/L	0.0001	0.0001	8786351			
. Tin (Sn)	mg/L	0.0001	0.0001	8800616	0.0001	0.0001	8800616
Dissolved Titanium (Ti)	mg/L	0.0008	0.0005	8786351			
. Titanium (Ti)	mg/L	0.0186	0.0005	8800616	0.0188	0.0005	8800616
Dissolved Tungsten (W)	mg/L	0.0078	0.0001	8786351			
. Tungsten (W)	mg/L	0.0013	0.0001	8800616	0.0012	0.0001	8800616
Dissolved Uranium (U)	mg/L	0.00005	0.00001	8786351			
. Uranium (U)	mg/L	0.00019	0.00001	8800616	0.00019	0.00001	8800616
Dissolved Vanadium (V)	mg/L	<0.00005	0.00005	8786351			
. Vanadium (V)	mg/L	0.00066	0.00005	8800616	0.00066	0.00005	8800616
Dissolved Zinc (Zn)	mg/L	<0.0005	0.0005	8786351			
. Zinc (Zn)	mg/L	0.0021	0.0005	8800616	0.0021	0.0005	8800616
Dissolved Zirconium (Zr)	mg/L	<0.0001	0.0001	8786351			
. Zirconium (Zr)	mg/L	0.0004	0.0001	8800616	0.0005	0.0001	8800616

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WIE412		WIE413		WIE414		
Sampling Date		2023/07/05 14:04		2023/07/05 11:18		2023/07/05 11:42		
COC Number		728784		728784		728784		
	UNITS	MWS-14-03-OB2	RDL	G6-OB-14	RDL	G6-BR-14	RDL	QC Batch
Metals								
Dissolved Aluminum (Al)	mg/L	0.0268	0.0005	0.0015	0.0005	0.0213	0.0005	8786351
. Aluminum (Al)	mg/L	2.47	0.0025	0.849	0.0005	1.98	0.0025	8800616
Dissolved Antimony (Sb)	mg/L	0.0004	0.0001	<0.0001	0.0001	<0.0001	0.0001	8786351
. Antimony (Sb)	mg/L	<0.0005	0.0005	0.0004	0.0001	<0.0005	0.0005	8800616
Dissolved Arsenic (As)	mg/L	0.0058	0.0001	0.0005	0.0001	0.0013	0.0001	8786351
. Arsenic (As)	mg/L	0.0076	0.0005	0.0013	0.0001	0.0021	0.0005	8800616
Dissolved Barium (Ba)	mg/L	0.0228	0.0002	0.0107	0.0002	0.0454	0.0002	8786351
. Barium (Ba)	mg/L	0.059	0.001	0.0250	0.0002	0.070	0.001	8800616
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	<0.00005	0.00005	<0.00005	0.00005	8786351
. Beryllium (Be)	mg/L	0.00028	0.00025	<0.00005	0.00005	<0.00025	0.00025	8800616
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	8786351
. Bismuth (Bi)	mg/L	<0.0005	0.0005	<0.0001	0.0001	<0.0005	0.0005	8800616
Dissolved Boron (B)	mg/L	0.017	0.001	0.006	0.001	0.027	0.001	8786351
. Boron (B)	mg/L	0.026	0.005	0.006	0.001	0.035	0.005	8800616
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	<0.00001	0.00001	<0.00001	0.00001	8786351
. Cadmium (Cd)	mg/L	0.000069	0.000025	0.000016	0.000005	0.000039	0.000025	8800616
Dissolved Calcium (Ca)	mg/L	40.0	0.02	36.7	0.02	68.4	0.1	8786351
. Calcium (Ca)	mg/L	160	0.1	51.5	0.1	125	0.1	8800616
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	<0.00002	0.00002	0.00045	0.00002	8786351
. Cesium (Cs)	mg/L	0.0003	0.0001	0.00009	0.00002	0.0019	0.0001	8800616
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	0.0006	0.0005	<0.0005	0.0005	8786351
. Chromium (Cr)	mg/L	0.0070	0.0025	0.0028	0.0005	0.0060	0.0025	8800616
Dissolved Cobalt (Co)	mg/L	0.00007	0.00005	<0.00005	0.00005	<0.00005	0.00005	8786351
. Cobalt (Co)	mg/L	0.00244	0.00025	0.00088	0.00005	0.00164	0.00025	8800616
Dissolved Copper (Cu)	mg/L	0.0008	0.0001	0.0006	0.0001	0.0003	0.0001	8786351
. Copper (Cu)	mg/L	0.0068	0.0005	0.0035	0.0001	0.0048	0.0005	8800616
Dissolved Iron (Fe)	mg/L	0.198	0.005	<0.005	0.005	0.852	0.005	8786351
. Iron (Fe)	mg/L	4.81	0.025	1.15	0.005	4.26	0.025	8800616
Dissolved Lead (Pb)	mg/L	0.00005	0.00005	<0.00005	0.00005	0.00006	0.00005	8786351
. Lead (Pb)	mg/L	0.00585	0.00025	0.0145	0.00005	0.00366	0.00025	8800616
Dissolved Lithium (Li)	mg/L	0.0073	0.0005	0.0013	0.0005	0.0072	0.0005	8786351

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WIE412		WIE413		WIE414		
Sampling Date		2023/07/05 14:04		2023/07/05 11:18		2023/07/05 11:42		
COC Number		728784		728784		728784		
	UNITS	MWS-14-03-OB2	RDL	G6-OB-14	RDL	G6-BR-14	RDL	QC Batch
. Lithium (Li)	mg/L	0.0138	0.0025	0.0024	0.0005	0.0111	0.0025	8800616
Dissolved Magnesium (Mg)	mg/L	15.1	0.005	8.84	0.005	22.7	0.005	8786351
. Magnesium (Mg)	mg/L	41.5	0.025	12.6	0.005	37.4	0.025	8800616
Dissolved Manganese (Mn)	mg/L	0.0264	0.0002	0.0073	0.0002	0.0470	0.0002	8786351
. Manganese (Mn)	mg/L	0.255	0.001	0.0626	0.0002	0.169	0.001	8800616
Mercury (Hg)	ug/L	<0.01	0.01	<0.01	0.01	<0.01	0.01	8786920
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	<0.01	0.01	<0.01	0.01	8786899
Dissolved Molybdenum (Mo)	mg/L	0.00263	0.00005	0.00022	0.00005	0.00099	0.00005	8786351
. Molybdenum (Mo)	mg/L	0.00138	0.00025	0.00011	0.00005	0.00077	0.00025	8800616
Dissolved Nickel (Ni)	mg/L	0.0011	0.0001	0.0002	0.0001	0.0001	0.0001	8786351
. Nickel (Ni)	mg/L	0.0069	0.0005	0.0022	0.0001	0.0050	0.0005	8800616
Dissolved Phosphorus (P)	mg/L	0.048	0.005	0.010	0.005	0.047	0.005	8786351
. Phosphorus (P)	mg/L	0.498	0.025	0.109	0.005	0.315	0.025	8800616
Dissolved Potassium (K)	mg/L	1.60	0.02	0.37	0.02	2.23	0.02	8786351
. Potassium (K)	mg/L	2.1	0.1	0.50	0.02	2.6	0.1	8800616
Dissolved Rubidium (Rb)	mg/L	0.00139	0.00002	0.00046	0.00002	0.00088	0.00002	8786351
. Rubidium (Rb)	mg/L	0.0058	0.0001	0.00173	0.00002	0.0042	0.0001	8800616
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	8786351
. Selenium (Se)	mg/L	<0.00025	0.00025	0.00009	0.00005	<0.00025	0.00025	8800616
Dissolved Silicon (Si)	mg/L	7.02	0.025	4.96	0.005	8.97	0.025	8786351
. Silicon (Si)	mg/L	12.7	0.025	5.36	0.025	11.4	0.025	8800616
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	<0.00001	0.00001	<0.00001	0.00001	8786351
. Silver (Ag)	mg/L	<0.00005	0.00005	<0.00001	0.00001	<0.00005	0.00005	8800616
Dissolved Sodium (Na)	mg/L	34.7	0.01	2.26	0.01	14.6	0.01	8786351
. Sodium (Na)	mg/L	34.6	0.05	1.91	0.01	15.1	0.05	8800616
Dissolved Strontium (Sr)	mg/L	0.163	0.0001	0.0352	0.0001	0.305	0.0001	8786351
. Strontium (Sr)	mg/L	0.247	0.0005	0.0450	0.0001	0.350	0.0005	8800616
Dissolved Sulphur (S)	mg/L	0.6	0.5	0.8	0.5	<0.5	0.5	8785425
Total Sulphur (S)	mg/L	1.0	0.5	0.7	0.5	<0.5	0.5	8786325
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	8786351
. Tellurium (Te)	mg/L	<0.0005	0.0005	<0.0001	0.0001	<0.0005	0.0005	8800616
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	<0.000005	0.000005	<0.000005	0.000005	8786351

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WIE412		WIE413		WIE414		
Sampling Date		2023/07/05 14:04		2023/07/05 11:18		2023/07/05 11:42		
COC Number		728784		728784		728784		
	UNITS	MWS-14-03-OB2	RDL	G6-OB-14	RDL	G6-BR-14	RDL	QC Batch
. Thallium (Tl)	mg/L	0.000060	0.000025	0.000021	0.000005	0.000025	0.000025	8800616
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	8786351
. Thorium (Th)	mg/L	0.002	0.001	<0.0002	0.0002	<0.001	0.001	8800616
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	8786351
. Tin (Sn)	mg/L	<0.0005	0.0005	<0.0001	0.0001	<0.0005	0.0005	8800616
Dissolved Titanium (Ti)	mg/L	0.0023	0.0005	<0.0005	0.0005	0.0018	0.0005	8786351
. Titanium (Ti)	mg/L	0.101	0.0025	0.0409	0.0005	0.0847	0.0025	8800616
Dissolved Tungsten (W)	mg/L	<0.0001	0.0001	<0.0001	0.0001	0.0009	0.0001	8786351
. Tungsten (W)	mg/L	<0.0005	0.0005	<0.0001	0.0001	0.0005	0.0005	8800616
Dissolved Uranium (U)	mg/L	0.00054	0.00001	0.00019	0.00001	0.00005	0.00001	8786351
. Uranium (U)	mg/L	0.00189	0.00005	0.00022	0.00001	0.00059	0.00005	8800616
Dissolved Vanadium (V)	mg/L	0.00024	0.00005	0.00083	0.00005	0.00009	0.00005	8786351
. Vanadium (V)	mg/L	0.00670	0.00025	0.00281	0.00005	0.00505	0.00025	8800616
Dissolved Zinc (Zn)	mg/L	0.0014	0.0005	0.0008	0.0005	0.0009	0.0005	8786351
. Zinc (Zn)	mg/L	0.0149	0.0025	0.0068	0.0005	0.0151	0.0025	8800616
Dissolved Zirconium (Zr)	mg/L	<0.0001	0.0001	<0.0001	0.0001	0.0005	0.0001	8786351
. Zirconium (Zr)	mg/L	0.0005	0.0005	0.0002	0.0001	0.0026	0.0005	8800616

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WIE415			WIE415			WIE416		
Sampling Date		2023/07/05 13:35			2023/07/05 13:35			2023/07/05 14:00		
COC Number		728784			728784			728784		
	UNITS	MW20-OB-21	RDL	QC Batch	MW20-OB-21 Lab-Dup	RDL	QC Batch	MW20-BR-21	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.202	0.0005	8800631				0.224	0.0025	8786351
. Aluminum (Al)	mg/L	0.183	0.0005	8800616				0.301	0.0025	8800616
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8800631				<0.0005	0.0005	8786351
. Antimony (Sb)	mg/L	<0.0001	0.0001	8800616				0.0006	0.0005	8800616
Dissolved Arsenic (As)	mg/L	0.0008	0.0001	8800631				0.0010	0.0005	8786351
. Arsenic (As)	mg/L	0.0004	0.0001	8800616				0.0012	0.0005	8800616
Dissolved Barium (Ba)	mg/L	0.0142	0.0002	8800631				0.722	0.001	8786351
. Barium (Ba)	mg/L	0.0116	0.0002	8800616				0.756	0.001	8800616
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8800631				<0.00025	0.00025	8786351
. Beryllium (Be)	mg/L	<0.00005	0.00005	8800616				<0.00025	0.00025	8800616
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8800631				<0.0005	0.0005	8786351
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8800616				<0.0005	0.0005	8800616
Dissolved Boron (B)	mg/L	0.007	0.001	8800631				<0.005	0.005	8786351
. Boron (B)	mg/L	0.006	0.001	8800616				<0.005	0.005	8800616
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8800631				<0.00005	0.00005	8786351
. Cadmium (Cd)	mg/L	0.000006	0.000005	8800616				<0.000025	0.000025	8800616
Dissolved Calcium (Ca)	mg/L	61.9	0.1	8800631				304	0.2	8786351
. Calcium (Ca)	mg/L	64.0	0.1	8800616				329	0.2	8800616
Dissolved Cesium (Cs)	mg/L	0.00003	0.00002	8800631				0.0002	0.0001	8786351
. Cesium (Cs)	mg/L	0.00002	0.00002	8800616				0.0002	0.0001	8800616
Dissolved Chromium (Cr)	mg/L	0.0017	0.0005	8800631				<0.0025	0.0025	8786351
. Chromium (Cr)	mg/L	0.0018	0.0005	8800616				<0.0025	0.0025	8800616
Dissolved Cobalt (Co)	mg/L	0.00023	0.00005	8800631				<0.00025	0.00025	8786351
. Cobalt (Co)	mg/L	0.00018	0.00005	8800616				<0.00025	0.00025	8800616
Dissolved Copper (Cu)	mg/L	0.0011	0.0001	8800631				0.0026	0.0005	8786351
. Copper (Cu)	mg/L	0.0007	0.0001	8800616				0.0027	0.0005	8800616
Dissolved Iron (Fe)	mg/L	0.321	0.005	8800631				<0.025	0.025	8786351
. Iron (Fe)	mg/L	0.335	0.005	8800616				0.157	0.025	8800616
Dissolved Lead (Pb)	mg/L	0.00026	0.00005	8800631				0.00089	0.00025	8786351
. Lead (Pb)	mg/L	0.00026	0.00005	8800616				0.00131	0.00025	8800616

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WIE415			WIE415			WIE416		
Sampling Date		2023/07/05 13:35			2023/07/05 13:35			2023/07/05 14:00		
COC Number		728784			728784			728784		
	UNITS	MW20-OB-21	RDL	QC Batch	MW20-OB-21 Lab-Dup	RDL	QC Batch	MW20-BR-21	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0017	0.0005	8800631				0.0194	0.0025	8786351
. Lithium (Li)	mg/L	0.0016	0.0005	8800616				0.0212	0.0025	8800616
Dissolved Magnesium (Mg)	mg/L	15.1	0.005	8800631				<0.025	0.025	8786351
. Magnesium (Mg)	mg/L	15.1	0.005	8800616				0.435	0.025	8800616
Dissolved Manganese (Mn)	mg/L	0.0125	0.0002	8800631				<0.001	0.001	8786351
. Manganese (Mn)	mg/L	0.0101	0.0002	8800616				0.004	0.001	8800616
Mercury (Hg)	ug/L	<0.01	0.01	8786920				<0.01	0.01	8786920
Dissolved Mercury (Hg)	ug/L							<0.01	0.01	8786899
Dissolved Molybdenum (Mo)	mg/L	0.00121	0.00005	8800631				0.0330	0.00025	8786351
. Molybdenum (Mo)	mg/L	0.00062	0.00005	8800616				0.0322	0.00025	8800616
Dissolved Nickel (Ni)	mg/L	0.0007	0.0001	8800631				0.0068	0.0005	8786351
. Nickel (Ni)	mg/L	0.0005	0.0001	8800616				0.0070	0.0005	8800616
Dissolved Phosphorus (P)	mg/L	0.024	0.005	8800631				<0.025	0.025	8786351
. Phosphorus (P)	mg/L	0.036	0.005	8800616				0.045	0.025	8800616
Dissolved Potassium (K)	mg/L	1.76	0.02	8800631				24.7	0.1	8786351
. Potassium (K)	mg/L	1.48	0.02	8800616				24.2	0.1	8800616
Dissolved Rubidium (Rb)	mg/L	0.00131	0.00002	8800631				0.0482	0.0001	8786351
. Rubidium (Rb)	mg/L	0.00105	0.00002	8800616				0.0473	0.0001	8800616
Dissolved Selenium (Se)	mg/L	0.0015	0.0002	8800631				<0.001	0.001	8786351
. Selenium (Se)	mg/L	0.00151	0.00005	8800616				0.00026	0.00025	8800616
Dissolved Silicon (Si)	mg/L	5.14	0.025	8800631				0.494	0.025	8786351
. Silicon (Si)	mg/L	5.04	0.025	8800616				0.891	0.025	8800616
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8800631				<0.00005	0.00005	8786351
. Silver (Ag)	mg/L	<0.00001	0.00001	8800616				<0.00005	0.00005	8800616
Dissolved Sodium (Na)	mg/L	7.90	0.01	8800631				134	0.05	8786351
. Sodium (Na)	mg/L	6.19	0.01	8800616				126	0.05	8800616
Dissolved Strontium (Sr)	mg/L	0.0692	0.0001	8800631				2.18	0.0005	8786351
. Strontium (Sr)	mg/L	0.0627	0.0001	8800616				2.15	0.0005	8800616
Dissolved Sulphur (S)	mg/L	10	0.5	8784483	10	0.5	8784483	1.9	0.5	8785425
Total Sulphur (S)	mg/L	10	0.5	8786325				2.0	0.5	8786325
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8800631				<0.0005	0.0005	8786351

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WIE415			WIE415			WIE416		
Sampling Date		2023/07/05 13:35			2023/07/05 13:35			2023/07/05 14:00		
COC Number		728784			728784			728784		
	UNITS	MW20-OB-21	RDL	QC Batch	MW20-OB-21 Lab-Dup	RDL	QC Batch	MW20-BR-21	RDL	QC Batch
. Tellurium (Te)	mg/L	<0.0001	0.0001	8800616				<0.0005	0.0005	8800616
Dissolved Thallium (Tl)	mg/L	0.000013	0.000005	8800631				<0.000025	0.000025	8786351
. Thallium (Tl)	mg/L	0.000010	0.000005	8800616				<0.000025	0.000025	8800616
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8800631				<0.001	0.001	8786351
. Thorium (Th)	mg/L	<0.0002	0.0002	8800616				<0.001	0.001	8800616
Dissolved Tin (Sn)	mg/L	0.0001	0.0001	8800631				<0.0005	0.0005	8786351
. Tin (Sn)	mg/L	<0.0001	0.0001	8800616				<0.0005	0.0005	8800616
Dissolved Titanium (Ti)	mg/L	0.0115	0.0005	8800631				<0.0025	0.0025	8786351
. Titanium (Ti)	mg/L	0.0134	0.0005	8800616				0.0053	0.0025	8800616
Dissolved Tungsten (W)	mg/L	0.0005	0.0001	8800631				0.0097	0.0005	8786351
. Tungsten (W)	mg/L	0.0003	0.0001	8800616				0.0083	0.0005	8800616
Dissolved Uranium (U)	mg/L	0.00045	0.00001	8800631				<0.00005	0.00005	8786351
. Uranium (U)	mg/L	0.00042	0.00001	8800616				<0.00005	0.00005	8800616
Dissolved Vanadium (V)	mg/L	0.00073	0.00005	8800631				0.00055	0.00025	8786351
. Vanadium (V)	mg/L	0.00077	0.00005	8800616				0.00072	0.00025	8800616
Dissolved Zinc (Zn)	mg/L	0.201	0.0005	8800631				1.03	0.0025	8786351
. Zinc (Zn)	mg/L	0.108	0.0005	8800616				3.28	0.0025	8800616
Dissolved Zirconium (Zr)	mg/L	0.0001	0.0001	8800631				<0.0005	0.0005	8786351
. Zirconium (Zr)	mg/L	0.0001	0.0001	8800616				<0.0005	0.0005	8800616

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WIE417	WIE418		WIE419		
Sampling Date		2023/07/05 14:53	2023/07/05 15:22		2023/07/05 08:00		
COC Number		728784	728784		728784		
	UNITS	MWS-14-07-OB	MWS-14-07-BR	RDL	DUPLICATE 2	RDL	QC Batch
Metals							
Dissolved Aluminum (Al)	mg/L	0.0043	0.0042	0.0005	0.222	0.0025	8800631
. Aluminum (Al)	mg/L	0.0316	0.0124	0.0005	0.258	0.0025	8800616
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	0.0001	<0.0005	0.0005	8800631
. Antimony (Sb)	mg/L	<0.0001	0.0002	0.0001	0.0005	0.0005	8800616
Dissolved Arsenic (As)	mg/L	0.0010	0.0011	0.0001	0.0010	0.0005	8800631
. Arsenic (As)	mg/L	0.0011	0.0014	0.0001	0.0011	0.0005	8800616
Dissolved Barium (Ba)	mg/L	0.0158	0.0181	0.0002	0.753	0.001	8800631
. Barium (Ba)	mg/L	0.0162	0.0193	0.0002	0.740	0.001	8800616
Dissolved Beryllium (Be)	mg/L	<0.00005	<0.00005	0.00005	<0.00025	0.00025	8800631
. Beryllium (Be)	mg/L	<0.00005	<0.00005	0.00005	<0.00025	0.00025	8800616
Dissolved Bismuth (Bi)	mg/L	<0.0001	<0.0001	0.0001	<0.0005	0.0005	8800631
. Bismuth (Bi)	mg/L	<0.0001	<0.0001	0.0001	<0.0005	0.0005	8800616
Dissolved Boron (B)	mg/L	0.004	0.016	0.001	<0.005	0.005	8800631
. Boron (B)	mg/L	0.004	0.019	0.001	<0.005	0.005	8800616
Dissolved Cadmium (Cd)	mg/L	<0.00001	<0.00001	0.00001	<0.00005	0.00005	8800631
. Cadmium (Cd)	mg/L	0.000008	0.000008	0.000005	<0.000025	0.000025	8800616
Dissolved Calcium (Ca)	mg/L	83.9	78.3	0.1	307	0.2	8800631
. Calcium (Ca)	mg/L	85.6	81.8	0.1	305	0.2	8800616
Dissolved Cesium (Cs)	mg/L	0.00005	0.00008	0.00002	0.0002	0.0001	8800631
. Cesium (Cs)	mg/L	0.00006	0.00010	0.00002	0.0002	0.0001	8800616
Dissolved Chromium (Cr)	mg/L	<0.0005	<0.0005	0.0005	<0.0025	0.0025	8800631
. Chromium (Cr)	mg/L	<0.0005	<0.0005	0.0005	<0.0025	0.0025	8800616
Dissolved Cobalt (Co)	mg/L	0.00006	0.00049	0.00005	<0.00025	0.00025	8800631
. Cobalt (Co)	mg/L	0.00017	0.00051	0.00005	<0.00025	0.00025	8800616
Dissolved Copper (Cu)	mg/L	0.0024	0.0011	0.0001	0.0039	0.0005	8800631
. Copper (Cu)	mg/L	0.0024	0.0027	0.0001	0.0028	0.0005	8800616
Dissolved Iron (Fe)	mg/L	0.011	0.281	0.005	<0.025	0.025	8800631
. Iron (Fe)	mg/L	0.058	0.562	0.005	0.082	0.025	8800616
Dissolved Lead (Pb)	mg/L	<0.00005	0.00008	0.00005	0.00090	0.00025	8800631
. Lead (Pb)	mg/L	<0.00005	0.00011	0.00005	0.00126	0.00025	8800616
Dissolved Lithium (Li)	mg/L	0.0016	0.0021	0.0005	0.0211	0.0025	8800631

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WIE417	WIE418		WIE419		
Sampling Date		2023/07/05 14:53	2023/07/05 15:22		2023/07/05 08:00		
COC Number		728784	728784		728784		
	UNITS	MWS-14-07-OB	MWS-14-07-BR	RDL	DUPLICATE 2	RDL	QC Batch
. Lithium (Li)	mg/L	0.0016	0.0024	0.0005	0.0217	0.0025	8800616
Dissolved Magnesium (Mg)	mg/L	17.5	16.1	0.005	<0.025	0.025	8800631
. Magnesium (Mg)	mg/L	18.2	17.0	0.005	0.131	0.025	8800616
Dissolved Manganese (Mn)	mg/L	0.0038	0.0922	0.0002	<0.001	0.001	8800631
. Manganese (Mn)	mg/L	0.0103	0.104	0.0002	0.002	0.001	8800616
Mercury (Hg)	ug/L	<0.01	<0.01	0.01	<0.01	0.01	8786920
Dissolved Mercury (Hg)	ug/L	<0.01	<0.01	0.01	<0.01	0.01	8786899
Dissolved Molybdenum (Mo)	mg/L	0.00036	0.00215	0.00005	0.0327	0.00025	8800631
. Molybdenum (Mo)	mg/L	0.00035	0.00239	0.00005	0.0325	0.00025	8800616
Dissolved Nickel (Ni)	mg/L	0.0019	0.0027	0.0001	0.0066	0.0005	8800631
. Nickel (Ni)	mg/L	0.0022	0.0028	0.0001	0.0065	0.0005	8800616
Dissolved Phosphorus (P)	mg/L	<0.005	<0.005	0.005	0.035	0.025	8800631
. Phosphorus (P)	mg/L	<0.005	0.006	0.005	0.038	0.025	8800616
Dissolved Potassium (K)	mg/L	1.10	1.52	0.02	24.7	0.1	8800631
. Potassium (K)	mg/L	1.13	1.56	0.02	23.6	0.1	8800616
Dissolved Rubidium (Rb)	mg/L	0.00267	0.00283	0.00002	0.0479	0.0001	8800631
. Rubidium (Rb)	mg/L	0.00277	0.00295	0.00002	0.0463	0.0001	8800616
Dissolved Selenium (Se)	mg/L	<0.0002	<0.0002	0.0002	<0.001	0.001	8800631
. Selenium (Se)	mg/L	0.00011	0.00009	0.00005	<0.00025	0.00025	8800616
Dissolved Silicon (Si)	mg/L	4.73	4.99	0.025	0.513	0.025	8800631
. Silicon (Si)	mg/L	4.81	5.32	0.025	0.801	0.025	8800616
Dissolved Silver (Ag)	mg/L	<0.00001	<0.00001	0.00001	<0.00005	0.00005	8800631
. Silver (Ag)	mg/L	<0.00001	<0.00001	0.00001	<0.00005	0.00005	8800616
Dissolved Sodium (Na)	mg/L	2.05	30.3	0.01	128	0.05	8800631
. Sodium (Na)	mg/L	2.14	34.2	0.01	124	0.05	8800616
Dissolved Strontium (Sr)	mg/L	0.0743	0.0888	0.0001	2.26	0.0005	8800631
. Strontium (Sr)	mg/L	0.0727	0.101	0.0001	2.17	0.0005	8800616
Dissolved Sulphur (S)	mg/L	1.8	3.8	0.5	1.9	0.5	8785425
Total Sulphur (S)	mg/L	1.9	4.3	0.5	1.9	0.5	8786325
Dissolved Tellurium (Te)	mg/L	<0.0001	<0.0001	0.0001	<0.0005	0.0005	8800631
. Tellurium (Te)	mg/L	<0.0001	<0.0001	0.0001	<0.0005	0.0005	8800616
Dissolved Thallium (Tl)	mg/L	0.000005	<0.000005	0.000005	<0.000025	0.000025	8800631

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WIE417	WIE418		WIE419		
Sampling Date		2023/07/05 14:53	2023/07/05 15:22		2023/07/05 08:00		
COC Number		728784	728784		728784		
	UNITS	MWS-14-07-OB	MWS-14-07-BR	RDL	DUPLICATE 2	RDL	QC Batch
. Thallium (Tl)	mg/L	0.000005	<0.000005	0.000005	<0.000025	0.000025	8800616
Dissolved Thorium (Th)	mg/L	<0.0002	<0.0002	0.0002	<0.001	0.001	8800631
. Thorium (Th)	mg/L	<0.0002	<0.0002	0.0002	<0.001	0.001	8800616
Dissolved Tin (Sn)	mg/L	<0.0001	0.0002	0.0001	<0.0005	0.0005	8800631
. Tin (Sn)	mg/L	<0.0001	0.0001	0.0001	0.0006	0.0005	8800616
Dissolved Titanium (Ti)	mg/L	<0.0005	<0.0005	0.0005	<0.0025	0.0025	8800631
. Titanium (Ti)	mg/L	0.0023	0.0011	0.0005	0.0030	0.0025	8800616
Dissolved Tungsten (W)	mg/L	<0.0001	0.0013	0.0001	0.0098	0.0005	8800631
. Tungsten (W)	mg/L	<0.0001	0.0016	0.0001	0.0089	0.0005	8800616
Dissolved Uranium (U)	mg/L	0.00037	0.00097	0.00001	<0.00005	0.00005	8800631
. Uranium (U)	mg/L	0.00038	0.00104	0.00001	<0.00005	0.00005	8800616
Dissolved Vanadium (V)	mg/L	0.00010	0.00018	0.00005	0.00053	0.00025	8800631
. Vanadium (V)	mg/L	0.00019	0.00032	0.00005	0.00067	0.00025	8800616
Dissolved Zinc (Zn)	mg/L	0.0045	0.0069	0.0005	1.09	0.0025	8800631
. Zinc (Zn)	mg/L	0.0042	0.0044	0.0005	2.78	0.0025	8800616
Dissolved Zirconium (Zr)	mg/L	0.0002	0.0006	0.0001	<0.0005	0.0005	8800631
. Zirconium (Zr)	mg/L	0.0002	0.0008	0.0001	<0.0005	0.0005	8800616

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		WIE417			WIE417		
Sampling Date		2023/07/05 14:53			2023/07/05 14:53		
COC Number		728784			728784		
	UNITS	MWS-14-07-OB	RDL	QC Batch	MWS-14-07-OB Lab-Dup	RDL	QC Batch
BTEX & F1 Hydrocarbons							
F1 (C6-C10)	ug/L	<25	25	8785790	<25	25	8785790
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	8785776			
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	8785776			
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	8785776			
Reached Baseline at C50	ug/L	Yes		8785776			
Surrogate Recovery (%)							
1,4-Difluorobenzene	%	100		8785790	100		8785790
4-Bromofluorobenzene	%	100		8785790	98		8785790
D10-o-Xylene	%	108		8785790	107		8785790
D4-1,2-Dichloroethane	%	99		8785790	102		8785790
o-Terphenyl	%	104		8785776			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WIE411 **Collected:** 2023/07/05
Sample ID: MWS-14-03-OB1 **Shipped:**
Matrix: Water **Received:** 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8788760	N/A	2023/07/14	Brent Boudreau
Alkalinity	AT	8782907	N/A	2023/07/13	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8781399	N/A	2023/07/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	8782810	N/A	2023/07/12	Alina Dobreanu
Conductivity	AT	8782916	N/A	2023/07/13	Kien Tran
Fluoride	ISE	8782918	2023/07/11	2023/07/13	Kien Tran
Hardness (calculated as CaCO3)		8781400	N/A	2023/07/13	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8786899	2023/07/13	2023/07/13	Indira HarryPaul
Mercury (low level)	CV/AA	8786920	2023/07/13	2023/07/13	Indira HarryPaul
Dissolved Metals Analysis by ICP	ICP	8785425	2023/07/12	2023/07/14	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8786351	N/A	2023/07/13	Nan Raykha
Metals in Water by ICPMS (low level)	ICP1/MS	8800616	N/A	2023/07/21	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8786325	2023/07/13	2023/07/13	Suban Kanapathippllai
Cyanide (Free)	SPEC	8797630	N/A	2023/07/18	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8807094	2023/07/14	2023/07/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8807093	2023/07/14	2023/07/17	Marjolen Busslinger
Total Ammonia-N	LACH/NH4	8786171	N/A	2023/07/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8782804	N/A	2023/07/14	Chandra Nandlal
pH	AT	8782919	2023/07/11	2023/07/13	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/08	Rupinder Kaur
Sulphate by Automated Turbidimetry	KONE	8782836	N/A	2023/07/12	Alina Dobreanu
Total Dissolved Solids	BAL	8782145	2023/07/11	2023/07/12	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/07/08	Rupinder Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8783695	2023/07/12	2023/07/13	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8783329	2023/07/11	2023/07/12	Shaneil Hall
Turbidity	AT	8782904	N/A	2023/07/12	Gurparteek KAUR

Bureau Veritas ID: WIE411 Dup **Collected:** 2023/07/05
Sample ID: MWS-14-03-OB1 **Shipped:**
Matrix: Water **Received:** 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals Analysis by ICP	ICP	8785425	2023/07/12	2023/07/14	Suban Kanapathippllai
Metals in Water by ICPMS (low level)	ICP1/MS	8800616	N/A	2023/07/21	Arefa Dabhad

Bureau Veritas ID: WIE412 **Collected:** 2023/07/05
Sample ID: MWS-14-03-OB2 **Shipped:**
Matrix: Water **Received:** 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8788760	N/A	2023/07/14	Brent Boudreau
Alkalinity	AT	8782907	N/A	2023/07/13	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8781399	N/A	2023/07/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	8782810	N/A	2023/07/12	Alina Dobreanu

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WIE412
Sample ID: MWS-14-03-OB2
Matrix: Water

Collected: 2023/07/05
Shipped:
Received: 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Conductivity	AT	8782916	N/A	2023/07/13	Kien Tran
Fluoride	ISE	8782918	2023/07/11	2023/07/13	Kien Tran
Hardness (calculated as CaCO3)		8781400	N/A	2023/07/13	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8786899	2023/07/13	2023/07/13	Indira HarryPaul
Mercury (low level)	CV/AA	8786920	2023/07/13	2023/07/13	Indira HarryPaul
Dissolved Metals Analysis by ICP	ICP	8785425	2023/07/12	2023/07/14	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8786351	N/A	2023/07/13	Nan Raykha
Metals in Water by ICPMS (low level)	ICP1/MS	8800616	N/A	2023/07/21	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8786325	2023/07/13	2023/07/13	Suban Kanapathippllai
Cyanide (Free)	SPEC	8797630	N/A	2023/07/18	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8807094	2023/07/14	2023/07/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8807093	2023/07/14	2023/07/18	Marjolen Busslinger
Total Ammonia-N	LACH/NH4	8786171	N/A	2023/07/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8782804	N/A	2023/07/14	Chandra Nandlal
pH	AT	8782919	2023/07/11	2023/07/13	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/08	Rupinder Kaur
Sulphate by Automated Turbidimetry	KONE	8782836	N/A	2023/07/12	Alina Dobreanu
Total Dissolved Solids	BAL	8782145	2023/07/11	2023/07/12	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/07/08	Rupinder Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8783695	2023/07/12	2023/07/13	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8783329	2023/07/11	2023/07/12	Shaneil Hall
Turbidity	AT	8782904	N/A	2023/07/12	Gurparteek KAUR

Bureau Veritas ID: WIE413
Sample ID: G6-OB-14
Matrix: Water

Collected: 2023/07/05
Shipped:
Received: 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8788760	N/A	2023/07/14	Brent Boudreau
Alkalinity	AT	8782907	N/A	2023/07/13	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8781399	N/A	2023/07/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	8782810	N/A	2023/07/12	Alina Dobreanu
Conductivity	AT	8782916	N/A	2023/07/13	Kien Tran
Fluoride	ISE	8782918	2023/07/11	2023/07/13	Kien Tran
Hardness (calculated as CaCO3)		8781400	N/A	2023/07/13	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8786899	2023/07/13	2023/07/13	Indira HarryPaul
Mercury (low level)	CV/AA	8786920	2023/07/13	2023/07/13	Indira HarryPaul
Dissolved Metals Analysis by ICP	ICP	8785425	2023/07/12	2023/07/14	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8786351	N/A	2023/07/13	Nan Raykha
Metals in Water by ICPMS (low level)	ICP1/MS	8800616	N/A	2023/07/21	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8786325	2023/07/13	2023/07/13	Suban Kanapathippllai
Cyanide (Free)	SPEC	8797630	N/A	2023/07/18	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8807094	2023/07/14	2023/07/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8807093	2023/07/14	2023/07/17	Marjolen Busslinger

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WIE413
Sample ID: G6-OB-14
Matrix: Water

Collected: 2023/07/05
Shipped:
Received: 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Ammonia-N	LACH/NH4	8786171	N/A	2023/07/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8782804	N/A	2023/07/14	Chandra Nandlal
pH	AT	8782919	2023/07/11	2023/07/13	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/08	Rupinder Kaur
Sulphate by Automated Turbidimetry	KONE	8782836	N/A	2023/07/12	Alina Dobreanu
Total Dissolved Solids	BAL	8782145	2023/07/11	2023/07/12	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/07/08	Rupinder Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8783695	2023/07/12	2023/07/13	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8783329	2023/07/11	2023/07/12	Shaneil Hall
Turbidity	AT	8782904	N/A	2023/07/12	Gurparteek KAUR

Bureau Veritas ID: WIE414
Sample ID: G6-BR-14
Matrix: Water

Collected: 2023/07/05
Shipped:
Received: 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8788760	N/A	2023/07/14	Brent Boudreau
Alkalinity	AT	8782907	N/A	2023/07/13	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8781399	N/A	2023/07/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	8782810	N/A	2023/07/12	Alina Dobreanu
Conductivity	AT	8782916	N/A	2023/07/13	Kien Tran
Fluoride	ISE	8782918	2023/07/11	2023/07/13	Kien Tran
Hardness (calculated as CaCO3)		8781400	N/A	2023/07/13	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8786899	2023/07/13	2023/07/13	Indira HarryPaul
Mercury (low level)	CV/AA	8786920	2023/07/13	2023/07/13	Indira HarryPaul
Dissolved Metals Analysis by ICP	ICP	8785425	2023/07/12	2023/07/14	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8786351	N/A	2023/07/13	Nan Raykha
Metals in Water by ICPMS (low level)	ICP1/MS	8800616	N/A	2023/07/21	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8786325	2023/07/13	2023/07/13	Suban Kanapathippllai
Cyanide (Free)	SPEC	8797630	N/A	2023/07/18	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8807094	2023/07/14	2023/07/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8807093	2023/07/14	2023/07/18	Marjolen Busslinger
Total Ammonia-N	LACH/NH4	8786171	N/A	2023/07/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8782804	N/A	2023/07/14	Chandra Nandlal
pH	AT	8782919	2023/07/11	2023/07/13	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/08	Rupinder Kaur
Sulphate by Automated Turbidimetry	KONE	8782836	N/A	2023/07/12	Alina Dobreanu
Total Dissolved Solids	BAL	8782145	2023/07/11	2023/07/12	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/07/08	Rupinder Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8783695	2023/07/12	2023/07/13	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8783329	2023/07/11	2023/07/12	Shaneil Hall
Turbidity	AT	8782904	N/A	2023/07/12	Gurparteek KAUR

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3K1437
Report Date: 2023/07/23

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: TP

TEST SUMMARY

Bureau Veritas ID: WIE415
Sample ID: MW20-OB-21
Matrix: Water

Collected: 2023/07/05
Shipped:
Received: 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8788760	N/A	2023/07/14	Brent Boudreau
Alkalinity	AT	8782907	N/A	2023/07/13	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8781399	N/A	2023/07/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	8782810	N/A	2023/07/12	Alina Dobreanu
Conductivity	AT	8782916	N/A	2023/07/13	Kien Tran
Fluoride	ISE	8782918	2023/07/11	2023/07/13	Kien Tran
Hardness (calculated as CaCO3)		8781400	N/A	2023/07/21	Automated Statchk
Mercury (low level)	CV/AA	8786920	2023/07/13	2023/07/13	Indira HarryPaul
Lab Filtered Metals Analysis by ICP	ICP	8784483	2023/07/12	2023/07/14	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8800631	N/A	2023/07/21	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8800616	N/A	2023/07/21	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8786325	2023/07/13	2023/07/13	Suban Kanapathippllai
Cyanide (Free)	SPEC	8797630	N/A	2023/07/18	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8807094	2023/07/14	2023/07/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8807093	2023/07/14	2023/07/17	Marjolen Busslinger
Total Ammonia-N	LACH/NH4	8786171	N/A	2023/07/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8782804	N/A	2023/07/14	Chandra Nandlal
pH	AT	8782919	2023/07/11	2023/07/13	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/08	Rupinder Kaur
Sulphate by Automated Turbidimetry	KONE	8782836	N/A	2023/07/12	Alina Dobreanu
Total Dissolved Solids	BAL	8782145	2023/07/11	2023/07/12	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/07/08	Rupinder Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8783695	2023/07/12	2023/07/13	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8783329	2023/07/11	2023/07/12	Shaneil Hall
Turbidity	AT	8782904	N/A	2023/07/12	Gurparteek KAUR

Bureau Veritas ID: WIE415 Dup
Sample ID: MW20-OB-21
Matrix: Water

Collected: 2023/07/05
Shipped:
Received: 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Lab Filtered Metals Analysis by ICP	ICP	8784483	2023/07/12	2023/07/14	Suban Kanapathippllai

Bureau Veritas ID: WIE416
Sample ID: MW20-BR-21
Matrix: Water

Collected: 2023/07/05
Shipped:
Received: 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8788760	N/A	2023/07/14	Brent Boudreau
Alkalinity	AT	8782907	N/A	2023/07/13	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8781399	N/A	2023/07/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	8782810	N/A	2023/07/12	Alina Dobreanu
Conductivity	AT	8782916	N/A	2023/07/13	Kien Tran
Fluoride	ISE	8782918	2023/07/11	2023/07/13	Kien Tran

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WIE416
Sample ID: MW20-BR-21
Matrix: Water

Collected: 2023/07/05
Shipped:
Received: 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hardness (calculated as CaCO3)		8781400	N/A	2023/07/13	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8786899	2023/07/13	2023/07/13	Indira HarryPaul
Mercury (low level)	CV/AA	8786920	2023/07/13	2023/07/13	Indira HarryPaul
Dissolved Metals Analysis by ICP	ICP	8785425	2023/07/12	2023/07/14	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8786351	N/A	2023/07/13	Nan Raykha
Metals in Water by ICPMS (low level)	ICP1/MS	8800616	N/A	2023/07/21	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8786325	2023/07/13	2023/07/13	Suban Kanapathippllai
Cyanide (Free)	SPEC	8797630	N/A	2023/07/18	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8807094	2023/07/14	2023/07/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8807093	2023/07/14	2023/07/17	Marjolen Busslinger
Total Ammonia-N	LACH/NH4	8786171	N/A	2023/07/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8782804	N/A	2023/07/14	Chandra Nandlal
pH	AT	8782919	2023/07/11	2023/07/13	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/08	Rupinder Kaur
Sulphate by Automated Turbidimetry	KONE	8782836	N/A	2023/07/12	Alina Dobreanu
Total Dissolved Solids	BAL	8782145	2023/07/11	2023/07/12	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/07/08	Rupinder Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8783695	2023/07/12	2023/07/13	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8783329	2023/07/11	2023/07/12	Shaneil Hall
Turbidity	AT	8782904	N/A	2023/07/12	Gurparteek KAUR

Bureau Veritas ID: WIE417
Sample ID: MWS-14-07-OB
Matrix: Water

Collected: 2023/07/05
Shipped:
Received: 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8788760	N/A	2023/07/14	Brent Boudreau
Alkalinity	AT	8782907	N/A	2023/07/13	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8781399	N/A	2023/07/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	8782810	N/A	2023/07/12	Alina Dobreanu
Conductivity	AT	8782916	N/A	2023/07/13	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	8784250	N/A	2023/07/12	Gyulshen Idriz
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	8785790	N/A	2023/07/12	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8785776	2023/07/12	2023/07/13	Emir Danisman
Fluoride	ISE	8782918	2023/07/11	2023/07/13	Kien Tran
Hardness (calculated as CaCO3)		8781400	N/A	2023/07/21	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8786899	2023/07/13	2023/07/13	Indira HarryPaul
Mercury (low level)	CV/AA	8786920	2023/07/13	2023/07/13	Indira HarryPaul
Dissolved Metals Analysis by ICP	ICP	8785425	2023/07/12	2023/07/14	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8800631	N/A	2023/07/21	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8800616	N/A	2023/07/21	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8786325	2023/07/13	2023/07/13	Suban Kanapathippllai
Cyanide (Free)	SPEC	8797630	N/A	2023/07/18	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8807094	2023/07/14	2023/07/14	Ming Dong

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WIE417
Sample ID: MWS-14-07-OB
Matrix: Water

Collected: 2023/07/05
Shipped:
Received: 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Phosphorus Low Level Total	KONE	8807093	2023/07/14	2023/07/17	Marjolen Busslinger
Total Ammonia-N	LACH/NH4	8786171	N/A	2023/07/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8782804	N/A	2023/07/14	Chandra Nandlal
pH	AT	8782919	2023/07/11	2023/07/13	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/08	Rupinder Kaur
Sulphate by Automated Turbidimetry	KONE	8782836	N/A	2023/07/12	Alina Dobreanu
Total Dissolved Solids	BAL	8782145	2023/07/11	2023/07/12	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/07/08	Rupinder Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8783695	2023/07/12	2023/07/13	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8783329	2023/07/11	2023/07/12	Shaneil Hall
Turbidity	AT	8782904	N/A	2023/07/12	Gurparteek KAUR

Bureau Veritas ID: WIE417 Dup
Sample ID: MWS-14-07-OB
Matrix: Water

Collected: 2023/07/05
Shipped:
Received: 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8788760	N/A	2023/07/14	Brent Boudreau
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	8785790	N/A	2023/07/12	Georgeta Rusu

Bureau Veritas ID: WIE418
Sample ID: MWS-14-07-BR
Matrix: Water

Collected: 2023/07/05
Shipped:
Received: 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8788760	N/A	2023/07/14	Brent Boudreau
Alkalinity	AT	8782907	N/A	2023/07/13	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8781399	N/A	2023/07/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	8782810	N/A	2023/07/12	Alina Dobreanu
Conductivity	AT	8782916	N/A	2023/07/13	Kien Tran
Fluoride	ISE	8782918	2023/07/11	2023/07/13	Kien Tran
Hardness (calculated as CaCO3)		8781400	N/A	2023/07/21	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8786899	2023/07/13	2023/07/13	Indira HarryPaul
Mercury (low level)	CV/AA	8786920	2023/07/13	2023/07/13	Indira HarryPaul
Dissolved Metals Analysis by ICP	ICP	8785425	2023/07/12	2023/07/14	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8800631	N/A	2023/07/21	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8800616	N/A	2023/07/21	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8786325	2023/07/13	2023/07/13	Suban Kanapathippllai
Cyanide (Free)	SPEC	8797630	N/A	2023/07/18	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8807094	2023/07/14	2023/07/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8807093	2023/07/14	2023/07/17	Marjolen Busslinger
Total Ammonia-N	LACH/NH4	8786171	N/A	2023/07/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8782804	N/A	2023/07/14	Chandra Nandlal
pH	AT	8782919	2023/07/11	2023/07/13	Kien Tran

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3K1437
Report Date: 2023/07/23

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: TP

TEST SUMMARY

Bureau Veritas ID: WIE418
Sample ID: MWS-14-07-BR
Matrix: Water

Collected: 2023/07/05
Shipped:
Received: 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Field Measured pH	PH	ONSITE	N/A	2023/07/08	Rupinder Kaur
Sulphate by Automated Turbidimetry	KONE	8782836	N/A	2023/07/12	Alina Dobreanu
Total Dissolved Solids	BAL	8782145	2023/07/11	2023/07/12	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/07/08	Rupinder Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8783695	2023/07/12	2023/07/13	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8783329	2023/07/11	2023/07/12	Shaneil Hall
Turbidity	AT	8782904	N/A	2023/07/12	Gurparteek KAUR

Bureau Veritas ID: WIE419
Sample ID: DUPLICATE 2
Matrix: Water

Collected: 2023/07/05
Shipped:
Received: 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8788760	N/A	2023/07/14	Brent Boudreau
Alkalinity	AT	8782907	N/A	2023/07/13	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8781399	N/A	2023/07/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	8782810	N/A	2023/07/12	Alina Dobreanu
Conductivity	AT	8782916	N/A	2023/07/13	Kien Tran
Fluoride	ISE	8782918	2023/07/11	2023/07/13	Kien Tran
Hardness (calculated as CaCO3)		8781400	N/A	2023/07/21	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8786899	2023/07/13	2023/07/13	Indira HarryPaul
Mercury (low level)	CV/AA	8786920	2023/07/13	2023/07/13	Indira HarryPaul
Dissolved Metals Analysis by ICP	ICP	8785425	2023/07/12	2023/07/14	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8800631	N/A	2023/07/21	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8800616	N/A	2023/07/21	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8786325	2023/07/13	2023/07/13	Suban Kanapathippllai
Cyanide (Free)	SPEC	8797630	N/A	2023/07/18	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8807094	2023/07/14	2023/07/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8807093	2023/07/14	2023/07/17	Marjolen Busslinger
Total Ammonia-N	LACH/NH4	8786181	N/A	2023/07/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8782804	N/A	2023/07/14	Chandra Nandlal
pH	AT	8782919	2023/07/11	2023/07/13	Kien Tran
Sulphate by Automated Turbidimetry	KONE	8782836	N/A	2023/07/12	Alina Dobreanu
Total Dissolved Solids	BAL	8782145	2023/07/11	2023/07/12	Shaneil Hall
Total Kjeldahl Nitrogen in Water	SKAL	8783695	2023/07/12	2023/07/13	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8783329	2023/07/11	2023/07/12	Shaneil Hall
Turbidity	AT	8782904	N/A	2023/07/12	Gurparteek KAUR

Bureau Veritas ID: WIE419 Dup
Sample ID: DUPLICATE 2
Matrix: Water

Collected: 2023/07/05
Shipped:
Received: 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Ammonia-N	LACH/NH4	8786181	N/A	2023/07/13	Prabhjot Kaur

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3K1437
Report Date: 2023/07/23

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: TP

TEST SUMMARY

Bureau Veritas ID: WIE419 Dup
Sample ID: DUPLICATE 2
Matrix: Water

Collected: 2023/07/05
Shipped:
Received: 2023/07/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Total Suspended Solids	BAL	8783329	2023/07/11	2023/07/12	Shaneil Hall

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	2.7°C
Package 2	3.3°C
Package 3	3.3°C

Acidity samples in job contained headspace.

Sample WIE412 [MWS-14-03-OB2] : Metals Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample WIE414 [G6-BR-14] : Metals Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample WIE416 [MW20-BR-21] : Metal Analysis:Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Sample WIE419 [DUPLICATE 2] : Metals Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8785776	o-Terphenyl	2023/07/12			108	60 - 130	105	%				
8785790	1,4-Difluorobenzene	2023/07/12	99	70 - 130	98	70 - 130	101	%				
8785790	4-Bromofluorobenzene	2023/07/12	101	70 - 130	101	70 - 130	100	%				
8785790	D10-o-Xylene	2023/07/12	101	70 - 130	105	70 - 130	105	%				
8785790	D4-1,2-Dichloroethane	2023/07/12	98	70 - 130	97	70 - 130	98	%				
8782145	Total Dissolved Solids	2023/07/12			97	90 - 110	<10	mg/L	1.4	20		
8782804	Nitrate (N)	2023/07/14	97	80 - 120	96	80 - 120	<0.10	mg/L	3.3	20		
8782804	Nitrite (N)	2023/07/14	104	80 - 120	104	80 - 120	<0.010	mg/L	1.6	20		
8782810	Dissolved Chloride (Cl-)	2023/07/12	NC	80 - 120	98	80 - 120	<1.0	mg/L	1.5	20		
8782836	Dissolved Sulphate (SO4)	2023/07/12	NC	75 - 125	96	80 - 120	<1.0	mg/L	0.75	20		
8782904	Turbidity	2023/07/12			101	80 - 120	<0.1	NTU	0.11	20		
8782907	Alkalinity (Total as CaCO3)	2023/07/13			95	85 - 115	<1.0	mg/L	1.7	20		
8782916	Conductivity	2023/07/13			102	85 - 115	<0.001	mS/cm	0	10		
8782918	Fluoride (F-)	2023/07/13	97	80 - 120	98	80 - 120	<0.10	mg/L	3.7	20		
8782919	pH	2023/07/13			102	98 - 103			1.9	N/A		
8783329	Total Suspended Solids	2023/07/12			95	85 - 115	<1	mg/L	8.7	20		
8783695	Total Kjeldahl Nitrogen (TKN)	2023/07/13	99	80 - 120	91	80 - 120	<0.10	mg/L	NC	20	93	80 - 120
8784250	Dissolved Organic Carbon	2023/07/12	96	80 - 120	99	80 - 120	<0.40	mg/L	0.97	20		
8784483	Dissolved Sulphur (S)	2023/07/14	NC	80 - 120	102	80 - 120	<0.5	mg/L	0.50	25		
8785425	Dissolved Sulphur (S)	2023/07/14	92	80 - 120	101	80 - 120	<0.5	mg/L	NC	25		
8785776	F2 (C10-C16 Hydrocarbons)	2023/07/12			108	60 - 130	<100	ug/L	5.0	30		
8785776	F3 (C16-C34 Hydrocarbons)	2023/07/12			119	60 - 130	<200	ug/L	5.4	30		
8785776	F4 (C34-C50 Hydrocarbons)	2023/07/12			113	60 - 130	<200	ug/L	6.1	30		
8785790	F1 (C6-C10)	2023/07/12	101	60 - 140	106	60 - 140	<25	ug/L	NC	30		
8786171	Total Ammonia-N	2023/07/13	102	75 - 125	103	80 - 120	<0.050	mg/L	9.2	20		
8786181	Total Ammonia-N	2023/07/13	98	75 - 125	103	80 - 120	<0.050	mg/L	1.9	20		
8786325	Total Sulphur (S)	2023/07/13	NC	80 - 120	103	80 - 120	<0.5	mg/L	0.11	25		
8786351	Dissolved Aluminum (Al)	2023/07/13	105	80 - 120	101	80 - 120	<0.0005	mg/L	2.0	20		
8786351	Dissolved Antimony (Sb)	2023/07/13	108	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8786351	Dissolved Arsenic (As)	2023/07/13	108	80 - 120	101	80 - 120	<0.0001	mg/L	0.092	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8786351	Dissolved Barium (Ba)	2023/07/13	102	80 - 120	98	80 - 120	<0.0002	mg/L	2.1	20		
8786351	Dissolved Beryllium (Be)	2023/07/13	112	80 - 120	107	80 - 120	<0.00005	mg/L	NC	20		
8786351	Dissolved Bismuth (Bi)	2023/07/13	93	80 - 120	96	80 - 120	<0.0001	mg/L	NC	20		
8786351	Dissolved Boron (B)	2023/07/13	110	80 - 120	107	80 - 120	<0.001	mg/L	2.6	20		
8786351	Dissolved Cadmium (Cd)	2023/07/13	105	80 - 120	97	80 - 120	<0.00001	mg/L	NC	20		
8786351	Dissolved Calcium (Ca)	2023/07/13	NC	80 - 120	103	80 - 120	<0.02	mg/L	0.74	20		
8786351	Dissolved Cesium (Cs)	2023/07/13	98	80 - 120	94	80 - 120	<0.00002	mg/L	NC	N/A		
8786351	Dissolved Chromium (Cr)	2023/07/13	101	80 - 120	98	80 - 120	<0.0005	mg/L	NC	20		
8786351	Dissolved Cobalt (Co)	2023/07/13	102	80 - 120	101	80 - 120	<0.00005	mg/L	NC	20		
8786351	Dissolved Copper (Cu)	2023/07/13	109	80 - 120	104	80 - 120	<0.0001	mg/L	0.24	20		
8786351	Dissolved Iron (Fe)	2023/07/13	104	80 - 120	102	80 - 120	<0.005	mg/L	1.2	20		
8786351	Dissolved Lead (Pb)	2023/07/13	102	80 - 120	99	80 - 120	<0.00005	mg/L	NC	20		
8786351	Dissolved Lithium (Li)	2023/07/13	108	80 - 120	103	80 - 120	<0.0005	mg/L	7.4	20		
8786351	Dissolved Magnesium (Mg)	2023/07/13	NC	80 - 120	100	80 - 120	<0.005	mg/L	1.7	20		
8786351	Dissolved Manganese (Mn)	2023/07/13	101	80 - 120	98	80 - 120	<0.0002	mg/L	2.1	20		
8786351	Dissolved Molybdenum (Mo)	2023/07/13	112	80 - 120	103	80 - 120	<0.00005	mg/L	4.4	20		
8786351	Dissolved Nickel (Ni)	2023/07/13	100	80 - 120	99	80 - 120	<0.0001	mg/L	2.4	20		
8786351	Dissolved Phosphorus (P)	2023/07/13	118	80 - 120	96	80 - 120	<0.005	mg/L	NC	20		
8786351	Dissolved Potassium (K)	2023/07/13	108	80 - 120	103	80 - 120	<0.02	mg/L	2.3	20		
8786351	Dissolved Rubidium (Rb)	2023/07/13	105	80 - 120	101	80 - 120	<0.00002	mg/L	NC	N/A		
8786351	Dissolved Selenium (Se)	2023/07/13	114	80 - 120	104	80 - 120	<0.0002	mg/L	NC	20		
8786351	Dissolved Silicon (Si)	2023/07/13	101	80 - 120	99	80 - 120	<0.005	mg/L	1.6	20		
8786351	Dissolved Silver (Ag)	2023/07/13	98	80 - 120	102	80 - 120	<0.00001	mg/L	NC	20		
8786351	Dissolved Sodium (Na)	2023/07/13	103	80 - 120	101	80 - 120	<0.01	mg/L	2.3	20		
8786351	Dissolved Strontium (Sr)	2023/07/13	99	80 - 120	97	80 - 120	<0.0001	mg/L	2.2	20		
8786351	Dissolved Tellurium (Te)	2023/07/13	107	80 - 120	95	80 - 120	<0.0001	mg/L	NC	20		
8786351	Dissolved Thallium (Tl)	2023/07/13	103	80 - 120	101	80 - 120	<0.000005	mg/L	NC	20		
8786351	Dissolved Thorium (Th)	2023/07/13	101	80 - 120	96	80 - 120	<0.0002	mg/L				
8786351	Dissolved Tin (Sn)	2023/07/13	105	80 - 120	98	80 - 120	<0.0001	mg/L	NC	20		
8786351	Dissolved Titanium (Ti)	2023/07/13	102	80 - 120	99	80 - 120	<0.0005	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8786351	Dissolved Tungsten (W)	2023/07/13	109	80 - 120	104	80 - 120	<0.0001	mg/L	NC	20		
8786351	Dissolved Uranium (U)	2023/07/13	104	80 - 120	99	80 - 120	<0.00001	mg/L	5.2	20		
8786351	Dissolved Vanadium (V)	2023/07/13	104	80 - 120	100	80 - 120	<0.00005	mg/L	0.38	20		
8786351	Dissolved Zinc (Zn)	2023/07/13	104	80 - 120	99	80 - 120	<0.0005	mg/L	NC	20		
8786351	Dissolved Zirconium (Zr)	2023/07/13	108	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8786899	Dissolved Mercury (Hg)	2023/07/13	97	75 - 125	98	80 - 120	<0.01	ug/L	NC	20		
8786920	Mercury (Hg)	2023/07/13	97	75 - 125	99	80 - 120	<0.01	ug/L	NC	20		
8788760	Acidity	2023/07/14	84	80 - 120	103	80 - 120	<5.0	mg/L	3.6	25		
8797630	Free Cyanide (CN)	2023/07/18	93	80 - 120	85	80 - 120	<2.0	ug/L				
8800616	. Aluminum (Al)	2023/07/21	NC	80 - 120	101	80 - 120	<0.0005	mg/L	8.4	20		
8800616	. Antimony (Sb)	2023/07/21	80	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		
8800616	. Arsenic (As)	2023/07/21	101	80 - 120	99	80 - 120	<0.0001	mg/L	2.3	20		
8800616	. Barium (Ba)	2023/07/21	108	80 - 120	101	80 - 120	<0.0002	mg/L	0.47	20		
8800616	. Beryllium (Be)	2023/07/21	109	80 - 120	105	80 - 120	<0.00005	mg/L	NC	20		
8800616	. Bismuth (Bi)	2023/07/21	88	80 - 120	95	80 - 120	<0.0001	mg/L	NC	20		
8800616	. Boron (B)	2023/07/21	104	80 - 120	100	80 - 120	<0.001	mg/L	0.14	20		
8800616	. Cadmium (Cd)	2023/07/21	110	80 - 120	100	80 - 120	<0.000005	mg/L	NC	20		
8800616	. Calcium (Ca)	2023/07/21	NC	80 - 120	103	80 - 120	<0.02	mg/L	1.9	20		
8800616	. Cesium (Cs)	2023/07/21	100	80 - 120	99	80 - 120	<0.00002	mg/L	NC	N/A		
8800616	. Chromium (Cr)	2023/07/21	104	80 - 120	102	80 - 120	<0.0005	mg/L	1.7	20		
8800616	. Cobalt (Co)	2023/07/21	102	80 - 120	105	80 - 120	<0.00005	mg/L	2.1	20		
8800616	. Copper (Cu)	2023/07/21	107	80 - 120	107	80 - 120	<0.0001	mg/L	0.88	20		
8800616	. Iron (Fe)	2023/07/21	127 (1)	80 - 120	103	80 - 120	<0.005	mg/L	4.0	20		
8800616	. Lead (Pb)	2023/07/21	102	80 - 120	102	80 - 120	<0.00005	mg/L	18	20		
8800616	. Lithium (Li)	2023/07/21	120	80 - 120	109	80 - 120	<0.0005	mg/L	0.94	20		
8800616	. Magnesium (Mg)	2023/07/21	NC	80 - 120	95	80 - 120	<0.005	mg/L	4.0	20		
8800616	. Manganese (Mn)	2023/07/21	NC	80 - 120	100	80 - 120	<0.0002	mg/L	0.015	20		
8800616	. Molybdenum (Mo)	2023/07/21	131 (1)	80 - 120	108	80 - 120	<0.00005	mg/L	0.27	20		
8800616	. Nickel (Ni)	2023/07/21	97	80 - 120	98	80 - 120	<0.0001	mg/L	5.2	20		
8800616	. Phosphorus (P)	2023/07/21	NC	80 - 120	106	80 - 120	<0.005	mg/L	0.36	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8800616	. Potassium (K)	2023/07/21	105	80 - 120	105	80 - 120	<0.02	mg/L	4.5	20		
8800616	. Rubidium (Rb)	2023/07/21	106	80 - 120	100	80 - 120	<0.00002	mg/L	NC	N/A		
8800616	. Selenium (Se)	2023/07/21	101	80 - 120	101	80 - 120	<0.00005	mg/L	NC	20		
8800616	. Silicon (Si)	2023/07/21	NC	80 - 120	98	80 - 120	<0.005	mg/L	3.2	20		
8800616	. Silver (Ag)	2023/07/21	63 (1)	80 - 120	102	80 - 120	<0.00001	mg/L	NC	20		
8800616	. Sodium (Na)	2023/07/21	NC	80 - 120	102	80 - 120	<0.01	mg/L	3.8	20		
8800616	. Strontium (Sr)	2023/07/21	NC	80 - 120	96	80 - 120	<0.0001	mg/L	2.3	20		
8800616	. Tellurium (Te)	2023/07/21	108	80 - 120	102	80 - 120	<0.0001	mg/L	NC	20		
8800616	. Thallium (Tl)	2023/07/21	108	80 - 120	96	80 - 120	<0.000005	mg/L	15	20		
8800616	. Thorium (Th)	2023/07/21	105	80 - 120	93	80 - 120	<0.0002	mg/L	8.2	20		
8800616	. Tin (Sn)	2023/07/21	114	80 - 120	102	80 - 120	<0.0001	mg/L	0	20		
8800616	. Titanium (Ti)	2023/07/21	169 (1)	80 - 120	99	80 - 120	<0.0005	mg/L	1.1	20		
8800616	. Tungsten (W)	2023/07/21	108	80 - 120	104	80 - 120	<0.0001	mg/L	4.7	20		
8800616	. Uranium (U)	2023/07/21	106	80 - 120	101	80 - 120	<0.00001	mg/L	0.53	20		
8800616	. Vanadium (V)	2023/07/21	102	80 - 120	96	80 - 120	<0.00005	mg/L	1.1	20		
8800616	. Zinc (Zn)	2023/07/21	105	80 - 120	101	80 - 120	<0.0005	mg/L	0.53	20		
8800616	. Zirconium (Zr)	2023/07/21	118	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		
8800631	Dissolved Aluminum (Al)	2023/07/21	108	80 - 120	102	80 - 120	<0.0005	mg/L	8.7	20		
8800631	Dissolved Antimony (Sb)	2023/07/21	120	80 - 120	105	80 - 120	<0.0001	mg/L	0.66	20		
8800631	Dissolved Arsenic (As)	2023/07/21	NC	80 - 120	99	80 - 120	<0.0001	mg/L	1.2	20		
8800631	Dissolved Barium (Ba)	2023/07/21	110	80 - 120	101	80 - 120	<0.0002	mg/L	1.6	20		
8800631	Dissolved Beryllium (Be)	2023/07/21	107	80 - 120	104	80 - 120	<0.00005	mg/L	NC	20		
8800631	Dissolved Bismuth (Bi)	2023/07/21	97	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8800631	Dissolved Boron (B)	2023/07/21	NC	80 - 120	99	80 - 120	<0.001	mg/L	15	20		
8800631	Dissolved Cadmium (Cd)	2023/07/21	112	80 - 120	101	80 - 120	<0.00001	mg/L	NC	20		
8800631	Dissolved Calcium (Ca)	2023/07/21	NC	80 - 120	107	80 - 120	<0.02	mg/L	1.6	20		
8800631	Dissolved Cesium (Cs)	2023/07/21	106	80 - 120	98	80 - 120	<0.00002	mg/L	0	N/A		
8800631	Dissolved Chromium (Cr)	2023/07/21	101	80 - 120	102	80 - 120	<0.0005	mg/L	NC	20		
8800631	Dissolved Cobalt (Co)	2023/07/21	101	80 - 120	103	80 - 120	<0.00005	mg/L	1.4	20		
8800631	Dissolved Copper (Cu)	2023/07/21	110	80 - 120	105	80 - 120	<0.0001	mg/L	4.0	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8800631	Dissolved Iron (Fe)	2023/07/21	103	80 - 120	102	80 - 120	<0.005	mg/L	1.9	20		
8800631	Dissolved Lead (Pb)	2023/07/21	103	80 - 120	102	80 - 120	<0.00005	mg/L	NC	20		
8800631	Dissolved Lithium (Li)	2023/07/21	116	80 - 120	120	80 - 120	<0.0005	mg/L	3.1	20		
8800631	Dissolved Magnesium (Mg)	2023/07/21	NC	80 - 120	101	80 - 120	<0.005	mg/L	2.7	20		
8800631	Dissolved Manganese (Mn)	2023/07/21	106	80 - 120	100	80 - 120	<0.0002	mg/L	0.61	20		
8800631	Dissolved Molybdenum (Mo)	2023/07/21	129 (1)	80 - 120	107	80 - 120	<0.00005	mg/L	0.81	20		
8800631	Dissolved Nickel (Ni)	2023/07/21	98	80 - 120	97	80 - 120	<0.0001	mg/L	0.52	20		
8800631	Dissolved Phosphorus (P)	2023/07/21	126 (1)	80 - 120	108	80 - 120	<0.005	mg/L	7.3	20		
8800631	Dissolved Potassium (K)	2023/07/21	NC	80 - 120	106	80 - 120	<0.02	mg/L	2.7	20		
8800631	Dissolved Rubidium (Rb)	2023/07/21	106	80 - 120	102	80 - 120	<0.00002	mg/L	NC	N/A		
8800631	Dissolved Selenium (Se)	2023/07/21	103	80 - 120	102	80 - 120	<0.0002	mg/L	NC	20		
8800631	Dissolved Silicon (Si)	2023/07/21	NC	80 - 120	108	80 - 120	<0.005	mg/L	4.9	20		
8800631	Dissolved Silver (Ag)	2023/07/21	55 (1)	80 - 120	104	80 - 120	<0.00001	mg/L	NC	20		
8800631	Dissolved Sodium (Na)	2023/07/21	NC	80 - 120	99	80 - 120	<0.01	mg/L	0.74	20		
8800631	Dissolved Strontium (Sr)	2023/07/21	NC	80 - 120	101	80 - 120	<0.0001	mg/L	0.55	20		
8800631	Dissolved Tellurium (Te)	2023/07/21	120	80 - 120	106	80 - 120	<0.0001	mg/L	NC	20		
8800631	Dissolved Thallium (Tl)	2023/07/21	105	80 - 120	103	80 - 120	<0.000005	mg/L	NC	20		
8800631	Dissolved Thorium (Th)	2023/07/21	101	80 - 120	97	80 - 120	<0.0002	mg/L				
8800631	Dissolved Tin (Sn)	2023/07/21	121 (1)	80 - 120	105	80 - 120	<0.0001	mg/L	5.1	20		
8800631	Dissolved Titanium (Ti)	2023/07/21	108	80 - 120	104	80 - 120	<0.0005	mg/L	NC	20		
8800631	Dissolved Tungsten (W)	2023/07/21	NC	80 - 120	102	80 - 120	<0.0001	mg/L	0.36	20		
8800631	Dissolved Uranium (U)	2023/07/21	105	80 - 120	101	80 - 120	<0.00001	mg/L	8.7	20		
8800631	Dissolved Vanadium (V)	2023/07/21	105	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8800631	Dissolved Zinc (Zn)	2023/07/21	107	80 - 120	101	80 - 120	<0.0005	mg/L	NC	20		
8800631	Dissolved Zirconium (Zr)	2023/07/21	119	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		
8807093	Total Phosphorus (P)	2023/07/17	112	80 - 120	111	80 - 120	<0.0010	mg/L			92	80 - 120

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8807094	Strong Acid Dissoc. Cyanide (CN)	2023/07/14	94	80 - 120	104	80 - 120	<0.00050	mg/L				

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Metal Analysis:Matrix Spike exceeds acceptance limits, probable matrix interference

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Cristina Carriere, Senior Scientific Specialist

<original signed by>

Mike MacGillivray, Scientific Specialist (Inorganics)

<original signed by>

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 729504

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/24
Report #: R7733063
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3K2251
Received: 2023/07/08, 10:04

Sample Matrix: Ground Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	2	N/A	2023/07/14	ATL SOP-00205	SM 24 2310B m
Alkalinity	2	N/A	2023/07/11	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	2	N/A	2023/07/12	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	2	N/A	2023/07/13	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	2	N/A	2023/07/11	CAM SOP-00414	SM 23 2510 m
Fluoride	2	2023/07/10	2023/07/11	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	2	N/A	2023/07/21	CAM SOP 00102/00408/00447	SM 2340 B
Mercury in Water by CVAA	2	2023/07/13	2023/07/13	CAM SOP-00453	EPA 7470A m
Dissolved Mercury (low level)	2	2023/07/11	2023/07/11	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	2	2023/07/11	2023/07/17	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	2	N/A	2023/07/21	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	1	N/A	2023/07/18	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	1	N/A	2023/07/19	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	2	2023/07/12	2023/07/13	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	2	N/A	2023/07/13	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	2	2023/07/14	2023/07/17	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	2	2023/07/14	2023/07/14	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	2	N/A	2023/07/13	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (3)	2	N/A	2023/07/13	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	2	2023/07/10	2023/07/11	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (4)	2	N/A	2023/07/10		Field pH Meter
Sulphate by Automated Turbidimetry	2	N/A	2023/07/13	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	2	2023/07/12	2023/07/14	CAM SOP-00428	SM 23 2540C m
Field Temperature (4)	2	N/A	2023/07/10		Field Thermometer
Total Kjeldahl Nitrogen in Water	2	2023/07/12	2023/07/13	CAM SOP-00938	OMOE E3516 m
Low Level Total Suspended Solids	1	2023/07/12	2023/07/13	CAM SOP-00428	SM 23 2540D m
Low Level Total Suspended Solids	1	2023/07/13	2023/07/13	CAM SOP-00428	SM 23 2540D m
Turbidity	2	N/A	2023/07/11	CAM SOP-00417	SM 23 2130 B m

Remarks:

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 729504

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/07/24
Report #: R7733063
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3K2251
Received: 2023/07/08, 10:04

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(4) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633
==========
This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.
For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C3K2251
Report Date: 2023/07/24

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: LV

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WIJ411			WIJ412		
Sampling Date		2023/07/06 15:56			2023/07/06 08:00		
COC Number		729504			729504		
	UNITS	MWS-14-06	RDL	QC Batch	Duplicate 6	RDL	QC Batch
Calculated Parameters							
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	230	1.0	8779920	230	1.0	8779920
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.8	1.0	8779920	1.8	1.0	8779920
Hardness (CaCO3)	mg/L	320	1.0	8778298	320	1.0	8778298
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8779920	<1.0	1.0	8779920
Field Measurements							
Field Temperature	Celsius	15.5	N/A	ONSITE	0.00	N/A	ONSITE
Field Measured pH	pH	7.31		ONSITE	0.00		ONSITE
Inorganics							
Acidity	mg/L	11	5.0	8788760	10	5.0	8788760
Total Ammonia-N	mg/L	0.19	0.050	8781947	0.15	0.050	8781947
Conductivity	mS/cm	0.728	0.001	8780090	0.729	0.001	8780090
Free Cyanide (CN)	ug/L	3.3 (1)	2.0	8790102	4.2 (1)	2.0	8790102
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050 (2)	0.00050	8809361	<0.00050 (2)	0.00050	8809361
Total Dissolved Solids	mg/L	425	10	8784831	415	10	8784831
Fluoride (F-)	mg/L	0.16	0.10	8780096	0.16	0.10	8780096
Total Kjeldahl Nitrogen (TKN)	mg/L	0.34	0.10	8783211	0.33	0.10	8783211
pH	pH	7.93		8780097	7.92		8780097
Total Phosphorus (P)	mg/L	0.64 (3)	0.010	8791484	0.33 (3)	0.010	8791484
Total Suspended Solids	mg/L	590	5	8783414	260	3	8783419
Dissolved Sulphate (SO4)	mg/L	33	1.0	8780075	30	1.0	8780075
Turbidity	NTU	9.8	0.1	8779323	13	0.1	8779323
Alkalinity (Total as CaCO3)	mg/L	230	1.0	8780095	240	1.0	8780095
Dissolved Chloride (Cl-)	mg/L	63	1.0	8780070	63	1.0	8780070
Nitrite (N)	mg/L	<0.010	0.010	8780037	<0.010	0.010	8780037
Nitrate (N)	mg/L	<0.10	0.10	8780037	<0.10	0.10	8780037

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.
(3) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3K2251
Report Date: 2023/07/24

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: LV

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WIJ411			WIJ412		
Sampling Date		2023/07/06 15:56			2023/07/06 08:00		
COC Number		729504			729504		
	UNITS	**MWS-14-06**	**RDL**	**QC Batch**	**Duplicate 6**	**RDL**	**QC Batch**
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8780037	<0.10	0.10	8780037

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WIJ411		WIJ412			WIJ412		
Sampling Date		2023/07/06 15:56		2023/07/06 08:00			2023/07/06 08:00		
COC Number		729504		729504			729504		
	UNITS	MWS-14-06	RDL	Duplicate 6	RDL	QC Batch	Duplicate 6 Lab-Dup	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	mg/L	0.0022	0.0005	0.0057	0.0005	8800631			
. Aluminum (Al)	mg/L	4.52	0.01	4.96	0.0025	8795285			
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	0.0001	0.0001	8800631			
. Antimony (Sb)	mg/L	<0.0005	0.0005	<0.0005	0.0005	8795285			
Dissolved Arsenic (As)	mg/L	0.0047	0.0001	0.0048	0.0001	8800631			
. Arsenic (As)	mg/L	0.0303	0.0005	0.0233	0.0005	8795285			
Dissolved Barium (Ba)	mg/L	0.0438	0.0002	0.0446	0.0002	8800631			
. Barium (Ba)	mg/L	0.131	0.001	0.116	0.001	8795285			
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	<0.00005	0.00005	8800631			
. Beryllium (Be)	mg/L	0.00111	0.00025	0.00096	0.00025	8795285			
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8800631			
. Bismuth (Bi)	mg/L	<0.0005	0.0005	<0.0005	0.0005	8795285			
Dissolved Boron (B)	mg/L	0.023	0.001	0.023	0.001	8800631			
. Boron (B)	mg/L	0.025	0.005	0.025	0.005	8795285			
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	<0.00001	0.00001	8800631			
. Cadmium (Cd)	mg/L	0.000463	0.000025	0.000560	0.000025	8795285			
Dissolved Calcium (Ca)	mg/L	96.1	0.1	97.1	0.1	8800631			
. Calcium (Ca)	mg/L	144	0.1	135	0.1	8795285			
Dissolved Cesium (Cs)	mg/L	0.00013	0.00002	0.00013	0.00002	8800631			
. Cesium (Cs)	mg/L	0.0014	0.0001	0.0017	0.0001	8795285			
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	<0.0005	0.0005	8800631			
. Chromium (Cr)	mg/L	0.0161	0.0025	0.0171	0.0025	8795285			
Dissolved Cobalt (Co)	mg/L	0.00254	0.00005	0.00260	0.00005	8800631			
. Cobalt (Co)	mg/L	0.0250	0.00025	0.0291	0.00025	8795285			
Dissolved Copper (Cu)	mg/L	0.0004	0.0001	0.0010	0.0001	8800631			
. Copper (Cu)	mg/L	0.120	0.0005	0.160	0.0005	8795285			
Dissolved Iron (Fe)	mg/L	0.422	0.005	0.448	0.005	8800631			
. Iron (Fe)	mg/L	18.8	0.025	15.4	0.025	8795285			
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	0.00018	0.00005	8800631			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WIJ411		WIJ412			WIJ412		
Sampling Date		2023/07/06 15:56		2023/07/06 08:00			2023/07/06 08:00		
COC Number		729504		729504			729504		
	UNITS	MWS-14-06	RDL	Duplicate 6	RDL	QC Batch	Duplicate 6 Lab-Dup	RDL	QC Batch
. Lead (Pb)	mg/L	0.0275	0.00025	0.0286	0.00025	8795285			
Dissolved Lithium (Li)	mg/L	0.0033	0.0005	0.0034	0.0005	8800631			
. Lithium (Li)	mg/L	0.0097	0.0025	0.0093	0.0025	8795285			
Dissolved Magnesium (Mg)	mg/L	18.9	0.005	19.5	0.005	8800631			
. Magnesium (Mg)	mg/L	26.9	0.025	25.5	0.025	8795285			
Dissolved Manganese (Mn)	mg/L	0.971	0.0002	0.971	0.0002	8800631			
. Manganese (Mn)	mg/L	1.45	0.001	1.35	0.001	8795285			
Mercury (Hg)	mg/L	<0.00010	0.00010	0.00014	0.00010	8786200			
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	<0.01	0.01	8780844			
Dissolved Molybdenum (Mo)	mg/L	0.00376	0.00005	0.00373	0.00005	8800631			
. Molybdenum (Mo)	mg/L	0.00059	0.00025	0.00052	0.00025	8795285			
Dissolved Nickel (Ni)	mg/L	0.0012	0.0001	0.0012	0.0001	8800631			
. Nickel (Ni)	mg/L	0.0468	0.0005	0.0515	0.0005	8795285			
Dissolved Phosphorus (P)	mg/L	<0.005	0.005	<0.005	0.005	8800631			
. Phosphorus (P)	mg/L	0.643	0.025	0.539	0.025	8795285			
Dissolved Potassium (K)	mg/L	1.74	0.02	1.75	0.02	8800631			
. Potassium (K)	mg/L	2.8	0.1	2.6	0.1	8795285			
Dissolved Rubidium (Rb)	mg/L	0.00232	0.00002	0.00232	0.00002	8800631			
. Rubidium (Rb)	mg/L	0.0100	0.0001	0.0092	0.0001	8795285			
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	<0.0002	0.0002	8800631			
. Selenium (Se)	mg/L	<0.00025	0.00025	<0.00025	0.00025	8795285			
Dissolved Silicon (Si)	mg/L	5.31	0.025	5.35	0.025	8800631			
. Silicon (Si)	mg/L	13.3	0.025	12.2	0.025	8795285			
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	<0.00001	0.00001	8800631			
. Silver (Ag)	mg/L	<0.00005	0.00005	<0.00005	0.00005	8795285			
Dissolved Sodium (Na)	mg/L	22.0	0.01	22.0	0.01	8800631			
. Sodium (Na)	mg/L	24.7	0.05	23.2	0.05	8795285			
Dissolved Strontium (Sr)	mg/L	0.308	0.0001	0.313	0.0001	8800631			
. Strontium (Sr)	mg/L	0.369	0.0005	0.355	0.0005	8795285			
Dissolved Sulphur (S)	mg/L	12	0.5	12	0.5	8781765	12	0.5	8781765

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3K2251
Report Date: 2023/07/24

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: LV

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WIJ411		WIJ412			WIJ412		
Sampling Date		2023/07/06 15:56		2023/07/06 08:00			2023/07/06 08:00		
COC Number		729504		729504			729504		
	UNITS	MWS-14-06	RDL	Duplicate 6	RDL	QC Batch	Duplicate 6 Lab-Dup	RDL	QC Batch
Total Sulphur (S)	mg/L	24	0.5	20	0.5	8783176			
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8800631			
. Tellurium (Te)	mg/L	<0.0005	0.0005	<0.0005	0.0005	8795285			
Dissolved Thallium (Tl)	mg/L	0.000013	0.000005	0.000013	0.000005	8800631			
. Thallium (Tl)	mg/L	0.000124	0.000025	0.000105	0.000025	8795285			
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	<0.0002	0.0002	8800631			
. Thorium (Th)	mg/L	<0.001	0.001	<0.001	0.001	8795285			
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8800631			
. Tin (Sn)	mg/L	<0.0005	0.0005	<0.0005	0.0005	8795285			
Dissolved Titanium (Ti)	mg/L	0.0006	0.0005	0.0005	0.0005	8800631			
. Titanium (Ti)	mg/L	0.0613	0.0025	0.0574	0.0025	8795285			
Dissolved Tungsten (W)	mg/L	0.0004	0.0001	0.0004	0.0001	8800631			
. Tungsten (W)	mg/L	<0.0005	0.0005	<0.0005	0.0005	8795285			
Dissolved Uranium (U)	mg/L	0.00233	0.00001	0.00232	0.00001	8800631			
. Uranium (U)	mg/L	0.00616	0.00005	0.00493	0.00005	8795285			
Dissolved Vanadium (V)	mg/L	0.00012	0.00005	0.00013	0.00005	8800631			
. Vanadium (V)	mg/L	0.0128	0.00025	0.0130	0.00025	8795285			
Dissolved Zinc (Zn)	mg/L	0.0378	0.0005	0.0411	0.0005	8800631			
. Zinc (Zn)	mg/L	5.48	0.0025	3.40	0.0025	8795285			
Dissolved Zirconium (Zr)	mg/L	0.0006	0.0001	0.0006	0.0001	8800631			
. Zirconium (Zr)	mg/L	0.0036	0.0005	0.0041	0.0005	8795285			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3K2251
Report Date: 2023/07/24

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: LV

TEST SUMMARY

Bureau Veritas ID: WIJ411
Sample ID: MWS-14-06
Matrix: Ground Water

Collected: 2023/07/06
Shipped:
Received: 2023/07/08

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8788760	N/A	2023/07/14	Brent Boudreau
Alkalinity	AT	8780095	N/A	2023/07/11	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8779920	N/A	2023/07/12	Automated Statchk
Chloride by Automated Colourimetry	KONE	8780070	N/A	2023/07/13	Alina Dobreanu
Conductivity	AT	8780090	N/A	2023/07/11	Kien Tran
Fluoride	ISE	8780096	2023/07/10	2023/07/11	Kien Tran
Hardness (calculated as CaCO3)		8778298	N/A	2023/07/21	Automated Statchk
Mercury in Water by CVAA	CV/AA	8786200	2023/07/13	2023/07/13	Indira HarryPaul
Dissolved Mercury (low level)	CV/AA	8780844	2023/07/11	2023/07/11	Indira HarryPaul
Dissolved Metals Analysis by ICP	ICP	8781765	2023/07/11	2023/07/17	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8800631	N/A	2023/07/21	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8795285	N/A	2023/07/19	Nan Raykha
Total Metals Analysis by ICP	ICP	8783176	2023/07/12	2023/07/13	Suban Kanapathippllai
Cyanide (Free)	SPEC	8790102	N/A	2023/07/13	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8809361	2023/07/17	2023/07/17	Ming Dong
Total Phosphorus Low Level Total	KONE	8791484	2023/07/14	2023/07/14	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8781947	N/A	2023/07/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8780037	N/A	2023/07/13	Chandra Nandlal
pH	AT	8780097	2023/07/10	2023/07/11	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/10	Jimmy Liu
Sulphate by Automated Turbidimetry	KONE	8780075	N/A	2023/07/13	Alina Dobreanu
Total Dissolved Solids	BAL	8784831	2023/07/12	2023/07/14	Razieh Tabesh
Field Measured pH	PH	ONSITE	N/A	2023/07/10	Jimmy Liu
Total Kjeldahl Nitrogen in Water	SKAL	8783211	2023/07/12	2023/07/13	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8783414	2023/07/12	2023/07/13	Razieh Tabesh
Turbidity	AT	8779323	N/A	2023/07/11	Gurparteek KAUR

Bureau Veritas ID: WIJ412
Sample ID: Duplicate 6
Matrix: Ground Water

Collected: 2023/07/06
Shipped:
Received: 2023/07/08

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8788760	N/A	2023/07/14	Brent Boudreau
Alkalinity	AT	8780095	N/A	2023/07/11	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	8779920	N/A	2023/07/12	Automated Statchk
Chloride by Automated Colourimetry	KONE	8780070	N/A	2023/07/13	Alina Dobreanu
Conductivity	AT	8780090	N/A	2023/07/11	Kien Tran
Fluoride	ISE	8780096	2023/07/10	2023/07/11	Kien Tran
Hardness (calculated as CaCO3)		8778298	N/A	2023/07/21	Automated Statchk
Mercury in Water by CVAA	CV/AA	8786200	2023/07/13	2023/07/13	Indira HarryPaul
Dissolved Mercury (low level)	CV/AA	8780844	2023/07/11	2023/07/11	Indira HarryPaul
Dissolved Metals Analysis by ICP	ICP	8781765	2023/07/11	2023/07/17	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8800631	N/A	2023/07/21	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8795285	N/A	2023/07/18	Nan Raykha

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3K2251
Report Date: 2023/07/24

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: LV

TEST SUMMARY

Bureau Veritas ID: WIJ412
Sample ID: Duplicate 6
Matrix: Ground Water

Collected: 2023/07/06
Shipped:
Received: 2023/07/08

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals Analysis by ICP	ICP	8783176	2023/07/12	2023/07/13	Suban Kanapathippllai
Cyanide (Free)	SPEC	8790102	N/A	2023/07/13	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8809361	2023/07/17	2023/07/17	Ming Dong
Total Phosphorus Low Level Total	KONE	8791484	2023/07/14	2023/07/14	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8781947	N/A	2023/07/13	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8780037	N/A	2023/07/13	Chandra Nandlal
pH	AT	8780097	2023/07/10	2023/07/11	Kien Tran
Field Measured pH	PH	ONSITE	N/A	2023/07/10	Jimmy Liu
Sulphate by Automated Turbidimetry	KONE	8780075	N/A	2023/07/13	Alina Dobreanu
Total Dissolved Solids	BAL	8784831	2023/07/12	2023/07/14	Razieh Tabesh
Field Measured pH	PH	ONSITE	N/A	2023/07/10	Jimmy Liu
Total Kjeldahl Nitrogen in Water	SKAL	8783211	2023/07/12	2023/07/13	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8783419	2023/07/13	2023/07/13	Tina Teng
Turbidity	AT	8779323	N/A	2023/07/11	Gurparteek KAUR

Bureau Veritas ID: WIJ412 Dup
Sample ID: Duplicate 6
Matrix: Ground Water

Collected: 2023/07/06
Shipped:
Received: 2023/07/08

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals Analysis by ICP	ICP	8781765	2023/07/11	2023/07/17	Suban Kanapathippllai

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	0.3°C

Sample WIJ411 [MWS-14-06] : Acidity sample contained headspace.

Metal Analysis:Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Sample WIJ412 [Duplicate 6] : Acidity sample contained headspace.

Metal Analysis:Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3K2251
Report Date: 2023/07/24

QUALITY ASSURANCE REPORT

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: LV

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8779323	Turbidity	2023/07/11			100	80 - 120	<0.1	NTU	2.7	20		
8780037	Nitrate (N)	2023/07/13	100	80 - 120	97	80 - 120	<0.10	mg/L	NC	20		
8780037	Nitrite (N)	2023/07/13	86	80 - 120	105	80 - 120	<0.010	mg/L	NC	20		
8780070	Dissolved Chloride (Cl-)	2023/07/13	86	80 - 120	93	80 - 120	<1.0	mg/L	17	20		
8780075	Dissolved Sulphate (SO4)	2023/07/13	NC	75 - 125	97	80 - 120	<1.0	mg/L	2.2	20		
8780090	Conductivity	2023/07/11			102	85 - 115	<0.001	mS/cm	0	10		
8780095	Alkalinity (Total as CaCO3)	2023/07/11			96	85 - 115	<1.0	mg/L	1.4	20		
8780096	Fluoride (F-)	2023/07/11	94	80 - 120	97	80 - 120	<0.10	mg/L	NC	20		
8780097	pH	2023/07/11			102	98 - 103			0.52	N/A		
8780844	Dissolved Mercury (Hg)	2023/07/11	99	75 - 125	99	80 - 120	<0.01	ug/L	NC	20		
8781765	Dissolved Sulphur (S)	2023/07/17	NC	80 - 120	105	80 - 120	<0.5	mg/L	0.67	25		
8781947	Total Ammonia-N	2023/07/13	84	75 - 125	102	80 - 120	<0.050	mg/L	0.93	20		
8783176	Total Sulphur (S)	2023/07/13	101	80 - 120	100	80 - 120	<0.5	mg/L				
8783211	Total Kjeldahl Nitrogen (TKN)	2023/07/13	93	80 - 120	103	80 - 120	<0.10	mg/L	NC	20	99	80 - 120
8783414	Total Suspended Solids	2023/07/13			96	85 - 115	<1	mg/L	0	20		
8783419	Total Suspended Solids	2023/07/13			97	85 - 115	<1	mg/L	0	20		
8784831	Total Dissolved Solids	2023/07/14			97	90 - 110	<10	mg/L	0.86	20		
8786200	Mercury (Hg)	2023/07/13	97	75 - 125	102	80 - 120	<0.00010	mg/L	NC	20		
8788760	Acidity	2023/07/14	84	80 - 120	103	80 - 120	<5.0	mg/L	3.6	25		
8790102	Free Cyanide (CN)	2023/07/13	83	80 - 120	85	80 - 120	<2.0	ug/L	4.7	20		
8791484	Total Phosphorus (P)	2023/07/14	113	80 - 120	105	80 - 120	<0.0010	mg/L			90	80 - 120
8795285	. Aluminum (Al)	2023/07/18	NC	80 - 120	102	80 - 120	<0.0005	mg/L	1.5	20		
8795285	. Antimony (Sb)	2023/07/18	115	80 - 120	105	80 - 120	<0.0001	mg/L				
8795285	. Arsenic (As)	2023/07/18	106	80 - 120	100	80 - 120	<0.0001	mg/L				
8795285	. Barium (Ba)	2023/07/18	109	80 - 120	102	80 - 120	<0.0002	mg/L				
8795285	. Beryllium (Be)	2023/07/18	108	80 - 120	100	80 - 120	<0.00005	mg/L				
8795285	. Bismuth (Bi)	2023/07/18	99	80 - 120	99	80 - 120	<0.0001	mg/L				
8795285	. Boron (B)	2023/07/18	102	80 - 120	92	80 - 120	<0.001	mg/L				
8795285	. Cadmium (Cd)	2023/07/18	108	80 - 120	100	80 - 120	<0.000005	mg/L				
8795285	. Calcium (Ca)	2023/07/18	NC	80 - 120	100	80 - 120	<0.02	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8795285	. Cesium (Cs)	2023/07/18	104	80 - 120	101	80 - 120	<0.00002	mg/L				
8795285	. Chromium (Cr)	2023/07/18	102	80 - 120	99	80 - 120	<0.0005	mg/L				
8795285	. Cobalt (Co)	2023/07/18	101	80 - 120	98	80 - 120	<0.00005	mg/L				
8795285	. Copper (Cu)	2023/07/18	108	80 - 120	105	80 - 120	<0.0001	mg/L				
8795285	. Iron (Fe)	2023/07/18	104	80 - 120	101	80 - 120	<0.005	mg/L				
8795285	. Lead (Pb)	2023/07/18	103	80 - 120	100	80 - 120	<0.00005	mg/L				
8795285	. Lithium (Li)	2023/07/18	111	80 - 120	104	80 - 120	<0.0005	mg/L				
8795285	. Magnesium (Mg)	2023/07/18	NC	80 - 120	100	80 - 120	<0.005	mg/L				
8795285	. Manganese (Mn)	2023/07/18	102	80 - 120	100	80 - 120	<0.0002	mg/L				
8795285	. Molybdenum (Mo)	2023/07/18	115	80 - 120	106	80 - 120	<0.00005	mg/L				
8795285	. Nickel (Ni)	2023/07/18	98	80 - 120	98	80 - 120	<0.0001	mg/L				
8795285	. Phosphorus (P)	2023/07/18	119	80 - 120	102	80 - 120	<0.005	mg/L				
8795285	. Potassium (K)	2023/07/18	105	80 - 120	103	80 - 120	<0.02	mg/L				
8795285	. Rubidium (Rb)	2023/07/18	104	80 - 120	101	80 - 120	<0.00002	mg/L				
8795285	. Selenium (Se)	2023/07/18	107	80 - 120	99	80 - 120	<0.00005	mg/L				
8795285	. Silicon (Si)	2023/07/18	106	80 - 120	100	80 - 120	<0.005	mg/L				
8795285	. Silver (Ag)	2023/07/18	105	80 - 120	103	80 - 120	<0.00001	mg/L				
8795285	. Sodium (Na)	2023/07/18	NC	80 - 120	101	80 - 120	<0.01	mg/L				
8795285	. Strontium (Sr)	2023/07/18	NC	80 - 120	99	80 - 120	<0.0001	mg/L				
8795285	. Tellurium (Te)	2023/07/18	111	80 - 120	101	80 - 120	<0.0001	mg/L				
8795285	. Thallium (Tl)	2023/07/18	103	80 - 120	101	80 - 120	<0.000005	mg/L				
8795285	. Thorium (Th)	2023/07/18	104	80 - 120	100	80 - 120	<0.0002	mg/L				
8795285	. Tin (Sn)	2023/07/18	111	80 - 120	104	80 - 120	<0.0001	mg/L				
8795285	. Titanium (Ti)	2023/07/18	101	80 - 120	97	80 - 120	<0.0005	mg/L				
8795285	. Tungsten (W)	2023/07/18	110	80 - 120	104	80 - 120	<0.0001	mg/L				
8795285	. Uranium (U)	2023/07/18	107	80 - 120	101	80 - 120	<0.00001	mg/L				
8795285	. Vanadium (V)	2023/07/18	103	80 - 120	98	80 - 120	<0.00005	mg/L				
8795285	. Zinc (Zn)	2023/07/18	105	80 - 120	99	80 - 120	<0.0005	mg/L				
8795285	. Zirconium (Zr)	2023/07/18	114	80 - 120	104	80 - 120	<0.0001	mg/L				
8800631	Dissolved Aluminum (Al)	2023/07/21	108	80 - 120	102	80 - 120	<0.0005	mg/L	8.7	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8800631	Dissolved Antimony (Sb)	2023/07/21	120	80 - 120	105	80 - 120	<0.0001	mg/L	0.66	20		
8800631	Dissolved Arsenic (As)	2023/07/21	NC	80 - 120	99	80 - 120	<0.0001	mg/L	1.2	20		
8800631	Dissolved Barium (Ba)	2023/07/21	110	80 - 120	101	80 - 120	<0.0002	mg/L	1.6	20		
8800631	Dissolved Beryllium (Be)	2023/07/21	107	80 - 120	104	80 - 120	<0.00005	mg/L	NC	20		
8800631	Dissolved Bismuth (Bi)	2023/07/21	97	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8800631	Dissolved Boron (B)	2023/07/21	NC	80 - 120	99	80 - 120	<0.001	mg/L	15	20		
8800631	Dissolved Cadmium (Cd)	2023/07/21	112	80 - 120	101	80 - 120	<0.00001	mg/L	NC	20		
8800631	Dissolved Calcium (Ca)	2023/07/21	NC	80 - 120	107	80 - 120	<0.02	mg/L	1.6	20		
8800631	Dissolved Cesium (Cs)	2023/07/21	106	80 - 120	98	80 - 120	<0.00002	mg/L	0	N/A		
8800631	Dissolved Chromium (Cr)	2023/07/21	101	80 - 120	102	80 - 120	<0.0005	mg/L	NC	20		
8800631	Dissolved Cobalt (Co)	2023/07/21	101	80 - 120	103	80 - 120	<0.00005	mg/L	1.4	20		
8800631	Dissolved Copper (Cu)	2023/07/21	110	80 - 120	105	80 - 120	<0.0001	mg/L	4.0	20		
8800631	Dissolved Iron (Fe)	2023/07/21	103	80 - 120	102	80 - 120	<0.005	mg/L	1.9	20		
8800631	Dissolved Lead (Pb)	2023/07/21	103	80 - 120	102	80 - 120	<0.00005	mg/L	NC	20		
8800631	Dissolved Lithium (Li)	2023/07/21	116	80 - 120	120	80 - 120	<0.0005	mg/L	3.1	20		
8800631	Dissolved Magnesium (Mg)	2023/07/21	NC	80 - 120	101	80 - 120	<0.005	mg/L	2.7	20		
8800631	Dissolved Manganese (Mn)	2023/07/21	106	80 - 120	100	80 - 120	<0.0002	mg/L	0.61	20		
8800631	Dissolved Molybdenum (Mo)	2023/07/21	129 (1)	80 - 120	107	80 - 120	<0.00005	mg/L	0.81	20		
8800631	Dissolved Nickel (Ni)	2023/07/21	98	80 - 120	97	80 - 120	<0.0001	mg/L	0.52	20		
8800631	Dissolved Phosphorus (P)	2023/07/21	126 (1)	80 - 120	108	80 - 120	<0.005	mg/L	7.3	20		
8800631	Dissolved Potassium (K)	2023/07/21	NC	80 - 120	106	80 - 120	<0.02	mg/L	2.7	20		
8800631	Dissolved Rubidium (Rb)	2023/07/21	106	80 - 120	102	80 - 120	<0.00002	mg/L	NC	N/A		
8800631	Dissolved Selenium (Se)	2023/07/21	103	80 - 120	102	80 - 120	<0.0002	mg/L	NC	20		
8800631	Dissolved Silicon (Si)	2023/07/21	NC	80 - 120	108	80 - 120	<0.005	mg/L	4.9	20		
8800631	Dissolved Silver (Ag)	2023/07/21	55 (1)	80 - 120	104	80 - 120	<0.00001	mg/L	NC	20		
8800631	Dissolved Sodium (Na)	2023/07/21	NC	80 - 120	99	80 - 120	<0.01	mg/L	0.74	20		
8800631	Dissolved Strontium (Sr)	2023/07/21	NC	80 - 120	101	80 - 120	<0.0001	mg/L	0.55	20		
8800631	Dissolved Tellurium (Te)	2023/07/21	120	80 - 120	106	80 - 120	<0.0001	mg/L	NC	20		
8800631	Dissolved Thallium (Tl)	2023/07/21	105	80 - 120	103	80 - 120	<0.000005	mg/L	NC	20		
8800631	Dissolved Thorium (Th)	2023/07/21	101	80 - 120	97	80 - 120	<0.0002	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8800631	Dissolved Tin (Sn)	2023/07/21	121 (1)	80 - 120	105	80 - 120	<0.0001	mg/L	5.1	20		
8800631	Dissolved Titanium (Ti)	2023/07/21	108	80 - 120	104	80 - 120	<0.0005	mg/L	NC	20		
8800631	Dissolved Tungsten (W)	2023/07/21	NC	80 - 120	102	80 - 120	<0.0001	mg/L	0.36	20		
8800631	Dissolved Uranium (U)	2023/07/21	105	80 - 120	101	80 - 120	<0.00001	mg/L	8.7	20		
8800631	Dissolved Vanadium (V)	2023/07/21	105	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8800631	Dissolved Zinc (Zn)	2023/07/21	107	80 - 120	101	80 - 120	<0.0005	mg/L	NC	20		
8800631	Dissolved Zirconium (Zr)	2023/07/21	119	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		
8809361	Strong Acid Dissoc. Cyanide (CN)	2023/07/17	90	80 - 120	98	80 - 120	<0.00050	mg/L				

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Metal Analysis:Matrix Spike exceeds acceptance limits, probable matrix interference

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3K2251
Report Date: 2023/07/24

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: LV

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Colleen Acker, B.Sc, Scientific Service Specialist

<original signed by>

Cristina Carriere, Senior Scientific Specialist

<original signed by>

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 737168

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/14
Report #: R7764462
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3L8153
Received: 2023/07/20, 16:39

Sample Matrix: Ground Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	1	N/A	2023/08/02	ATL SOP-00205	SM 24 2310B m
Alkalinity	1	N/A	2023/08/02	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	1	N/A	2023/08/02	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	1	N/A	2023/08/02	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	1	N/A	2023/08/01	CAM SOP-00414	SM 23 2510 m
Fluoride	1	2023/07/31	2023/08/01	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	1	N/A	2023/07/28	CAM SOP 00102/00408/00447	SM 2340 B
Dissolved Mercury (low level)	1	2023/07/27	2023/07/27	CAM SOP-00453	EPA 7470 m
Mercury (low level)	1	2023/07/27	2023/07/27	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	1	2023/07/27	2023/07/28	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	1	N/A	2023/07/28	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	1	N/A	2023/07/31	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	1	2023/07/27	2023/07/28	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	1	N/A	2023/08/01	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	1	2023/07/31	2023/07/31	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	1	2023/08/01	2023/08/14	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	1	N/A	2023/07/27	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (3)	1	N/A	2023/08/02	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	1	2023/07/31	2023/08/02	CAM SOP-00413	SM 4500H+ B m
Sulphate by Automated Turbidimetry	1	N/A	2023/08/02	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	1	2023/07/26	2023/07/27	CAM SOP-00428	SM 23 2540C m
Total Kjeldahl Nitrogen in Water	1	2023/07/26	2023/07/27	CAM SOP-00938	OMOE E3516 m
Turbidity	1	N/A	2023/07/26	CAM SOP-00417	SM 23 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 737168

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/14
Report #: R7764462
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3L8153
Received: 2023/07/20, 16:39

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WLR815		
Sampling Date		2023/07/06 13:16		
COC Number		737168		
	UNITS	**DPC**	**RDL**	**QC Batch**
Calculated Parameters				
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	410	1.0	8822389
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.5	1.0	8822389
Hardness (CaCO3)	mg/L	410	1.0	8806004
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8822389
Inorganics				
Acidity	mg/L	<5.6	5.6	8828085
Total Ammonia-N	mg/L	7.0	0.050	8814293
Conductivity	mS/cm	0.739	0.001	8824324
Free Cyanide (CN)	ug/L	6.6 (1)	2.0	8833238
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.00095 (2)	0.00050	8852235
Total Dissolved Solids	mg/L	480	10	8812448
Fluoride (F-)	mg/L	0.20	0.10	8824323
Total Kjeldahl Nitrogen (TKN)	mg/L	7.3	0.20	8814253
pH	pH	7.81		8824099
Total Phosphorus (P)	mg/L	0.23	0.0010	8852234
Dissolved Sulphate (SO4)	mg/L	<1.0	1.0	8823998
Turbidity	NTU	100	0.1	8814147
Alkalinity (Total as CaCO3)	mg/L	410	1.0	8824109
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	8823994
Nitrite (N)	mg/L	<0.010	0.010	8823976
Nitrate (N)	mg/L	<0.10	0.10	8823976
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8823976

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WLR815			WLR815		
Sampling Date		2023/07/06 13:16			2023/07/06 13:16		
COC Number		737168			737168		
	UNITS	DPC	RDL	QC Batch	DPC Lab-Dup	RDL	QC Batch
Metals							
Dissolved Aluminum (Al)	mg/L	0.0090	0.0025	8814597			
. Aluminum (Al)	mg/L	0.0137	0.0025	8823442			
Dissolved Antimony (Sb)	mg/L	<0.0005	0.0005	8814597			
. Antimony (Sb)	mg/L	0.0004	0.0001	8823442			
Dissolved Arsenic (As)	mg/L	0.0022	0.0005	8814597			
. Arsenic (As)	mg/L	0.0023	0.0001	8823442			
Dissolved Barium (Ba)	mg/L	1.28	0.001	8814597			
. Barium (Ba)	mg/L	4.04	0.002	8823442			
Dissolved Beryllium (Be)	mg/L	<0.00025	0.00025	8814597			
. Beryllium (Be)	mg/L	<0.00005	0.00005	8823442			
Dissolved Bismuth (Bi)	mg/L	<0.0005	0.0005	8814597			
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8823442			
Dissolved Boron (B)	mg/L	0.057	0.005	8814597			
. Boron (B)	mg/L	0.280	0.001	8823442			
Dissolved Cadmium (Cd)	mg/L	<0.00005	0.00005	8814597			
. Cadmium (Cd)	mg/L	0.000011	0.000005	8823442			
Dissolved Calcium (Ca)	mg/L	127	0.1	8814597			
. Calcium (Ca)	mg/L	133	0.1	8823442			
Dissolved Cesium (Cs)	mg/L	<0.0001	0.0001	8814597			
. Cesium (Cs)	mg/L	<0.00002	0.00002	8823442			
Dissolved Chromium (Cr)	mg/L	<0.0025	0.0025	8814597			
. Chromium (Cr)	mg/L	<0.0005	0.0005	8823442			
Dissolved Cobalt (Co)	mg/L	0.00150	0.00025	8814597			
. Cobalt (Co)	mg/L	0.00173	0.00005	8823442			
Dissolved Copper (Cu)	mg/L	0.0030	0.0005	8814597			
. Copper (Cu)	mg/L	0.0015	0.0001	8823442			
Dissolved Iron (Fe)	mg/L	17.8	0.025	8814597			
. Iron (Fe)	mg/L	4.12	0.005	8823442			
Dissolved Lead (Pb)	mg/L	<0.00025	0.00025	8814597			
. Lead (Pb)	mg/L	0.00013	0.00005	8823442			
Dissolved Lithium (Li)	mg/L	<0.0025	0.0025	8814597			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WLR815			WLR815		
Sampling Date		2023/07/06 13:16			2023/07/06 13:16		
COC Number		737168			737168		
	UNITS	DPC	RDL	QC Batch	DPC Lab-Dup	RDL	QC Batch
. Lithium (Li)	mg/L	0.0019	0.0005	8823442			
Dissolved Magnesium (Mg)	mg/L	22.4	0.025	8814597			
. Magnesium (Mg)	mg/L	24.3	0.005	8823442			
Dissolved Manganese (Mn)	mg/L	1.13	0.001	8814597			
. Manganese (Mn)	mg/L	1.50	0.001	8823442			
Mercury (Hg)	ug/L	<0.01	0.01	8816413	<0.01	0.01	8816413
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8816293			
Dissolved Molybdenum (Mo)	mg/L	0.00036	0.00025	8814597			
. Molybdenum (Mo)	mg/L	0.00084	0.00005	8823442			
Dissolved Nickel (Ni)	mg/L	0.0076	0.0005	8814597			
. Nickel (Ni)	mg/L	0.0044	0.0001	8823442			
Dissolved Phosphorus (P)	mg/L	0.107	0.025	8814597			
. Phosphorus (P)	mg/L	0.013	0.005	8823442			
Dissolved Potassium (K)	mg/L	1.1	0.1	8814597			
. Potassium (K)	mg/L	1.62	0.02	8823442			
Dissolved Rubidium (Rb)	mg/L	0.0017	0.0001	8814597			
. Rubidium (Rb)	mg/L	0.00232	0.00002	8823442			
Dissolved Selenium (Se)	mg/L	<0.001	0.001	8814597			
. Selenium (Se)	mg/L	0.00006	0.00005	8823442			
Dissolved Silicon (Si)	mg/L	11.0	0.025	8814597			
. Silicon (Si)	mg/L	8.72	0.025	8823442			
Dissolved Silver (Ag)	mg/L	<0.00005	0.00005	8814597			
. Silver (Ag)	mg/L	<0.00001	0.00001	8823442			
Dissolved Sodium (Na)	mg/L	5.56	0.05	8814597			
. Sodium (Na)	mg/L	7.69	0.01	8823442			
Dissolved Strontium (Sr)	mg/L	0.179	0.0005	8814597			
. Strontium (Sr)	mg/L	0.223	0.0001	8823442			
Dissolved Sulphur (S)	mg/L	<0.5	0.5	8816610	<0.5	0.5	8816610
Total Sulphur (S)	mg/L	0.7	0.5	8816778	0.6	0.5	8816778
Dissolved Tellurium (Te)	mg/L	<0.0005	0.0005	8814597			
. Tellurium (Te)	mg/L	<0.0001	0.0001	8823442			
Dissolved Thallium (Tl)	mg/L	<0.000025	0.000025	8814597			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WLR815			WLR815		
Sampling Date		2023/07/06 13:16			2023/07/06 13:16		
COC Number		737168			737168		
	UNITS	DPC	RDL	QC Batch	DPC Lab-Dup	RDL	QC Batch
. Thallium (Tl)	mg/L	<0.000005	0.000005	8823442			
Dissolved Thorium (Th)	mg/L	<0.001	0.001	8814597			
. Thorium (Th)	mg/L	<0.0002	0.0002	8823442			
Dissolved Tin (Sn)	mg/L	<0.0005	0.0005	8814597			
. Tin (Sn)	mg/L	<0.0001	0.0001	8823442			
Dissolved Titanium (Ti)	mg/L	<0.0025	0.0025	8814597			
. Titanium (Ti)	mg/L	0.0011	0.0005	8823442			
Dissolved Tungsten (W)	mg/L	<0.0005	0.0005	8814597			
. Tungsten (W)	mg/L	<0.0001	0.0001	8823442			
Dissolved Uranium (U)	mg/L	0.00010	0.00005	8814597			
. Uranium (U)	mg/L	0.00029	0.00001	8823442			
Dissolved Vanadium (V)	mg/L	<0.00025	0.00025	8814597			
. Vanadium (V)	mg/L	0.00011	0.00005	8823442			
Dissolved Zinc (Zn)	mg/L	0.652	0.0025	8814597			
. Zinc (Zn)	mg/L	0.792	0.001	8823442			
Dissolved Zirconium (Zr)	mg/L	<0.0005	0.0005	8814597			
. Zirconium (Zr)	mg/L	<0.0001	0.0001	8823442			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WLR815
Sample ID: DPC
Matrix: Ground Water

Collected: 2023/07/06
Shipped:
Received: 2023/07/20

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8828085	N/A	2023/08/02	Brent Boudreau
Alkalinity	AT	8824109	N/A	2023/08/02	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	8822389	N/A	2023/08/02	Automated Statchk
Chloride by Automated Colourimetry	KONE	8823994	N/A	2023/08/02	Massarat Jan
Conductivity	AT	8824324	N/A	2023/08/01	Yogesh Patel
Fluoride	ISE	8824323	2023/07/31	2023/08/01	Yogesh Patel
Hardness (calculated as CaCO3)		8806004	N/A	2023/07/28	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8816293	2023/07/27	2023/07/27	Gagandeep Rai
Mercury (low level)	CV/AA	8816413	2023/07/27	2023/07/27	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8816610	2023/07/27	2023/07/28	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8814597	N/A	2023/07/28	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8823442	N/A	2023/07/31	Thuy Linh Nguyen
Total Metals Analysis by ICP	ICP	8816778	2023/07/27	2023/07/28	Suban Kanapathippllai
Cyanide (Free)	SPEC	8833238	N/A	2023/08/01	Dafne Strozake Maximo
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8852235	2023/07/31	2023/07/31	Ming Dong
Total Phosphorus Low Level Total	KONE	8852234	2023/08/01	2023/08/14	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8814293	N/A	2023/07/27	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8823976	N/A	2023/08/02	Chandra Nandlal
pH	AT	8824099	2023/07/31	2023/08/02	Yogesh Patel
Sulphate by Automated Turbidimetry	KONE	8823998	N/A	2023/08/02	Massarat Jan
Total Dissolved Solids	BAL	8812448	2023/07/26	2023/07/27	Tina Teng
Total Kjeldahl Nitrogen in Water	SKAL	8814253	2023/07/26	2023/07/27	Kruti Jitesh Patel
Turbidity	AT	8814147	N/A	2023/07/26	Leily Karimi

Bureau Veritas ID: WLR815 Dup
Sample ID: DPC
Matrix: Ground Water

Collected: 2023/07/06
Shipped:
Received: 2023/07/20

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury (low level)	CV/AA	8816413	2023/07/27	2023/07/27	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8816610	2023/07/27	2023/07/28	Suban Kanapathippllai
Total Metals Analysis by ICP	ICP	8816778	2023/07/27	2023/07/28	Suban Kanapathippllai

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	8.7°C

Sample received past hold time for Turbidity analysis, proceeded with client consent.

Sample WLR815 [DPC] : Metals Analysis: Due to the sample matrix, the sample required dilution. Detection limits were adjusted accordingly.
Acidity sample contained headspace.
Acidity: Sample integrity may have been compromised, sample received past hold time. Sample was analyzed past method specified hold time for Cyanide (total). Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised. Sample was analyzed past method specified hold time for Cyanide (Free).

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8812448	Total Dissolved Solids	2023/07/27			95	90 - 110	<10	mg/L	0.13	20		
8814147	Turbidity	2023/07/26			100	80 - 120	<0.1	NTU	2.6	20		
8814253	Total Kjeldahl Nitrogen (TKN)	2023/07/27	87	80 - 120	91	80 - 120	<0.10	mg/L	6.2	20	98	80 - 120
8814293	Total Ammonia-N	2023/07/27	99	75 - 125	97	80 - 120	<0.050	mg/L	NC	20		
8814597	Dissolved Aluminum (Al)	2023/07/28	119	80 - 120	99	80 - 120	<0.0005	mg/L	3.6	20		
8814597	Dissolved Antimony (Sb)	2023/07/28	112	80 - 120	109	80 - 120	<0.0001	mg/L	2.5	20		
8814597	Dissolved Arsenic (As)	2023/07/28	103	80 - 120	100	80 - 120	<0.0001	mg/L	1.1	20		
8814597	Dissolved Barium (Ba)	2023/07/28	105	80 - 120	97	80 - 120	<0.0002	mg/L	4.5	20		
8814597	Dissolved Beryllium (Be)	2023/07/28	92	80 - 120	95	80 - 120	<0.00005	mg/L	NC	20		
8814597	Dissolved Bismuth (Bi)	2023/07/28	85	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8814597	Dissolved Boron (B)	2023/07/28	NC	80 - 120	97	80 - 120	<0.001	mg/L	5.6	20		
8814597	Dissolved Cadmium (Cd)	2023/07/28	102	80 - 120	99	80 - 120	<0.00001	mg/L	NC	20		
8814597	Dissolved Calcium (Ca)	2023/07/28	NC	80 - 120	104	80 - 120	<0.02	mg/L	6.6	20		
8814597	Dissolved Cesium (Cs)	2023/07/28	111	80 - 120	103	80 - 120	<0.00002	mg/L	NC	N/A		
8814597	Dissolved Chromium (Cr)	2023/07/28	107	80 - 120	100	80 - 120	<0.0005	mg/L	NC	20		
8814597	Dissolved Cobalt (Co)	2023/07/28	101	80 - 120	101	80 - 120	<0.00005	mg/L	1.4	20		
8814597	Dissolved Copper (Cu)	2023/07/28	111	80 - 120	99	80 - 120	<0.0001	mg/L	4.9	20		
8814597	Dissolved Iron (Fe)	2023/07/28	106	80 - 120	103	80 - 120	<0.005	mg/L	0.12	20		
8814597	Dissolved Lead (Pb)	2023/07/28	95	80 - 120	100	80 - 120	<0.00005	mg/L	NC	20		
8814597	Dissolved Lithium (Li)	2023/07/28	103	80 - 120	101	80 - 120	<0.0005	mg/L	2.3	20		
8814597	Dissolved Magnesium (Mg)	2023/07/28	NC	80 - 120	100	80 - 120	<0.005	mg/L	2.5	20		
8814597	Dissolved Manganese (Mn)	2023/07/28	108	80 - 120	101	80 - 120	<0.0002	mg/L	1.4	20		
8814597	Dissolved Molybdenum (Mo)	2023/07/28	119	80 - 120	103	80 - 120	<0.00005	mg/L	1.7	20		
8814597	Dissolved Nickel (Ni)	2023/07/28	97	80 - 120	101	80 - 120	<0.0001	mg/L	1.8	20		
8814597	Dissolved Phosphorus (P)	2023/07/28	117	80 - 120	108	80 - 120	<0.005	mg/L	11	20		
8814597	Dissolved Potassium (K)	2023/07/28	NC	80 - 120	100	80 - 120	<0.02	mg/L	3.2	20		
8814597	Dissolved Rubidium (Rb)	2023/07/28	105	80 - 120	102	80 - 120	<0.00002	mg/L	1.5	N/A		
8814597	Dissolved Selenium (Se)	2023/07/28	104	80 - 120	106	80 - 120	<0.0002	mg/L	NC	20		
8814597	Dissolved Silicon (Si)	2023/07/28	121 (1)	80 - 120	98	80 - 120	<0.005	mg/L	8.6	20		
8814597	Dissolved Silver (Ag)	2023/07/28	96	80 - 120	105	80 - 120	<0.00001	mg/L	NC	20		
8814597	Dissolved Sodium (Na)	2023/07/28	NC	80 - 120	101	80 - 120	<0.01	mg/L	1.6	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8814597	Dissolved Strontium (Sr)	2023/07/28	NC	80 - 120	103	80 - 120	<0.0001	mg/L	2.2	20		
8814597	Dissolved Tellurium (Te)	2023/07/28	105	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8814597	Dissolved Thallium (Tl)	2023/07/28	96	80 - 120	102	80 - 120	<0.000005	mg/L	NC	20		
8814597	Dissolved Thorium (Th)	2023/07/28	100	80 - 120	100	80 - 120	<0.0002	mg/L	NC	20		
8814597	Dissolved Tin (Sn)	2023/07/28	113	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8814597	Dissolved Titanium (Ti)	2023/07/28	113	80 - 120	98	80 - 120	<0.0005	mg/L	NC	20		
8814597	Dissolved Tungsten (W)	2023/07/28	107	80 - 120	106	80 - 120	<0.0001	mg/L	3.7	20		
8814597	Dissolved Uranium (U)	2023/07/28	99	80 - 120	101	80 - 120	<0.00001	mg/L	0	20		
8814597	Dissolved Vanadium (V)	2023/07/28	113	80 - 120	101	80 - 120	<0.00005	mg/L	0.30	20		
8814597	Dissolved Zinc (Zn)	2023/07/28	93	80 - 120	101	80 - 120	<0.0005	mg/L	1.1	20		
8814597	Dissolved Zirconium (Zr)	2023/07/28	131 (1)	80 - 120	105	80 - 120	<0.0001	mg/L	NC	20		
8816293	Dissolved Mercury (Hg)	2023/07/27	105	75 - 125	109	80 - 120	<0.01	ug/L	NC	20		
8816413	Mercury (Hg)	2023/07/27	105	75 - 125	107	80 - 120	<0.01	ug/L	NC	20		
8816610	Dissolved Sulphur (S)	2023/07/28	100	80 - 120	96	80 - 120	<0.5	mg/L	NC	25		
8816778	Total Sulphur (S)	2023/07/28	102	80 - 120	98	80 - 120	<0.5	mg/L	7.6	25		
8823442	. Aluminum (Al)	2023/07/31	NC	80 - 120	97	80 - 120	<0.0005	mg/L	1.7	20		
8823442	. Antimony (Sb)	2023/07/31	111	80 - 120	104	80 - 120	<0.0001	mg/L				
8823442	. Arsenic (As)	2023/07/31	104	80 - 120	99	80 - 120	<0.0001	mg/L				
8823442	. Barium (Ba)	2023/07/31	102	80 - 120	99	80 - 120	<0.0002	mg/L				
8823442	. Beryllium (Be)	2023/07/31	99	80 - 120	93	80 - 120	<0.00005	mg/L				
8823442	. Bismuth (Bi)	2023/07/31	96	80 - 120	100	80 - 120	<0.0001	mg/L				
8823442	. Boron (B)	2023/07/31	96	80 - 120	91	80 - 120	<0.001	mg/L				
8823442	. Cadmium (Cd)	2023/07/31	107	80 - 120	99	80 - 120	<0.000005	mg/L				
8823442	. Calcium (Ca)	2023/07/31	NC	80 - 120	100	80 - 120	<0.02	mg/L				
8823442	. Cesium (Cs)	2023/07/31	95	80 - 120	94	80 - 120	<0.00002	mg/L				
8823442	. Chromium (Cr)	2023/07/31	101	80 - 120	100	80 - 120	<0.0005	mg/L				
8823442	. Cobalt (Co)	2023/07/31	102	80 - 120	106	80 - 120	<0.00005	mg/L				
8823442	. Copper (Cu)	2023/07/31	108	80 - 120	102	80 - 120	<0.0001	mg/L				
8823442	. Iron (Fe)	2023/07/31	107	80 - 120	105	80 - 120	<0.005	mg/L				
8823442	. Lead (Pb)	2023/07/31	102	80 - 120	103	80 - 120	<0.00005	mg/L				
8823442	. Lithium (Li)	2023/07/31	113	80 - 120	105	80 - 120	<0.0005	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8823442	. Magnesium (Mg)	2023/07/31	NC	80 - 120	102	80 - 120	<0.005	mg/L				
8823442	. Manganese (Mn)	2023/07/31	102	80 - 120	100	80 - 120	<0.0002	mg/L				
8823442	. Molybdenum (Mo)	2023/07/31	110	80 - 120	102	80 - 120	<0.00005	mg/L				
8823442	. Nickel (Ni)	2023/07/31	101	80 - 120	101	80 - 120	<0.0001	mg/L				
8823442	. Phosphorus (P)	2023/07/31	109	80 - 120	99	80 - 120	<0.005	mg/L				
8823442	. Potassium (K)	2023/07/31	107	80 - 120	104	80 - 120	<0.02	mg/L				
8823442	. Rubidium (Rb)	2023/07/31	103	80 - 120	103	80 - 120	<0.00002	mg/L				
8823442	. Selenium (Se)	2023/07/31	106	80 - 120	100	80 - 120	<0.00005	mg/L				
8823442	. Silicon (Si)	2023/07/31	102	80 - 120	97	80 - 120	<0.005	mg/L				
8823442	. Silver (Ag)	2023/07/31	106	80 - 120	103	80 - 120	<0.00001	mg/L				
8823442	. Sodium (Na)	2023/07/31	NC	80 - 120	104	80 - 120	<0.01	mg/L				
8823442	. Strontium (Sr)	2023/07/31	NC	80 - 120	98	80 - 120	<0.0001	mg/L				
8823442	. Tellurium (Te)	2023/07/31	107	80 - 120	94	80 - 120	<0.0001	mg/L				
8823442	. Thallium (Tl)	2023/07/31	103	80 - 120	107	80 - 120	<0.000005	mg/L				
8823442	. Thorium (Th)	2023/07/31	101	80 - 120	102	80 - 120	<0.0002	mg/L				
8823442	. Tin (Sn)	2023/07/31	111	80 - 120	103	80 - 120	<0.0001	mg/L				
8823442	. Titanium (Ti)	2023/07/31	102	80 - 120	97	80 - 120	<0.0005	mg/L				
8823442	. Tungsten (W)	2023/07/31	107	80 - 120	106	80 - 120	<0.0001	mg/L				
8823442	. Uranium (U)	2023/07/31	109	80 - 120	103	80 - 120	<0.00001	mg/L				
8823442	. Vanadium (V)	2023/07/31	102	80 - 120	98	80 - 120	<0.00005	mg/L				
8823442	. Zinc (Zn)	2023/07/31	104	80 - 120	103	80 - 120	<0.0005	mg/L				
8823442	. Zirconium (Zr)	2023/07/31	108	80 - 120	98	80 - 120	<0.0001	mg/L				
8823976	Nitrate (N)	2023/08/02	95	80 - 120	96	80 - 120	<0.10	mg/L	NC	20		
8823976	Nitrite (N)	2023/08/02	104	80 - 120	105	80 - 120	<0.010	mg/L	NC	20		
8823994	Dissolved Chloride (Cl-)	2023/08/02	NC	80 - 120	100	80 - 120	<1.0	mg/L	3.5	20		
8823998	Dissolved Sulphate (SO4)	2023/08/02	NC	75 - 125	104	80 - 120	<1.0	mg/L	0.82	20		
8824099	pH	2023/08/01			102	98 - 103			0.028	N/A		
8824109	Alkalinity (Total as CaCO3)	2023/08/01			96	85 - 115	<1.0	mg/L	1.1	20		
8824323	Fluoride (F-)	2023/08/01	101	80 - 120	98	80 - 120	<0.10	mg/L	3.3	20		
8824324	Conductivity	2023/08/01			100	85 - 115	<0.001	mS/cm	0	10		
8828085	Acidity	2023/08/02	96	80 - 120	104	80 - 120	<5.0	mg/L	NC	25		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8833238	Free Cyanide (CN)	2023/08/01	99	80 - 120	102	80 - 120	<2.0	ug/L				
8852234	Total Phosphorus (P)	2023/08/14			111	80 - 120	<0.0010	mg/L			92	N/A
8852235	Strong Acid Dissoc. Cyanide (CN)	2023/07/31	85	80 - 120	98	80 - 120	<0.00050	mg/L				

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix spike exceedes acceptance limits. Probable matrix interference.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Anastassia Hamanov, Scientific Specialist

<original signed by>

Colleen Acker, B.Sc, Scientific Service Specialist

<original signed by>

Cristina Carriere, Senior Scientific Specialist

<original signed by>

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 744715

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/28
Report #: R7785370
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3N6265
Received: 2023/08/03, 16:28

Sample Matrix: Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	6	N/A	2023/08/17	ATL SOP-00205	SM 24 2310B m
Acidity (CaCO3) in water (1)	1	N/A	2023/08/18	ATL SOP-00205	SM 24 2310B m
Alkalinity	7	N/A	2023/08/10	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	7	N/A	2023/08/11	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	7	N/A	2023/08/09	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	7	N/A	2023/08/10	CAM SOP-00414	SM 23 2510 m
Fluoride	7	2023/08/08	2023/08/10	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	6	N/A	2023/08/16	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO3)	1	N/A	2023/08/17	CAM SOP 00102/00408/00447	SM 2340 B
Mercury in Water by CVAA	2	2023/08/10	2023/08/11	CAM SOP-00453	EPA 7470A m
Dissolved Mercury (low level)	7	2023/08/09	2023/08/09	CAM SOP-00453	EPA 7470 m
Mercury (low level)	3	2023/08/10	2023/08/11	CAM SOP-00453	EPA 7470 m
Mercury (low level)	2	2023/08/09	2023/08/09	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	7	2023/08/08	2023/08/11	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	3	N/A	2023/08/15	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS (low level)	2	N/A	2023/08/16	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS (low level)	2	N/A	2023/08/25	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	5	N/A	2023/08/15	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	2	N/A	2023/08/25	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	7	2023/08/09	2023/08/10	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	7	N/A	2023/08/10	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	4	2023/08/14	2023/08/14	CAL SOP-00270	SM 23 4500-CN m
Cyanide, Strong Acid Dissociable (SAD) (2)	3	2023/08/14	2023/08/15	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	7	2023/08/12	2023/08/12	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	7	N/A	2023/08/10	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (3)	5	N/A	2023/08/08	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Nitrate & Nitrite as Nitrogen in Water (3)	2	N/A	2023/08/09	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	7	2023/08/08	2023/08/10	CAM SOP-00413	SM 4500H+ B m
Sulphate by Automated Turbidimetry	1	N/A	2023/08/21	CAM SOP-00464	SM 23 4500-SO42- E m

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 744715

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/28
Report #: R7785370
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3N6265
Received: 2023/08/03, 16:28

Sample Matrix: Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Sulphate by Automated Turbidimetry	6	N/A	2023/08/09	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	7	2023/08/08	2023/08/09	CAM SOP-00428	SM 23 2540C m
Total Kjeldahl Nitrogen in Water	7	2023/08/09	2023/08/10	CAM SOP-00938	OMOE E3516 m
Total Suspended Solids	2	2023/08/08	2023/08/09	CAM SOP-00428	SM 23 2540D m
Low Level Total Suspended Solids	5	2023/08/08	2023/08/09	CAM SOP-00428	SM 23 2540D m
Turbidity	7	N/A	2023/08/09	CAM SOP-00417	SM 23 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633
==========
This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6265
Report Date: 2023/08/28

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WPN315			WPN316			WPN317		
Sampling Date		2023/08/02 15:03			2023/08/02 12:00			2023/08/02 12:48		
COC Number		744715			744715			744715		
	UNITS	MW02-OB-18	RDL	QC Batch	MW24-BR-21	RDL	QC Batch	MW24-OB-21	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	120	1.0	8836536	180	1.0	8836536	170	1.0	8836536
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8836536	3.1	1.0	8836536	1.7	1.0	8836536
Hardness (CaCO3)	mg/L	2500	1.0	8836204	130	1.0	8836204	170	1.0	8836204
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8836536	<1.0	1.0	8836536	<1.0	1.0	8836536
Inorganics										
Acidity	mg/L	26	5.0	8861053	<5.0	5.0	8858164	<5.0	5.0	8858164
Total Ammonia-N	mg/L	1.8	0.050	8841406	0.51	0.050	8841406	0.13	0.050	8841406
Conductivity	mS/cm	3.42	0.001	8838953	0.438	0.001	8838953	0.313	0.001	8838953
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	8856240	<2.0 (1)	2.0	8856240	<2.0 (1)	2.0	8856240
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.188	0.0025	8854849	<0.00050	0.00050	8854849	<0.00050	0.00050	8854849
Total Dissolved Solids	mg/L	3610	10	8838046	240	10	8838046	195	10	8838046
Fluoride (F-)	mg/L	0.20	0.10	8838964	0.50	0.10	8838964	0.33	0.10	8838964
Total Kjeldahl Nitrogen (TKN)	mg/L	2.6	0.20	8842276	0.74	0.10	8842276	0.26	0.10	8842276
pH	pH	7.33		8838968	8.25		8838968	8.03		8838968
Total Phosphorus (P)	mg/L	1.3	0.10	8854864	0.028	0.0010	8854864	0.086	0.0010	8854864
Total Suspended Solids	mg/L	40000	100	8838082	62	2	8838036	97	1	8838036
Dissolved Sulphate (SO4)	mg/L	2400	10	8838261	41	1.0	8838261	2.5	1.0	8838261
Turbidity	NTU	9.2	0.1	8838911	2.8	0.1	8838911	7.0	0.1	8838911
Alkalinity (Total as CaCO3)	mg/L	120	1.0	8838929	190	1.0	8838929	170	1.0	8838929
Dissolved Chloride (Cl-)	mg/L	4.5	1.0	8838258	2.3	1.0	8838258	<1.0	1.0	8838258
Nitrite (N)	mg/L	0.011	0.010	8838830	<0.010	0.010	8838867	<0.010	0.010	8838830
Nitrate (N)	mg/L	<0.10	0.10	8838830	<0.10	0.10	8838867	<0.10	0.10	8838830
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8838830	<0.10	0.10	8838867	<0.10	0.10	8838830

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6265
Report Date: 2023/08/28

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WPN318			WPN318			WPN319		
Sampling Date		2023/08/02 13:49			2023/08/02 13:49			2023/08/02 14:09		
COC Number		744715			744715			744715		
	UNITS	MW25-OB-21	RDL	QC Batch	MW25-OB-21 Lab-Dup	RDL	QC Batch	MW25-BR-21	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	230	1.0	8836536				220	1.0	8836536
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.3	1.0	8836536				3.1	1.0	8836536
Hardness (CaCO3)	mg/L	230	1.0	8836204				210	1.0	8836204
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8836536				<1.0	1.0	8836536
Inorganics										
Acidity	mg/L	6.8	5.0	8861053				<5.0	5.0	8858164
Total Ammonia-N	mg/L	0.052	0.050	8841406				0.23	0.050	8841406
Conductivity	mS/cm	0.411	0.001	8838953				0.409	0.001	8838953
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	8856240				<2.0 (1)	2.0	8856240
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8854849				<0.00050	0.00050	8854849
Total Dissolved Solids	mg/L	240	10	8838046				250	10	8838046
Fluoride (F-)	mg/L	0.14	0.10	8838964				0.19	0.10	8838964
Total Kjeldahl Nitrogen (TKN)	mg/L	0.17	0.10	8842276				0.39	0.10	8842276
pH	pH	8.04		8838968				8.16		8838968
Total Phosphorus (P)	mg/L	0.60	0.010	8854864				0.0024	0.0010	8854864
Total Suspended Solids	mg/L	1300	5	8838036				20	1	8838036
Dissolved Sulphate (SO4)	mg/L	3.0	1.0	8838261				<1.0	1.0	8838261
Turbidity	NTU	12	0.1	8838911				2.0	0.1	8838911
Alkalinity (Total as CaCO3)	mg/L	230	1.0	8838929				230	1.0	8838929
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	8838258				<1.0	1.0	8838258
Nitrite (N)	mg/L	<0.010	0.010	8838867	<0.010	0.010	8838867	<0.010	0.010	8838830
Nitrate (N)	mg/L	<0.10	0.10	8838867	<0.10	0.10	8838867	<0.10	0.10	8838830
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8838867	<0.10	0.10	8838867	<0.10	0.10	8838830

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6265
Report Date: 2023/08/28

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WPN319			WPN320			WPN321		
Sampling Date		2023/08/02 14:09			2023/08/02 15:21			2023/08/02 08:00		
COC Number		744715			744715			744715		
	UNITS	MW25-BR-21 Lab-Dup	RDL	QC Batch	MW6-OB-13	RDL	QC Batch	DUPLICATE 3	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L				230	1.0	8836536	180	1.0	8836536
Carb. Alkalinity (calc. as CaCO3)	mg/L				<1.0	1.0	8836536	2.9	1.0	8836536
Hardness (CaCO3)	mg/L				1400	1.0	8836204	140	1.0	8836204
Hydrox. Alkalinity (calc. as CaCO3)	mg/L				<1.0	1.0	8836536	<1.0	1.0	8836536
Inorganics										
Acidity	mg/L				46	5.0	8858164	<5.0	5.0	8858164
Total Ammonia-N	mg/L				0.77	0.050	8841406	0.56	0.050	8841406
Conductivity	mS/cm				0.922	0.001	8838953	0.438	0.001	8838953
Free Cyanide (CN)	ug/L				<2.0 (1)	2.0	8856240	<2.0 (1)	2.0	8856240
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8854849	0.00164	0.00050	8854849	<0.00050	0.00050	8854849
Total Dissolved Solids	mg/L				510	10	8838046	270	10	8838046
Fluoride (F-)	mg/L				<0.10	0.10	8838964	0.50	0.10	8838964
Total Kjeldahl Nitrogen (TKN)	mg/L				1.3	0.10	8842276	0.58	0.10	8842276
pH	pH				7.43		8838968	8.23		8838968
Total Phosphorus (P)	mg/L				2.9	0.10	8854864	0.016	0.0010	8854864
Total Suspended Solids	mg/L				5500	100	8838082	35	1	8838036
Dissolved Sulphate (SO4)	mg/L				11	1.0	8861653	42	1.0	8838261
Turbidity	NTU				25	0.1	8838911	3.4	0.1	8838911
Alkalinity (Total as CaCO3)	mg/L				230	1.0	8838929	190	1.0	8838929
Dissolved Chloride (Cl-)	mg/L				150	1.0	8838258	2.5	1.0	8838258
Nitrite (N)	mg/L				<0.010	0.010	8838830	<0.010	0.010	8838830
Nitrate (N)	mg/L				<0.10	0.10	8838830	<0.10	0.10	8838830
Nitrate + Nitrite (N)	mg/L				<0.10	0.10	8838830	<0.10	0.10	8838830

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6265
Report Date: 2023/08/28

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN315			WPN316			WPN316		
Sampling Date		2023/08/02 15:03			2023/08/02 12:00			2023/08/02 12:00		
COC Number		744715			744715			744715		
	UNITS	MW02-OB-18	RDL	QC Batch	MW24-BR-21	RDL	QC Batch	MW24-BR-21 Lab-Dup	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.011	0.005	8842342	0.0018	0.0005	8878655	0.0018	0.0005	8878655
. Aluminum (Al)	mg/L	8.26	0.005	8844598	0.210	0.0005	8874547			
Dissolved Antimony (Sb)	mg/L	0.002	0.001	8842342	<0.0001	0.0001	8878655	<0.0001	0.0001	8878655
. Antimony (Sb)	mg/L	0.002	0.001	8844598	0.0003	0.0001	8874547			
Dissolved Arsenic (As)	mg/L	28.3	0.05	8842342	0.0010	0.0001	8878655	0.0010	0.0001	8878655
. Arsenic (As)	mg/L	35.5	0.05	8844598	0.0013	0.0001	8874547			
Dissolved Barium (Ba)	mg/L	0.019	0.002	8842342	0.0195	0.0002	8878655	0.0189	0.0002	8878655
. Barium (Ba)	mg/L	0.046	0.002	8844598	0.0192	0.0002	8874547			
Dissolved Beryllium (Be)	mg/L	<0.0005	0.0005	8842342	<0.00005	0.00005	8878655	<0.00005	0.00005	8878655
. Beryllium (Be)	mg/L	0.0007	0.0005	8844598	<0.00005	0.00005	8874547			
Dissolved Bismuth (Bi)	mg/L	<0.001	0.001	8842342	<0.0001	0.0001	8878655	<0.0001	0.0001	8878655
. Bismuth (Bi)	mg/L	<0.001	0.001	8844598	<0.0001	0.0001	8874547			
Dissolved Boron (B)	mg/L	1.82	0.01	8842342	0.053	0.001	8878655	0.054	0.001	8878655
. Boron (B)	mg/L	1.93	0.01	8844598	0.049	0.001	8874547			
Dissolved Cadmium (Cd)	mg/L	<0.0001	0.0001	8842342	<0.00001	0.00001	8878655	<0.00001	0.00001	8878655
. Cadmium (Cd)	mg/L	0.00060	0.00005	8844598	0.000017	0.000005	8874547			
Dissolved Calcium (Ca)	mg/L	644	10	8842342	34.0	0.02	8878655	34.1	0.02	8878655
. Calcium (Ca)	mg/L	738	10	8844598	33.2	0.02	8874547			
Dissolved Cesium (Cs)	mg/L	<0.0002	0.0002	8842342	0.00002	0.00002	8878655	<0.00002	0.00002	8878655
. Cesium (Cs)	mg/L	0.0012	0.0002	8844598	0.00003	0.00002	8874547			
Dissolved Chromium (Cr)	mg/L	<0.005	0.005	8842342	<0.0005	0.0005	8878655	<0.0005	0.0005	8878655
. Chromium (Cr)	mg/L	0.039	0.005	8844598	0.0011	0.0005	8874547			
Dissolved Cobalt (Co)	mg/L	0.0096	0.0005	8842342	<0.00005	0.00005	8878655	<0.00005	0.00005	8878655
. Cobalt (Co)	mg/L	0.0210	0.0005	8844598	0.00033	0.00005	8874547			
Dissolved Copper (Cu)	mg/L	0.001	0.001	8842342	0.0005	0.0001	8878655	0.0005	0.0001	8878655
. Copper (Cu)	mg/L	0.038	0.001	8844598	0.0026	0.0001	8874547			
Dissolved Iron (Fe)	mg/L	0.14	0.05	8842342	0.753	0.005	8878655	0.741	0.005	8878655
. Iron (Fe)	mg/L	84.5	0.05	8844598	10.4	0.025	8874547			
Dissolved Lead (Pb)	mg/L	0.0019	0.0005	8842342	<0.00005	0.00005	8878655	<0.00005	0.00005	8878655
. Lead (Pb)	mg/L	0.0447	0.0005	8844598	0.00045	0.00005	8874547			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN315			WPN316			WPN316		
Sampling Date		2023/08/02 15:03			2023/08/02 12:00			2023/08/02 12:00		
COC Number		744715			744715			744715		
	UNITS	MW02-OB-18	RDL	QC Batch	MW24-BR-21	RDL	QC Batch	MW24-BR-21 Lab-Dup	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.118	0.005	8842342	0.0092	0.0005	8878655	0.0092	0.0005	8878655
. Lithium (Li)	mg/L	0.123	0.005	8844598	0.0091	0.0005	8874547			
Dissolved Magnesium (Mg)	mg/L	218	0.05	8842342	12.0	0.005	8878655	11.9	0.005	8878655
. Magnesium (Mg)	mg/L	252	0.05	8844598	12.4	0.005	8874547			
Dissolved Manganese (Mn)	mg/L	0.840	0.002	8842342	0.237	0.0002	8878655	0.232	0.0002	8878655
. Manganese (Mn)	mg/L	3.01	0.002	8844598	0.311	0.0002	8874547			
Mercury (Hg)	mg/L	<0.00010	0.00010	8844089						
Mercury (Hg)	ug/L				<0.01	0.01	8844731			
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8841715	<0.01	0.01	8841715			
Dissolved Molybdenum (Mo)	mg/L	0.0255	0.0005	8842342	0.0383	0.00005	8878655	0.0371	0.00005	8878655
. Molybdenum (Mo)	mg/L	0.0126	0.0005	8844598	0.0139	0.00005	8874547			
Dissolved Nickel (Ni)	mg/L	0.012	0.001	8842342	0.0002	0.0001	8878655	0.0002	0.0001	8878655
. Nickel (Ni)	mg/L	0.042	0.001	8844598	0.0012	0.0001	8874547			
Dissolved Phosphorus (P)	mg/L	0.07	0.05	8842342	0.011	0.005	8878655	0.010	0.005	8878655
. Phosphorus (P)	mg/L	1.51	0.05	8844598	0.016	0.005	8874547			
Dissolved Potassium (K)	mg/L	31.8	0.2	8842342	4.33	0.02	8878655	4.26	0.02	8878655
. Potassium (K)	mg/L	33.9	0.2	8844598	4.85	0.02	8874547			
Dissolved Rubidium (Rb)	mg/L	0.0065	0.0002	8842342	0.00475	0.00002	8878655	0.00465	0.00002	8878655
. Rubidium (Rb)	mg/L	0.0141	0.0002	8844598	0.00536	0.00002	8874547			
Dissolved Selenium (Se)	mg/L	<0.002	0.002	8842342	<0.0002	0.0002	8878655	<0.0002	0.0002	8878655
. Selenium (Se)	mg/L	<0.0005	0.0005	8844598	0.00053	0.00005	8874547			
Dissolved Silicon (Si)	mg/L	7.72	0.05	8842342	2.91	0.005	8878655	2.91	0.005	8878655
. Silicon (Si)	mg/L	17.8	0.05	8844598	1.65	0.005	8874547			
Dissolved Silver (Ag)	mg/L	<0.0001	0.0001	8842342	0.00001	0.00001	8878655	0.00001	0.00001	8878655
. Silver (Ag)	mg/L	<0.0001	0.0001	8844598	0.00002	0.00001	8874547			
Dissolved Sodium (Na)	mg/L	81.8	0.1	8842342	48.7	0.01	8878655	48.3	0.01	8878655
. Sodium (Na)	mg/L	76.0	0.1	8844598	43.1	0.01	8874547			
Dissolved Strontium (Sr)	mg/L	1.63	0.001	8842342	0.190	0.0001	8878655	0.186	0.0001	8878655
. Strontium (Sr)	mg/L	1.80	0.001	8844598	0.168	0.0001	8874547			
Dissolved Sulphur (S)	mg/L	790	5	8839778	15	0.5	8839778			
Total Sulphur (S)	mg/L	800	5	8840999	14	0.5	8840999			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN315			WPN316			WPN316		
Sampling Date		2023/08/02 15:03			2023/08/02 12:00			2023/08/02 12:00		
COC Number		744715			744715			744715		
	UNITS	MW02-OB-18	RDL	QC Batch	MW24-BR-21	RDL	QC Batch	MW24-BR-21 Lab-Dup	RDL	QC Batch
Dissolved Tellurium (Te)	mg/L	<0.001	0.001	8842342	<0.0001	0.0001	8878655	<0.0001	0.0001	8878655
. Tellurium (Te)	mg/L	<0.001	0.001	8844598	<0.0001	0.0001	8874547			
Dissolved Thallium (Tl)	mg/L	<0.00005	0.00005	8842342	<0.000005	0.000005	8878655	<0.000005	0.000005	8878655
. Thallium (Tl)	mg/L	0.00010	0.00005	8844598	0.000023	0.000005	8874547			
Dissolved Thorium (Th)	mg/L	<0.002	0.002	8842342	<0.0002	0.0002	8878655	<0.0002	0.0002	8878655
. Thorium (Th)	mg/L	0.004	0.002	8844598	<0.0002	0.0002	8874547			
Dissolved Tin (Sn)	mg/L	<0.001	0.001	8842342	<0.0001	0.0001	8878655	<0.0001	0.0001	8878655
. Tin (Sn)	mg/L	<0.001	0.001	8844598	0.0006	0.0001	8874547			
Dissolved Titanium (Ti)	mg/L	<0.005	0.005	8842342	<0.0005	0.0005	8878655	<0.0005	0.0005	8878655
. Titanium (Ti)	mg/L	0.110	0.005	8844598	0.0113	0.0005	8874547			
Dissolved Tungsten (W)	mg/L	<0.001	0.001	8842342	0.113	0.0005	8878655	0.115	0.0005	8878655
. Tungsten (W)	mg/L	0.004	0.001	8844598	0.0259	0.0001	8874547			
Dissolved Uranium (U)	mg/L	0.0037	0.0001	8842342	0.00324	0.00001	8878655	0.00317	0.00001	8878655
. Uranium (U)	mg/L	0.0057	0.0001	8844598	0.00095	0.00001	8874547			
Dissolved Vanadium (V)	mg/L	<0.0005	0.0005	8842342	<0.00005	0.00005	8878655	<0.00005	0.00005	8878655
. Vanadium (V)	mg/L	0.0182	0.0005	8844598	0.00057	0.00005	8874547			
Dissolved Zinc (Zn)	mg/L	0.008	0.005	8842342	0.0056	0.0005	8878655	0.0056	0.0005	8878655
. Zinc (Zn)	mg/L	0.179	0.005	8844598	1.43	0.005	8874547			
Dissolved Zirconium (Zr)	mg/L	<0.001	0.001	8842342	<0.0001	0.0001	8878655	<0.0001	0.0001	8878655
. Zirconium (Zr)	mg/L	0.004	0.001	8844598	0.0001	0.0001	8874547			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN317			WPN317			WPN318		
Sampling Date		2023/08/02 12:48			2023/08/02 12:48			2023/08/02 13:49		
COC Number		744715			744715			744715		
	UNITS	MW24-OB-21	RDL	QC Batch	MW24-OB-21 Lab-Dup	RDL	QC Batch	MW25-OB-21	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0012	0.0005	8842342				0.0008	0.0005	8842342
. Aluminum (Al)	mg/L	0.246	0.0005	8844598				2.66	0.0025	8844598
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8842342				<0.0001	0.0001	8842342
. Antimony (Sb)	mg/L	0.0001	0.0001	8844598				<0.0005	0.0005	8844598
Dissolved Arsenic (As)	mg/L	0.0005	0.0001	8842342				0.0010	0.0001	8842342
. Arsenic (As)	mg/L	0.0009	0.0001	8844598				0.0029	0.0005	8844598
Dissolved Barium (Ba)	mg/L	0.0201	0.0002	8842342				0.0294	0.0002	8842342
. Barium (Ba)	mg/L	0.0250	0.0002	8844598				0.058	0.001	8844598
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8842342				<0.00005	0.00005	8842342
. Beryllium (Be)	mg/L	<0.00005	0.00005	8844598				<0.00025	0.00025	8844598
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8842342				<0.0001	0.0001	8842342
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8844598				<0.0005	0.0005	8844598
Dissolved Boron (B)	mg/L	0.013	0.001	8842342				0.011	0.001	8842342
. Boron (B)	mg/L	0.014	0.001	8844598				0.018	0.005	8844598
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8842342				<0.00001	0.00001	8842342
. Cadmium (Cd)	mg/L	0.000017	0.000005	8844598				0.000096	0.000025	8844598
Dissolved Calcium (Ca)	mg/L	49.5	0.1	8842342				67.8	0.1	8842342
. Calcium (Ca)	mg/L	56.7	0.1	8844598				216	0.1	8844598
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	8842342				<0.00002	0.00002	8842342
. Cesium (Cs)	mg/L	0.00003	0.00002	8844598				0.0003	0.0001	8844598
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8842342				<0.0005	0.0005	8842342
. Chromium (Cr)	mg/L	0.0011	0.0005	8844598				0.0113	0.0025	8844598
Dissolved Cobalt (Co)	mg/L	<0.00005	0.00005	8842342				0.00014	0.00005	8842342
. Cobalt (Co)	mg/L	0.00028	0.00005	8844598				0.00370	0.00025	8844598
Dissolved Copper (Cu)	mg/L	<0.0001	0.0001	8842342				0.0004	0.0001	8842342
. Copper (Cu)	mg/L	0.0015	0.0001	8844598				0.0101	0.0005	8844598
Dissolved Iron (Fe)	mg/L	1.26	0.005	8842342				1.08	0.005	8842342
. Iron (Fe)	mg/L	4.55	0.005	8844598				8.81	0.025	8844598
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8842342				<0.00005	0.00005	8842342
. Lead (Pb)	mg/L	0.00050	0.00005	8844598				0.00451	0.00025	8844598

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN317			WPN317			WPN318		
Sampling Date		2023/08/02 12:48			2023/08/02 12:48			2023/08/02 13:49		
COC Number		744715			744715			744715		
	UNITS	MW24-OB-21	RDL	QC Batch	MW24-OB-21 Lab-Dup	RDL	QC Batch	MW25-OB-21	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0032	0.0005	8842342				0.0015	0.0005	8842342
. Lithium (Li)	mg/L	0.0037	0.0005	8844598				0.0047	0.0025	8844598
Dissolved Magnesium (Mg)	mg/L	12.3	0.005	8842342				15.0	0.005	8842342
. Magnesium (Mg)	mg/L	14.4	0.005	8844598				54.3	0.025	8844598
Dissolved Manganese (Mn)	mg/L	0.0530	0.0002	8842342				0.127	0.0002	8842342
. Manganese (Mn)	mg/L	0.0786	0.0002	8844598				0.335	0.001	8844598
Mercury (Hg)	ug/L	<0.01	0.01	8844731				0.01	0.01	8844731
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8841511	<0.01	0.01	8841511	<0.01	0.01	8841715
Dissolved Molybdenum (Mo)	mg/L	0.00059	0.00005	8842342				0.00107	0.00005	8842342
. Molybdenum (Mo)	mg/L	0.00055	0.00005	8844598				<0.00025	0.00025	8844598
Dissolved Nickel (Ni)	mg/L	0.0002	0.0001	8842342				0.0002	0.0001	8842342
. Nickel (Ni)	mg/L	0.0008	0.0001	8844598				0.0069	0.0005	8844598
Dissolved Phosphorus (P)	mg/L	0.030	0.005	8842342				<0.005	0.005	8842342
. Phosphorus (P)	mg/L	0.087	0.005	8844598				0.636	0.025	8844598
Dissolved Potassium (K)	mg/L	1.61	0.02	8842342				1.72	0.02	8842342
. Potassium (K)	mg/L	1.57	0.02	8844598				2.0	0.1	8844598
Dissolved Rubidium (Rb)	mg/L	0.00116	0.00002	8842342				0.00236	0.00002	8842342
. Rubidium (Rb)	mg/L	0.00157	0.00002	8844598				0.0067	0.0001	8844598
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8842342				<0.0002	0.0002	8842342
. Selenium (Se)	mg/L	0.00005	0.00005	8844598				<0.00025	0.00025	8844598
Dissolved Silicon (Si)	mg/L	7.48	0.025	8842342				6.33	0.025	8842342
. Silicon (Si)	mg/L	7.51	0.025	8844598				10.2	0.025	8844598
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8842342				<0.00001	0.00001	8842342
. Silver (Ag)	mg/L	<0.00001	0.00001	8844598				<0.00005	0.00005	8844598
Dissolved Sodium (Na)	mg/L	4.93	0.01	8842342				4.64	0.01	8842342
. Sodium (Na)	mg/L	4.70	0.01	8844598				4.58	0.05	8844598
Dissolved Strontium (Sr)	mg/L	0.157	0.0001	8842342				0.0621	0.0001	8842342
. Strontium (Sr)	mg/L	0.164	0.0001	8844598				0.130	0.0005	8844598
Dissolved Sulphur (S)	mg/L	1.3	0.5	8839778				1.3	0.5	8839778
Total Sulphur (S)	mg/L	1.4	0.5	8840999				1.6	0.5	8840999
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8842342				<0.0001	0.0001	8842342

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN317			WPN317			WPN318		
Sampling Date		2023/08/02 12:48			2023/08/02 12:48			2023/08/02 13:49		
COC Number		744715			744715			744715		
	UNITS	MW24-OB-21	RDL	QC Batch	MW24-OB-21 Lab-Dup	RDL	QC Batch	MW25-OB-21	RDL	QC Batch
. Tellurium (Te)	mg/L	<0.0001	0.0001	8844598				<0.0005	0.0005	8844598
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8842342				<0.000005	0.000005	8842342
. Thallium (Tl)	mg/L	0.000009	0.000005	8844598				0.000077	0.000025	8844598
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8842342				<0.0002	0.0002	8842342
. Thorium (Th)	mg/L	<0.0002	0.0002	8844598				0.001	0.001	8844598
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8842342				<0.0001	0.0001	8842342
. Tin (Sn)	mg/L	0.0002	0.0001	8844598				<0.0005	0.0005	8844598
Dissolved Titanium (Ti)	mg/L	<0.0005	0.0005	8842342				<0.0005	0.0005	8842342
. Titanium (Ti)	mg/L	0.0161	0.0005	8844598				0.149	0.0025	8844598
Dissolved Tungsten (W)	mg/L	0.0002	0.0001	8842342				0.0001	0.0001	8842342
. Tungsten (W)	mg/L	0.0002	0.0001	8844598				<0.0005	0.0005	8844598
Dissolved Uranium (U)	mg/L	0.00004	0.00001	8842342				0.00018	0.00001	8842342
. Uranium (U)	mg/L	0.00007	0.00001	8844598				0.00063	0.00005	8844598
Dissolved Vanadium (V)	mg/L	<0.00005	0.00005	8842342				<0.00005	0.00005	8842342
. Vanadium (V)	mg/L	0.00076	0.00005	8844598				0.00839	0.00025	8844598
Dissolved Zinc (Zn)	mg/L	0.0186	0.0005	8842342				0.0069	0.0005	8842342
. Zinc (Zn)	mg/L	0.702	0.0005	8844598				0.814	0.0025	8844598
Dissolved Zirconium (Zr)	mg/L	<0.0001	0.0001	8842342				<0.0001	0.0001	8842342
. Zirconium (Zr)	mg/L	0.0003	0.0001	8844598				0.0008	0.0005	8844598

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN319			WPN320			WPN320		
Sampling Date		2023/08/02 14:09			2023/08/02 15:21			2023/08/02 15:21		
COC Number		744715			744715			744715		
	UNITS	MW25-BR-21	RDL	QC Batch	MW6-OB-13	RDL	QC Batch	MW6-OB-13 Lab-Dup	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0127	0.0005	8842342	0.0605	0.0005	8878655			
. Aluminum (Al)	mg/L	0.0264	0.0005	8844598	42.1	0.025	8874547			
Dissolved Antimony (Sb)	mg/L	0.0003	0.0001	8842342	0.0001	0.0001	8878655			
. Antimony (Sb)	mg/L	0.0003	0.0001	8844598	<0.001	0.001	8874547			
Dissolved Arsenic (As)	mg/L	0.0006	0.0001	8842342	0.0176	0.0001	8878655			
. Arsenic (As)	mg/L	0.0008	0.0001	8844598	0.057	0.001	8874547			
Dissolved Barium (Ba)	mg/L	0.0240	0.0002	8842342	0.0612	0.0002	8878655			
. Barium (Ba)	mg/L	0.0238	0.0002	8844598	0.470	0.002	8874547			
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8842342	<0.00005	0.00005	8878655			
. Beryllium (Be)	mg/L	<0.00005	0.00005	8844598	0.0040	0.0005	8874547			
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8842342	<0.0001	0.0001	8878655			
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8844598	<0.001	0.001	8874547			
Dissolved Boron (B)	mg/L	0.029	0.001	8842342	0.007	0.001	8878655			
. Boron (B)	mg/L	0.030	0.001	8844598	0.04	0.01	8874547			
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8842342	<0.00001	0.00001	8878655			
. Cadmium (Cd)	mg/L	<0.000005	0.000005	8844598	0.00107	0.00005	8874547			
Dissolved Calcium (Ca)	mg/L	53.3	0.1	8842342	89.7	0.2	8878655			
. Calcium (Ca)	mg/L	52.7	0.1	8844598	415	0.2	8874547			
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	8842342	<0.00002	0.00002	8878655			
. Cesium (Cs)	mg/L	<0.00002	0.00002	8844598	0.0006	0.0002	8874547			
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8842342	0.0020	0.0005	8878655			
. Chromium (Cr)	mg/L	<0.0005	0.0005	8844598	0.071	0.005	8874547			
Dissolved Cobalt (Co)	mg/L	0.00008	0.00005	8842342	0.00356	0.00005	8878655			
. Cobalt (Co)	mg/L	0.00009	0.00005	8844598	0.0461	0.0005	8874547			
Dissolved Copper (Cu)	mg/L	0.0004	0.0001	8842342	0.0001	0.0001	8878655			
. Copper (Cu)	mg/L	0.0006	0.0001	8844598	0.068	0.001	8874547			
Dissolved Iron (Fe)	mg/L	1.20	0.005	8842342	26.1	0.05	8878655			
. Iron (Fe)	mg/L	1.72	0.005	8844598	125	0.25	8874547			
Dissolved Lead (Pb)	mg/L	0.00007	0.00005	8842342	<0.00005	0.00005	8878655			
. Lead (Pb)	mg/L	0.00013	0.00005	8844598	0.0521	0.0005	8874547			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN319			WPN320			WPN320		
Sampling Date		2023/08/02 14:09			2023/08/02 15:21			2023/08/02 15:21		
COC Number		744715			744715			744715		
	UNITS	MW25-BR-21	RDL	QC Batch	MW6-OB-13	RDL	QC Batch	MW6-OB-13 Lab-Dup	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0052	0.0005	8842342	0.0011	0.0005	8878655			
. Lithium (Li)	mg/L	0.0053	0.0005	8844598	0.034	0.005	8874547			
Dissolved Magnesium (Mg)	mg/L	18.8	0.005	8842342	12.1	0.005	8878655			
. Magnesium (Mg)	mg/L	17.2	0.005	8844598	98.7	0.05	8874547			
Dissolved Manganese (Mn)	mg/L	0.327	0.0002	8842342	1.99	0.002	8878655			
. Manganese (Mn)	mg/L	0.319	0.0002	8844598	4.54	0.002	8874547			
Mercury (Hg)	mg/L				<0.0015	0.0015	8844089			
Mercury (Hg)	ug/L	<0.01	0.01	8841716						
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8841715	<0.01	0.01	8841511			
Dissolved Molybdenum (Mo)	mg/L	0.00061	0.00005	8842342	0.00106	0.00005	8878655			
. Molybdenum (Mo)	mg/L	0.00060	0.00005	8844598	<0.0005	0.0005	8874547			
Dissolved Nickel (Ni)	mg/L	0.0003	0.0001	8842342	0.0011	0.0001	8878655			
. Nickel (Ni)	mg/L	0.0003	0.0001	8844598	0.075	0.001	8874547			
Dissolved Phosphorus (P)	mg/L	<0.005	0.005	8842342	0.007	0.005	8878655			
. Phosphorus (P)	mg/L	0.006	0.005	8844598	1.40	0.05	8874547			
Dissolved Potassium (K)	mg/L	3.46	0.02	8842342	1.80	0.02	8878655			
. Potassium (K)	mg/L	3.40	0.02	8844598	5.4	0.2	8874547			
Dissolved Rubidium (Rb)	mg/L	0.00389	0.00002	8842342	0.00204	0.00002	8878655			
. Rubidium (Rb)	mg/L	0.00385	0.00002	8844598	0.0246	0.0002	8874547			
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8842342	<0.0002	0.0002	8878655			
. Selenium (Se)	mg/L	<0.00005	0.00005	8844598	<0.0005	0.0005	8874547			
Dissolved Silicon (Si)	mg/L	3.07	0.005	8842342	5.42	0.05	8878655			
. Silicon (Si)	mg/L	3.07	0.005	8844598	41.5	0.05	8874547			
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8842342	<0.00001	0.00001	8878655			
. Silver (Ag)	mg/L	<0.00001	0.00001	8844598	<0.0001	0.0001	8874547			
Dissolved Sodium (Na)	mg/L	10.6	0.01	8842342	90.4	0.1	8878655			
. Sodium (Na)	mg/L	9.87	0.01	8844598	90.2	0.1	8874547			
Dissolved Strontium (Sr)	mg/L	0.498	0.0001	8842342	0.166	0.0001	8878655			
. Strontium (Sr)	mg/L	0.483	0.0001	8844598	0.466	0.001	8874547			
Dissolved Sulphur (S)	mg/L	0.7	0.5	8839778	2.0	0.5	8839778	2.0	0.5	8839778
Total Sulphur (S)	mg/L	0.8	0.5	8840999	7	5	8840999			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN319			WPN320			WPN320		
Sampling Date		2023/08/02 14:09			2023/08/02 15:21			2023/08/02 15:21		
COC Number		744715			744715			744715		
	UNITS	MW25-BR-21	RDL	QC Batch	MW6-OB-13	RDL	QC Batch	MW6-OB-13 Lab-Dup	RDL	QC Batch
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8842342	<0.0001	0.0001	8878655			
. Tellurium (Te)	mg/L	<0.0001	0.0001	8844598	<0.001	0.001	8874547			
Dissolved Thallium (Tl)	mg/L	0.000007	0.000005	8842342	<0.000005	0.000005	8878655			
. Thallium (Tl)	mg/L	0.000009	0.000005	8844598	0.00031	0.00005	8874547			
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8842342	0.0003	0.0002	8878655			
. Thorium (Th)	mg/L	<0.0002	0.0002	8844598	<0.002	0.002	8874547			
Dissolved Tin (Sn)	mg/L	0.0002	0.0001	8842342	<0.0001	0.0001	8878655			
. Tin (Sn)	mg/L	0.0003	0.0001	8844598	<0.001	0.001	8874547			
Dissolved Titanium (Ti)	mg/L	0.0007	0.0005	8842342	0.0024	0.0005	8878655			
. Titanium (Ti)	mg/L	0.0013	0.0005	8844598	0.087	0.005	8874547			
Dissolved Tungsten (W)	mg/L	0.0024	0.0001	8842342	0.0001	0.0001	8878655			
. Tungsten (W)	mg/L	0.0021	0.0001	8844598	<0.001	0.001	8874547			
Dissolved Uranium (U)	mg/L	0.00012	0.00001	8842342	0.00073	0.00001	8878655			
. Uranium (U)	mg/L	0.00014	0.00001	8844598	0.0083	0.0001	8874547			
Dissolved Vanadium (V)	mg/L	<0.00005	0.00005	8842342	0.00716	0.00005	8878655			
. Vanadium (V)	mg/L	0.00006	0.00005	8844598	0.117	0.0005	8874547			
Dissolved Zinc (Zn)	mg/L	0.408	0.0005	8842342	0.0015	0.0005	8878655			
. Zinc (Zn)	mg/L	0.591	0.0005	8844598	0.174	0.005	8874547			
Dissolved Zirconium (Zr)	mg/L	<0.0001	0.0001	8842342	0.0017	0.0001	8878655			
. Zirconium (Zr)	mg/L	<0.0001	0.0001	8844598	0.009	0.001	8874547			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN321		
Sampling Date		2023/08/02 08:00		
COC Number		744715		
	UNITS	DUPLICATE 3	RDL	QC Batch
Metals				
Dissolved Aluminum (Al)	mg/L	0.0017	0.0005	8853726
. Aluminum (Al)	mg/L	0.0955	0.0005	8844598
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8853726
. Antimony (Sb)	mg/L	0.0002	0.0001	8844598
Dissolved Arsenic (As)	mg/L	0.0009	0.0001	8853726
. Arsenic (As)	mg/L	0.0013	0.0001	8844598
Dissolved Barium (Ba)	mg/L	0.0181	0.0002	8853726
. Barium (Ba)	mg/L	0.0202	0.0002	8844598
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8853726
. Beryllium (Be)	mg/L	<0.00005	0.00005	8844598
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8853726
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8844598
Dissolved Boron (B)	mg/L	0.053	0.001	8853726
. Boron (B)	mg/L	0.054	0.001	8844598
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8853726
. Cadmium (Cd)	mg/L	0.000008	0.000005	8844598
Dissolved Calcium (Ca)	mg/L	34.7	0.02	8853726
. Calcium (Ca)	mg/L	36.4	0.02	8844598
Dissolved Cesium (Cs)	mg/L	0.00002	0.00002	8853726
. Cesium (Cs)	mg/L	0.00002	0.00002	8844598
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8853726
. Chromium (Cr)	mg/L	<0.0005	0.0005	8844598
Dissolved Cobalt (Co)	mg/L	<0.00005	0.00005	8853726
. Cobalt (Co)	mg/L	0.00012	0.00005	8844598
Dissolved Copper (Cu)	mg/L	<0.0001	0.0001	8853726
. Copper (Cu)	mg/L	0.0011	0.0001	8844598
Dissolved Iron (Fe)	mg/L	0.715	0.005	8853726
. Iron (Fe)	mg/L	4.85	0.005	8844598
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8853726
. Lead (Pb)	mg/L	0.00020	0.00005	8844598
Dissolved Lithium (Li)	mg/L	0.0092	0.0005	8853726

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN321		
Sampling Date		2023/08/02 08:00		
COC Number		744715		
	UNITS	DUPLICATE 3	RDL	QC Batch
. Lithium (Li)	mg/L	0.0091	0.0005	8844598
Dissolved Magnesium (Mg)	mg/L	12.4	0.005	8853726
. Magnesium (Mg)	mg/L	11.7	0.005	8844598
Dissolved Manganese (Mn)	mg/L	0.238	0.0002	8853726
. Manganese (Mn)	mg/L	0.266	0.0002	8844598
Mercury (Hg)	ug/L	<0.01	0.01	8841716
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8841715
Dissolved Molybdenum (Mo)	mg/L	0.0364	0.00005	8853726
. Molybdenum (Mo)	mg/L	0.0315	0.00005	8844598
Dissolved Nickel (Ni)	mg/L	0.0002	0.0001	8853726
. Nickel (Ni)	mg/L	0.0004	0.0001	8844598
Dissolved Phosphorus (P)	mg/L	0.011	0.005	8853726
. Phosphorus (P)	mg/L	0.023	0.005	8844598
Dissolved Potassium (K)	mg/L	4.38	0.02	8853726
. Potassium (K)	mg/L	4.35	0.02	8844598
Dissolved Rubidium (Rb)	mg/L	0.00457	0.00002	8853726
. Rubidium (Rb)	mg/L	0.00459	0.00002	8844598
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8853726
. Selenium (Se)	mg/L	0.00023	0.00005	8844598
Dissolved Silicon (Si)	mg/L	2.77	0.005	8853726
. Silicon (Si)	mg/L	2.57	0.005	8844598
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8853726
. Silver (Ag)	mg/L	<0.00001	0.00001	8844598
Dissolved Sodium (Na)	mg/L	49.7	0.01	8853726
. Sodium (Na)	mg/L	47.6	0.01	8844598
Dissolved Strontium (Sr)	mg/L	0.186	0.0001	8853726
. Strontium (Sr)	mg/L	0.194	0.0001	8844598
Dissolved Sulphur (S)	mg/L	14	0.5	8839778
Total Sulphur (S)	mg/L	14	0.5	8840999
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8853726
. Tellurium (Te)	mg/L	<0.0001	0.0001	8844598
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8853726

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN321		
Sampling Date		2023/08/02 08:00		
COC Number		744715		
	UNITS	DUPLICATE 3	RDL	QC Batch
. Thallium (Tl)	mg/L	0.000012	0.000005	8844598
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8853726
. Thorium (Th)	mg/L	<0.0002	0.0002	8844598
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8853726
. Tin (Sn)	mg/L	0.0005	0.0001	8844598
Dissolved Titanium (Ti)	mg/L	<0.0005	0.0005	8853726
. Titanium (Ti)	mg/L	0.0050	0.0005	8844598
Dissolved Tungsten (W)	mg/L	0.110	0.0005	8853726
. Tungsten (W)	mg/L	0.0965	0.0005	8844598
Dissolved Uranium (U)	mg/L	0.00287	0.00001	8853726
. Uranium (U)	mg/L	0.00261	0.00001	8844598
Dissolved Vanadium (V)	mg/L	<0.00005	0.00005	8853726
. Vanadium (V)	mg/L	0.00031	0.00005	8844598
Dissolved Zinc (Zn)	mg/L	0.0047	0.0005	8853726
. Zinc (Zn)	mg/L	1.28	0.0005	8844598
Dissolved Zirconium (Zr)	mg/L	<0.0001	0.0001	8853726
. Zirconium (Zr)	mg/L	<0.0001	0.0001	8844598

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6265
Report Date: 2023/08/28

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

TEST SUMMARY

Bureau Veritas ID: WPN315
Sample ID: MW02-OB-18
Matrix: Water

Collected: 2023/08/02
Shipped:
Received: 2023/08/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8861053	N/A	2023/08/17	Brent Boudreau
Alkalinity	AT	8838929	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8836536	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8838258	N/A	2023/08/09	Alina Dobreanu
Conductivity	AT	8838953	N/A	2023/08/10	Surinder Rai
Fluoride	ISE	8838964	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8836204	N/A	2023/08/16	Cristina Carriere
Mercury in Water by CVAA	CV/AA	8844089	2023/08/10	2023/08/11	Jaswinder Kaur
Dissolved Mercury (low level)	CV/AA	8841715	2023/08/09	2023/08/09	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8842342	N/A	2023/08/15	Nan Raykha
Metals in Water by ICPMS (low level)	ICP1/MS	8844598	N/A	2023/08/15	Nan Raykha
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8856240	N/A	2023/08/10	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854849	2023/08/15	2023/08/15	Ming Dong
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8841406	N/A	2023/08/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8838830	N/A	2023/08/08	Chandra Nandlal
pH	AT	8838968	2023/08/08	2023/08/10	Surinder Rai
Sulphate by Automated Turbidimetry	KONE	8838261	N/A	2023/08/09	Alina Dobreanu
Total Dissolved Solids	BAL	8838046	2023/08/08	2023/08/09	Shaneil Hall
Total Kjeldahl Nitrogen in Water	SKAL	8842276	2023/08/09	2023/08/10	Kruti Jitesh Patel
Total Suspended Solids	BAL	8838082	2023/08/08	2023/08/09	Razieh Tabesh
Turbidity	AT	8838911	N/A	2023/08/09	Leily Karimi

Bureau Veritas ID: WPN316
Sample ID: MW24-BR-21
Matrix: Water

Collected: 2023/08/02
Shipped:
Received: 2023/08/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8858164	N/A	2023/08/17	Brent Boudreau
Alkalinity	AT	8838929	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8836536	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8838258	N/A	2023/08/09	Alina Dobreanu
Conductivity	AT	8838953	N/A	2023/08/10	Surinder Rai
Fluoride	ISE	8838964	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8836204	N/A	2023/08/16	Cristina Carriere
Dissolved Mercury (low level)	CV/AA	8841715	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8844731	2023/08/10	2023/08/11	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8878655	N/A	2023/08/25	Azita Fazaeli
Metals in Water by ICPMS (low level)	ICP1/MS	8874547	N/A	2023/08/25	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8856240	N/A	2023/08/10	Amy Phan

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WPN316 **Collected:** 2023/08/02
Sample ID: MW24-BR-21 **Shipped:**
Matrix: Water **Received:** 2023/08/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854849	2023/08/14	2023/08/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8841406	N/A	2023/08/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8838867	N/A	2023/08/09	Chandra Nandlal
pH	AT	8838968	2023/08/08	2023/08/10	Surinder Rai
Sulphate by Automated Turbidimetry	KONE	8838261	N/A	2023/08/09	Alina Dobreanu
Total Dissolved Solids	BAL	8838046	2023/08/08	2023/08/09	Shaneil Hall
Total Kjeldahl Nitrogen in Water	SKAL	8842276	2023/08/09	2023/08/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8838036	2023/08/08	2023/08/09	Shaneil Hall
Turbidity	AT	8838911	N/A	2023/08/09	Leily Karimi

Bureau Veritas ID: WPN316 Dup **Collected:** 2023/08/02
Sample ID: MW24-BR-21 **Shipped:**
Matrix: Water **Received:** 2023/08/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals by ICPMS (low level)	ICP1/MS	8878655	N/A	2023/08/25	Azita Fazaeli

Bureau Veritas ID: WPN317 **Collected:** 2023/08/02
Sample ID: MW24-OB-21 **Shipped:**
Matrix: Water **Received:** 2023/08/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8858164	N/A	2023/08/17	Brent Boudreau
Alkalinity	AT	8838929	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8836536	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8838258	N/A	2023/08/09	Alina Dobreanu
Conductivity	AT	8838953	N/A	2023/08/10	Surinder Rai
Fluoride	ISE	8838964	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8836204	N/A	2023/08/16	Cristina Carriere
Dissolved Mercury (low level)	CV/AA	8841511	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8844731	2023/08/10	2023/08/11	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8842342	N/A	2023/08/15	Nan Raykha
Metals in Water by ICPMS (low level)	ICP1/MS	8844598	N/A	2023/08/15	Nan Raykha
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8856240	N/A	2023/08/10	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854849	2023/08/15	2023/08/15	Ming Dong
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8841406	N/A	2023/08/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8838830	N/A	2023/08/08	Chandra Nandlal
pH	AT	8838968	2023/08/08	2023/08/10	Surinder Rai
Sulphate by Automated Turbidimetry	KONE	8838261	N/A	2023/08/09	Alina Dobreanu
Total Dissolved Solids	BAL	8838046	2023/08/08	2023/08/09	Shaneil Hall

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6265
Report Date: 2023/08/28

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

TEST SUMMARY

Bureau Veritas ID: WPN317 **Collected:** 2023/08/02
Sample ID: MW24-OB-21 **Shipped:**
Matrix: Water **Received:** 2023/08/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Kjeldahl Nitrogen in Water	SKAL	8842276	2023/08/09	2023/08/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8838036	2023/08/08	2023/08/09	Shaneil Hall
Turbidity	AT	8838911	N/A	2023/08/09	Leily Karimi

Bureau Veritas ID: WPN317 Dup **Collected:** 2023/08/02
Sample ID: MW24-OB-21 **Shipped:**
Matrix: Water **Received:** 2023/08/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Mercury (low level)	CV/AA	8841511	2023/08/09	2023/08/09	Jaswinder Kaur

Bureau Veritas ID: WPN318 **Collected:** 2023/08/02
Sample ID: MW25-OB-21 **Shipped:**
Matrix: Water **Received:** 2023/08/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8861053	N/A	2023/08/18	Brent Boudreau
Alkalinity	AT	8838929	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8836536	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8838258	N/A	2023/08/09	Alina Dobreanu
Conductivity	AT	8838953	N/A	2023/08/10	Surinder Rai
Fluoride	ISE	8838964	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8836204	N/A	2023/08/16	Cristina Carriere
Dissolved Mercury (low level)	CV/AA	8841715	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8844731	2023/08/10	2023/08/11	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8842342	N/A	2023/08/15	Nan Raykha
Metals in Water by ICPMS (low level)	ICP1/MS	8844598	N/A	2023/08/15	Nan Raykha
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8856240	N/A	2023/08/10	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854849	2023/08/15	2023/08/15	Ming Dong
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8841406	N/A	2023/08/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8838867	N/A	2023/08/09	Chandra Nandlal
pH	AT	8838968	2023/08/08	2023/08/10	Surinder Rai
Sulphate by Automated Turbidimetry	KONE	8838261	N/A	2023/08/09	Alina Dobreanu
Total Dissolved Solids	BAL	8838046	2023/08/08	2023/08/09	Shaneil Hall
Total Kjeldahl Nitrogen in Water	SKAL	8842276	2023/08/09	2023/08/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8838036	2023/08/08	2023/08/09	Shaneil Hall
Turbidity	AT	8838911	N/A	2023/08/09	Leily Karimi

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WPN318 Dup
Sample ID: MW25-OB-21
Matrix: Water
Collected: 2023/08/02
Shipped:
Received: 2023/08/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrate & Nitrite as Nitrogen in Water	LACH	8838867	N/A	2023/08/09	Chandra Nandlal

Bureau Veritas ID: WPN319
Sample ID: MW25-BR-21
Matrix: Water
Collected: 2023/08/02
Shipped:
Received: 2023/08/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8858164	N/A	2023/08/17	Brent Boudreau
Alkalinity	AT	8838929	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8836536	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8838258	N/A	2023/08/09	Alina Dobreanu
Conductivity	AT	8838953	N/A	2023/08/10	Surinder Rai
Fluoride	ISE	8838964	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8836204	N/A	2023/08/17	Cristina Carriere
Dissolved Mercury (low level)	CV/AA	8841715	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8841716	2023/08/09	2023/08/09	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8842342	N/A	2023/08/16	Nan Raykha
Metals in Water by ICPMS (low level)	ICP1/MS	8844598	N/A	2023/08/15	Nan Raykha
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8856240	N/A	2023/08/10	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854849	2023/08/14	2023/08/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8841406	N/A	2023/08/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8838830	N/A	2023/08/08	Chandra Nandlal
pH	AT	8838968	2023/08/08	2023/08/10	Surinder Rai
Sulphate by Automated Turbidimetry	KONE	8838261	N/A	2023/08/09	Alina Dobreanu
Total Dissolved Solids	BAL	8838046	2023/08/08	2023/08/09	Shaneil Hall
Total Kjeldahl Nitrogen in Water	SKAL	8842276	2023/08/09	2023/08/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8838036	2023/08/08	2023/08/09	Shaneil Hall
Turbidity	AT	8838911	N/A	2023/08/09	Leily Karimi

Bureau Veritas ID: WPN319 Dup
Sample ID: MW25-BR-21
Matrix: Water
Collected: 2023/08/02
Shipped:
Received: 2023/08/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854849	2023/08/14	2023/08/14	Ming Dong

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6265
Report Date: 2023/08/28

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

TEST SUMMARY

Bureau Veritas ID: WPN320
Sample ID: MW6-OB-13
Matrix: Water

Collected: 2023/08/02
Shipped:
Received: 2023/08/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8858164	N/A	2023/08/17	Brent Boudreau
Alkalinity	AT	8838929	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8836536	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8838258	N/A	2023/08/09	Alina Dobreanu
Conductivity	AT	8838953	N/A	2023/08/10	Surinder Rai
Fluoride	ISE	8838964	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8836204	N/A	2023/08/16	Cristina Carriere
Mercury in Water by CVAA	CV/AA	8844089	2023/08/10	2023/08/11	Jaswinder Kaur
Dissolved Mercury (low level)	CV/AA	8841511	2023/08/09	2023/08/09	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8878655	N/A	2023/08/25	Azita Fazaeli
Metals in Water by ICPMS (low level)	ICP1/MS	8874547	N/A	2023/08/25	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8856240	N/A	2023/08/10	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854849	2023/08/14	2023/08/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8841406	N/A	2023/08/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8838830	N/A	2023/08/08	Chandra Nandlal
pH	AT	8838968	2023/08/08	2023/08/10	Surinder Rai
Sulphate by Automated Turbidimetry	KONE	8861653	N/A	2023/08/21	Alina Dobreanu
Total Dissolved Solids	BAL	8838046	2023/08/08	2023/08/09	Shaneil Hall
Total Kjeldahl Nitrogen in Water	SKAL	8842276	2023/08/09	2023/08/10	Kruti Jitesh Patel
Total Suspended Solids	BAL	8838082	2023/08/08	2023/08/09	Razieh Tabesh
Turbidity	AT	8838911	N/A	2023/08/09	Leily Karimi

Bureau Veritas ID: WPN320 Dup
Sample ID: MW6-OB-13
Matrix: Water

Collected: 2023/08/02
Shipped:
Received: 2023/08/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai

Bureau Veritas ID: WPN321
Sample ID: DUPLICATE 3
Matrix: Water

Collected: 2023/08/02
Shipped:
Received: 2023/08/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8858164	N/A	2023/08/17	Brent Boudreau
Alkalinity	AT	8838929	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8836536	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8838258	N/A	2023/08/09	Alina Dobreanu
Conductivity	AT	8838953	N/A	2023/08/10	Surinder Rai
Fluoride	ISE	8838964	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8836204	N/A	2023/08/16	Cristina Carriere

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6265
Report Date: 2023/08/28

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

TEST SUMMARY

Bureau Veritas ID: WPN321
Sample ID: DUPLICATE 3
Matrix: Water

Collected: 2023/08/02
Shipped:
Received: 2023/08/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Mercury (low level)	CV/AA	8841715	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8841716	2023/08/09	2023/08/09	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8853726	N/A	2023/08/16	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8844598	N/A	2023/08/15	Nan Raykha
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8856240	N/A	2023/08/10	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854849	2023/08/14	2023/08/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8841406	N/A	2023/08/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8838830	N/A	2023/08/08	Chandra Nandlal
pH	AT	8838968	2023/08/08	2023/08/10	Surinder Rai
Sulphate by Automated Turbidimetry	KONE	8838261	N/A	2023/08/09	Alina Dobreanu
Total Dissolved Solids	BAL	8838046	2023/08/08	2023/08/09	Shaneil Hall
Total Kjeldahl Nitrogen in Water	SKAL	8842276	2023/08/09	2023/08/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8838036	2023/08/08	2023/08/09	Shaneil Hall
Turbidity	AT	8838911	N/A	2023/08/09	Leily Karimi

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	8.3°C
Package 2	8.7°C
Package 3	9.0°C

Sample WPN315 [MW02-OB-18] : ICPMS Metals Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Acidity sample contained headspace.

Sample WPN316 [MW24-BR-21] : Acidity sample contained headspace.

Sample WPN318 [MW25-OB-21] : ICPMS Metals Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly

Sample WPN319 [MW25-BR-21] : Acidity sample contained headspace.

Sample WPN320 [MW6-OB-13] : Metals: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Metals Analysis: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.
Acidity sample contained headspace.

Sample WPN321 [DUPLICATE 3] : Acidity sample contained headspace.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6265
Report Date: 2023/08/28

QUALITY ASSURANCE REPORT

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: BM

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8838036	Total Suspended Solids	2023/08/09			100	85 - 115	<1	mg/L	0	20		
8838046	Total Dissolved Solids	2023/08/09			100	90 - 110	<10	mg/L	1.1	20		
8838082	Total Suspended Solids	2023/08/09			97	85 - 115	<10	mg/L	9.5	20		
8838258	Dissolved Chloride (Cl-)	2023/08/09	NC	80 - 120	97	80 - 120	<1.0	mg/L	0.95	20		
8838261	Dissolved Sulphate (SO4)	2023/08/09	NC	75 - 125	98	80 - 120	<1.0	mg/L	1.1	20		
8838830	Nitrate (N)	2023/08/08	NC	80 - 120	95	80 - 120	<0.10	mg/L	2.5	20		
8838830	Nitrite (N)	2023/08/08	102	80 - 120	104	80 - 120	<0.010	mg/L	3.8	20		
8838867	Nitrate (N)	2023/08/09	91	80 - 120	93	80 - 120	<0.10	mg/L	NC	20		
8838867	Nitrite (N)	2023/08/09	105	80 - 120	104	80 - 120	<0.010	mg/L	NC	20		
8838911	Turbidity	2023/08/09			100	80 - 120	<0.1	NTU	1.0	20		
8838929	Alkalinity (Total as CaCO3)	2023/08/10			96	85 - 115	<1.0	mg/L	1.0	20		
8838953	Conductivity	2023/08/10			100	85 - 115	<0.001	mS/cm	0.91	10		
8838964	Fluoride (F-)	2023/08/10	96	80 - 120	98	80 - 120	<0.10	mg/L	NC	20		
8838968	pH	2023/08/10			102	98 - 103			1.2	N/A		
8839778	Dissolved Sulphur (S)	2023/08/11	NC	80 - 120	99	80 - 120	<0.5	mg/L	0.20	25		
8840999	Total Sulphur (S)	2023/08/10	NC	80 - 120	99	80 - 120	<0.5	mg/L				
8841406	Total Ammonia-N	2023/08/10	97	75 - 125	102	80 - 120	<0.050	mg/L	9.3	20		
8841511	Dissolved Mercury (Hg)	2023/08/09	98	75 - 125	101	80 - 120	<0.01	ug/L	NC	20		
8841715	Dissolved Mercury (Hg)	2023/08/09	97	75 - 125	102	80 - 120	<0.01	ug/L	NC	20		
8841716	Mercury (Hg)	2023/08/09	101	75 - 125	100	80 - 120	<0.01	ug/L	NC	20		
8842276	Total Kjeldahl Nitrogen (TKN)	2023/08/10	88	80 - 120	95	80 - 120	<0.10	mg/L	NC (1)	20	95	80 - 120
8842342	Dissolved Aluminum (Al)	2023/08/15	106	80 - 120	96	80 - 120	<0.0005	mg/L	6.3	20		
8842342	Dissolved Antimony (Sb)	2023/08/15	111	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8842342	Dissolved Arsenic (As)	2023/08/15	NC	80 - 120	99	80 - 120	<0.0001	mg/L	0.13	20		
8842342	Dissolved Barium (Ba)	2023/08/15	101	80 - 120	95	80 - 120	<0.0002	mg/L	0.045	20		
8842342	Dissolved Beryllium (Be)	2023/08/15	114	80 - 120	99	80 - 120	<0.00005	mg/L	NC	20		
8842342	Dissolved Bismuth (Bi)	2023/08/15	95	80 - 120	93	80 - 120	<0.0001	mg/L	NC	20		
8842342	Dissolved Boron (B)	2023/08/15	111	80 - 120	100	80 - 120	<0.001	mg/L	0.75	20		
8842342	Dissolved Cadmium (Cd)	2023/08/15	109	80 - 120	97	80 - 120	<0.00001	mg/L	NC	20		
8842342	Dissolved Calcium (Ca)	2023/08/15	NC	80 - 120	103	80 - 120	<0.02	mg/L	1.7	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8842342	Dissolved Cesium (Cs)	2023/08/15	97	80 - 120	95	80 - 120	<0.00002	mg/L	NC	N/A		
8842342	Dissolved Chromium (Cr)	2023/08/15	107	80 - 120	100	80 - 120	<0.0005	mg/L	NC	20		
8842342	Dissolved Cobalt (Co)	2023/08/15	106	80 - 120	104	80 - 120	<0.00005	mg/L	NC	20		
8842342	Dissolved Copper (Cu)	2023/08/15	108	80 - 120	101	80 - 120	<0.0001	mg/L	0.091	20		
8842342	Dissolved Iron (Fe)	2023/08/15	106	80 - 120	101	80 - 120	<0.005	mg/L	1.5	20		
8842342	Dissolved Lead (Pb)	2023/08/15	103	80 - 120	95	80 - 120	<0.00005	mg/L	NC	20		
8842342	Dissolved Lithium (Li)	2023/08/15	109	80 - 120	101	80 - 120	<0.0005	mg/L	1.1	20		
8842342	Dissolved Magnesium (Mg)	2023/08/15	NC	80 - 120	101	80 - 120	<0.005	mg/L	0.65	20		
8842342	Dissolved Manganese (Mn)	2023/08/15	105	80 - 120	97	80 - 120	<0.0002	mg/L	2.1	20		
8842342	Dissolved Molybdenum (Mo)	2023/08/15	117	80 - 120	103	80 - 120	<0.00005	mg/L	1.2	20		
8842342	Dissolved Nickel (Ni)	2023/08/15	102	80 - 120	98	80 - 120	<0.0001	mg/L	2.7	20		
8842342	Dissolved Phosphorus (P)	2023/08/15	122 (2)	80 - 120	103	80 - 120	<0.005	mg/L	8.2	20		
8842342	Dissolved Potassium (K)	2023/08/15	110	80 - 120	103	80 - 120	<0.02	mg/L	0.86	20		
8842342	Dissolved Rubidium (Rb)	2023/08/15	103	80 - 120	98	80 - 120	<0.00002	mg/L	NC	N/A		
8842342	Dissolved Selenium (Se)	2023/08/15	112	80 - 120	101	80 - 120	<0.0002	mg/L	NC	20		
8842342	Dissolved Silicon (Si)	2023/08/15	101	80 - 120	100	80 - 120	<0.005	mg/L	1.2	20		
8842342	Dissolved Silver (Ag)	2023/08/15	106	80 - 120	99	80 - 120	<0.00001	mg/L	NC	20		
8842342	Dissolved Sodium (Na)	2023/08/15	NC	80 - 120	105	80 - 120	<0.01	mg/L	1.2	20		
8842342	Dissolved Strontium (Sr)	2023/08/15	102	80 - 120	96	80 - 120	<0.0001	mg/L	1.5	20		
8842342	Dissolved Tellurium (Te)	2023/08/15	111	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8842342	Dissolved Thallium (Tl)	2023/08/15	104	80 - 120	97	80 - 120	<0.000005	mg/L	NC	20		
8842342	Dissolved Thorium (Th)	2023/08/15	97	80 - 120	96	80 - 120	<0.0002	mg/L				
8842342	Dissolved Tin (Sn)	2023/08/15	112	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8842342	Dissolved Titanium (Ti)	2023/08/15	106	80 - 120	95	80 - 120	<0.0005	mg/L	NC	20		
8842342	Dissolved Tungsten (W)	2023/08/15	110	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		
8842342	Dissolved Uranium (U)	2023/08/15	106	80 - 120	96	80 - 120	<0.00001	mg/L	2.2	20		
8842342	Dissolved Vanadium (V)	2023/08/15	104	80 - 120	98	80 - 120	<0.00005	mg/L	1.2	20		
8842342	Dissolved Zinc (Zn)	2023/08/15	104	80 - 120	97	80 - 120	<0.0005	mg/L	5.6	20		
8842342	Dissolved Zirconium (Zr)	2023/08/15	111	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8844089	Mercury (Hg)	2023/08/11	106	75 - 125	107	80 - 120	<0.00010	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8844598	. Aluminum (Al)	2023/08/10	NC	80 - 120	97	80 - 120	<0.0005	mg/L	0.72 (3)	20		
8844598	. Antimony (Sb)	2023/08/10	115	80 - 120	106	80 - 120	<0.0001	mg/L				
8844598	. Arsenic (As)	2023/08/10	111	80 - 120	99	80 - 120	<0.0001	mg/L				
8844598	. Barium (Ba)	2023/08/10	107	80 - 120	102	80 - 120	<0.0002	mg/L				
8844598	. Beryllium (Be)	2023/08/10	108	80 - 120	95	80 - 120	<0.00005	mg/L				
8844598	. Bismuth (Bi)	2023/08/10	97	80 - 120	98	80 - 120	<0.0001	mg/L				
8844598	. Boron (B)	2023/08/10	96	80 - 120	87	80 - 120	<0.001	mg/L				
8844598	. Cadmium (Cd)	2023/08/10	109	80 - 120	99	80 - 120	<0.000005	mg/L				
8844598	. Calcium (Ca)	2023/08/10	NC	80 - 120	99	80 - 120	<0.02	mg/L				
8844598	. Cesium (Cs)	2023/08/10	103	80 - 120	101	80 - 120	<0.00002	mg/L				
8844598	. Chromium (Cr)	2023/08/10	103	80 - 120	92	80 - 120	<0.0005	mg/L				
8844598	. Cobalt (Co)	2023/08/10	103	80 - 120	98	80 - 120	<0.00005	mg/L				
8844598	. Copper (Cu)	2023/08/10	NC	80 - 120	103	80 - 120	<0.0001	mg/L				
8844598	. Iron (Fe)	2023/08/10	104	80 - 120	97	80 - 120	<0.005	mg/L				
8844598	. Lead (Pb)	2023/08/10	103	80 - 120	99	80 - 120	<0.00005	mg/L				
8844598	. Lithium (Li)	2023/08/10	113	80 - 120	103	80 - 120	<0.0005	mg/L				
8844598	. Magnesium (Mg)	2023/08/10	NC	80 - 120	95	80 - 120	<0.005	mg/L				
8844598	. Manganese (Mn)	2023/08/10	102	80 - 120	94	80 - 120	<0.0002	mg/L				
8844598	. Molybdenum (Mo)	2023/08/10	118	80 - 120	106	80 - 120	<0.00005	mg/L				
8844598	. Nickel (Ni)	2023/08/10	100	80 - 120	94	80 - 120	<0.0001	mg/L				
8844598	. Phosphorus (P)	2023/08/10	116	80 - 120	102	80 - 120	<0.005	mg/L				
8844598	. Potassium (K)	2023/08/10	108	80 - 120	99	80 - 120	<0.02	mg/L				
8844598	. Rubidium (Rb)	2023/08/10	106	80 - 120	98	80 - 120	<0.00002	mg/L				
8844598	. Selenium (Se)	2023/08/10	105	80 - 120	97	80 - 120	<0.00005	mg/L				
8844598	. Silicon (Si)	2023/08/10	106	80 - 120	97	80 - 120	<0.005	mg/L				
8844598	. Silver (Ag)	2023/08/10	106	80 - 120	100	80 - 120	<0.00001	mg/L				
8844598	. Sodium (Na)	2023/08/10	NC	80 - 120	95	80 - 120	<0.01	mg/L				
8844598	. Strontium (Sr)	2023/08/10	NC	80 - 120	97	80 - 120	<0.0001	mg/L				
8844598	. Tellurium (Te)	2023/08/10	113	80 - 120	100	80 - 120	<0.0001	mg/L				
8844598	. Thallium (Tl)	2023/08/10	105	80 - 120	101	80 - 120	<0.000005	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8844598	. Thorium (Th)	2023/08/10	98	80 - 120	100	80 - 120	<0.0002	mg/L				
8844598	. Tin (Sn)	2023/08/10	112	80 - 120	103	80 - 120	<0.0001	mg/L				
8844598	. Titanium (Ti)	2023/08/10	103	80 - 120	100	80 - 120	<0.0005	mg/L				
8844598	. Tungsten (W)	2023/08/10	106	80 - 120	101	80 - 120	<0.0001	mg/L				
8844598	. Uranium (U)	2023/08/10	104	80 - 120	101	80 - 120	<0.00001	mg/L				
8844598	. Vanadium (V)	2023/08/10	105	80 - 120	94	80 - 120	<0.00005	mg/L				
8844598	. Zinc (Zn)	2023/08/10	105	80 - 120	96	80 - 120	<0.0005	mg/L				
8844598	. Zirconium (Zr)	2023/08/10	112	80 - 120	100	80 - 120	<0.0001	mg/L				
8844731	Mercury (Hg)	2023/08/11	93	75 - 125	102	80 - 120	<0.01	ug/L	5.4	20		
8853726	Dissolved Aluminum (Al)	2023/08/16	NC	80 - 120	98	80 - 120	<0.0005	mg/L	0.29	20		
8853726	Dissolved Antimony (Sb)	2023/08/16	115	80 - 120	112	80 - 120	<0.0001	mg/L	NC	20		
8853726	Dissolved Arsenic (As)	2023/08/16	107	80 - 120	99	80 - 120	<0.0001	mg/L	4.6	20		
8853726	Dissolved Barium (Ba)	2023/08/16	107	80 - 120	101	80 - 120	<0.0002	mg/L	1.5	20		
8853726	Dissolved Beryllium (Be)	2023/08/16	107	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8853726	Dissolved Bismuth (Bi)	2023/08/16	70 (4)	80 - 120	95	80 - 120	<0.0001	mg/L	NC	20		
8853726	Dissolved Boron (B)	2023/08/16	100	80 - 120	94	80 - 120	<0.001	mg/L	0.62	20		
8853726	Dissolved Cadmium (Cd)	2023/08/16	111	80 - 120	99	80 - 120	<0.00001	mg/L	NC	20		
8853726	Dissolved Calcium (Ca)	2023/08/16	NC	80 - 120	101	80 - 120	<0.02	mg/L	0.52	20		
8853726	Dissolved Cesium (Cs)	2023/08/16	106	80 - 120	102	80 - 120	<0.00002	mg/L	NC	N/A		
8853726	Dissolved Chromium (Cr)	2023/08/16	104	80 - 120	97	80 - 120	<0.0005	mg/L	1.0	20		
8853726	Dissolved Cobalt (Co)	2023/08/16	103	80 - 120	97	80 - 120	<0.00005	mg/L	0	20		
8853726	Dissolved Copper (Cu)	2023/08/16	106	80 - 120	100	80 - 120	<0.0001	mg/L	0.75	20		
8853726	Dissolved Iron (Fe)	2023/08/16	106	80 - 120	100	80 - 120	<0.005	mg/L	1.5	20		
8853726	Dissolved Lead (Pb)	2023/08/16	104	80 - 120	95	80 - 120	<0.00005	mg/L	16	20		
8853726	Dissolved Lithium (Li)	2023/08/16	109	80 - 120	100	80 - 120	<0.0005	mg/L	4.0	20		
8853726	Dissolved Magnesium (Mg)	2023/08/16	NC	80 - 120	97	80 - 120	<0.005	mg/L	1.3	20		
8853726	Dissolved Manganese (Mn)	2023/08/16	104	80 - 120	97	80 - 120	<0.0002	mg/L	0.85	20		
8853726	Dissolved Molybdenum (Mo)	2023/08/16	116	80 - 120	104	80 - 120	<0.00005	mg/L	10	20		
8853726	Dissolved Nickel (Ni)	2023/08/16	100	80 - 120	97	80 - 120	<0.0001	mg/L	2.4	20		
8853726	Dissolved Phosphorus (P)	2023/08/16	115	80 - 120	101	80 - 120	<0.005	mg/L	4.8	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8853726	Dissolved Potassium (K)	2023/08/16	107	80 - 120	100	80 - 120	<0.02	mg/L	0.57	20		
8853726	Dissolved Rubidium (Rb)	2023/08/16	108	80 - 120	101	80 - 120	<0.00002	mg/L	0	N/A		
8853726	Dissolved Selenium (Se)	2023/08/16	108	80 - 120	99	80 - 120	<0.0002	mg/L	NC	20		
8853726	Dissolved Silicon (Si)	2023/08/16	271 (4)	80 - 120	101	80 - 120	<0.005	mg/L	1.3	20		
8853726	Dissolved Silver (Ag)	2023/08/16	112	80 - 120	104	80 - 120	<0.00001	mg/L	NC	20		
8853726	Dissolved Sodium (Na)	2023/08/16	104	80 - 120	97	80 - 120	<0.01	mg/L	1.4	20		
8853726	Dissolved Strontium (Sr)	2023/08/16	110	80 - 120	100	80 - 120	<0.0001	mg/L	1.6	20		
8853726	Dissolved Tellurium (Te)	2023/08/16	113	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8853726	Dissolved Thallium (Tl)	2023/08/16	108	80 - 120	96	80 - 120	<0.000005	mg/L	NC	20		
8853726	Dissolved Thorium (Th)	2023/08/16	102	80 - 120	98	80 - 120	<0.0002	mg/L	NC	20		
8853726	Dissolved Tin (Sn)	2023/08/16	115	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		
8853726	Dissolved Titanium (Ti)	2023/08/16	106	80 - 120	100	80 - 120	<0.0005	mg/L	1.0	20		
8853726	Dissolved Tungsten (W)	2023/08/16	112	80 - 120	98	80 - 120	<0.0001	mg/L	NC	20		
8853726	Dissolved Uranium (U)	2023/08/16	107	80 - 120	97	80 - 120	<0.00001	mg/L	2.1	20		
8853726	Dissolved Vanadium (V)	2023/08/16	106	80 - 120	98	80 - 120	<0.00005	mg/L	1.6	20		
8853726	Dissolved Zinc (Zn)	2023/08/16	104	80 - 120	97	80 - 120	<0.0005	mg/L	1.4	20		
8853726	Dissolved Zirconium (Zr)	2023/08/16	121 (4)	80 - 120	107	80 - 120	<0.0001	mg/L	NC	20		
8854849	Strong Acid Dissoc. Cyanide (CN)	2023/08/14	93	80 - 120	103	80 - 120	<0.00050	mg/L	NC	20		
8854864	Total Phosphorus (P)	2023/08/12	109	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20	85	80 - 120
8856240	Free Cyanide (CN)	2023/08/10	95	80 - 120	93	80 - 120	<2.0	ug/L				
8858164	Acidity	2023/08/17	80	80 - 120	103	80 - 120	<5.0	mg/L	3.1	25		
8861053	Acidity	2023/08/18	90	80 - 120	104	80 - 120	<5.0	mg/L	2.7	25		
8861653	Dissolved Sulphate (SO4)	2023/08/21	NC	75 - 125	98	80 - 120	<1.0	mg/L	1.8	20		
8874547	. Aluminum (Al)	2023/08/25	NC	80 - 120	100	80 - 120	<0.0005	mg/L	1.2	20		
8874547	. Antimony (Sb)	2023/08/25	118	80 - 120	103	80 - 120	<0.0001	mg/L				
8874547	. Arsenic (As)	2023/08/25	114	80 - 120	100	80 - 120	<0.0001	mg/L				
8874547	. Barium (Ba)	2023/08/25	107	80 - 120	96	80 - 120	<0.0002	mg/L				
8874547	. Beryllium (Be)	2023/08/25	109	80 - 120	100	80 - 120	<0.00005	mg/L				
8874547	. Bismuth (Bi)	2023/08/25	105	80 - 120	103	80 - 120	<0.0001	mg/L				
8874547	. Boron (B)	2023/08/25	110	80 - 120	101	80 - 120	<0.001	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8874547	. Cadmium (Cd)	2023/08/25	111	80 - 120	97	80 - 120	<0.000005	mg/L				
8874547	. Calcium (Ca)	2023/08/25	NC	80 - 120	100	80 - 120	<0.02	mg/L	1.0	20		
8874547	. Cesium (Cs)	2023/08/25	108	80 - 120	100	80 - 120	<0.00002	mg/L				
8874547	. Chromium (Cr)	2023/08/25	107	80 - 120	97	80 - 120	<0.0005	mg/L				
8874547	. Cobalt (Co)	2023/08/25	105	80 - 120	98	80 - 120	<0.00005	mg/L				
8874547	. Copper (Cu)	2023/08/25	109	80 - 120	99	80 - 120	<0.0001	mg/L	4.3	20		
8874547	. Iron (Fe)	2023/08/25	109	80 - 120	100	80 - 120	<0.005	mg/L	0.48	20		
8874547	. Lead (Pb)	2023/08/25	103	80 - 120	97	80 - 120	<0.00005	mg/L				
8874547	. Lithium (Li)	2023/08/25	113	80 - 120	103	80 - 120	<0.0005	mg/L				
8874547	. Magnesium (Mg)	2023/08/25	NC	80 - 120	99	80 - 120	<0.005	mg/L	0.12	20		
8874547	. Manganese (Mn)	2023/08/25	108	80 - 120	97	80 - 120	<0.0002	mg/L	2.9	20		
8874547	. Molybdenum (Mo)	2023/08/25	116	80 - 120	102	80 - 120	<0.00005	mg/L				
8874547	. Nickel (Ni)	2023/08/25	105	80 - 120	98	80 - 120	<0.0001	mg/L				
8874547	. Phosphorus (P)	2023/08/25	NC	80 - 120	99	80 - 120	<0.005	mg/L				
8874547	. Potassium (K)	2023/08/25	109	80 - 120	98	80 - 120	<0.02	mg/L				
8874547	. Rubidium (Rb)	2023/08/25	109	80 - 120	100	80 - 120	<0.00002	mg/L				
8874547	. Selenium (Se)	2023/08/25	114	80 - 120	100	80 - 120	<0.00005	mg/L				
8874547	. Silicon (Si)	2023/08/25	110	80 - 120	102	80 - 120	<0.005	mg/L				
8874547	. Silver (Ag)	2023/08/25	110	80 - 120	101	80 - 120	<0.00001	mg/L				
8874547	. Sodium (Na)	2023/08/25	NC	80 - 120	100	80 - 120	<0.01	mg/L				
8874547	. Strontium (Sr)	2023/08/25	NC	80 - 120	97	80 - 120	<0.0001	mg/L				
8874547	. Tellurium (Te)	2023/08/25	115	80 - 120	98	80 - 120	<0.0001	mg/L				
8874547	. Thallium (Tl)	2023/08/25	106	80 - 120	98	80 - 120	<0.000005	mg/L				
8874547	. Thorium (Th)	2023/08/25	96	80 - 120	100	80 - 120	<0.0002	mg/L				
8874547	. Tin (Sn)	2023/08/25	113	80 - 120	100	80 - 120	<0.0001	mg/L				
8874547	. Titanium (Ti)	2023/08/25	110	80 - 120	99	80 - 120	<0.0005	mg/L				
8874547	. Tungsten (W)	2023/08/25	111	80 - 120	101	80 - 120	<0.0001	mg/L				
8874547	. Uranium (U)	2023/08/25	108	80 - 120	107	80 - 120	<0.00001	mg/L				
8874547	. Vanadium (V)	2023/08/25	111	80 - 120	98	80 - 120	<0.00005	mg/L				
8874547	. Zinc (Zn)	2023/08/25	110	80 - 120	98	80 - 120	<0.0005	mg/L	6.7	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8874547	. Zirconium (Zr)	2023/08/25	116	80 - 120	101	80 - 120	<0.0001	mg/L				
8878655	Dissolved Aluminum (Al)	2023/08/25	110	80 - 120	100	80 - 120	<0.0005	mg/L	1.2	20		
8878655	Dissolved Antimony (Sb)	2023/08/25	118	80 - 120	105	80 - 120	<0.0001	mg/L	NC	20		
8878655	Dissolved Arsenic (As)	2023/08/25	113	80 - 120	101	80 - 120	<0.0001	mg/L	2.2	20		
8878655	Dissolved Barium (Ba)	2023/08/25	108	80 - 120	100	80 - 120	<0.0002	mg/L	2.8	20		
8878655	Dissolved Beryllium (Be)	2023/08/25	107	80 - 120	101	80 - 120	<0.00005	mg/L	NC	20		
8878655	Dissolved Bismuth (Bi)	2023/08/25	103	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		
8878655	Dissolved Boron (B)	2023/08/25	NC	80 - 120	99	80 - 120	<0.001	mg/L	2.3	20		
8878655	Dissolved Cadmium (Cd)	2023/08/25	111	80 - 120	99	80 - 120	<0.00001	mg/L	NC	20		
8878655	Dissolved Calcium (Ca)	2023/08/25	NC	80 - 120	101	80 - 120	<0.02	mg/L	0.18	20		
8878655	Dissolved Cesium (Cs)	2023/08/25	110	80 - 120	104	80 - 120	<0.00002	mg/L	0	N/A		
8878655	Dissolved Chromium (Cr)	2023/08/25	108	80 - 120	98	80 - 120	<0.0005	mg/L	NC	20		
8878655	Dissolved Cobalt (Co)	2023/08/25	106	80 - 120	98	80 - 120	<0.00005	mg/L	NC	20		
8878655	Dissolved Copper (Cu)	2023/08/25	109	80 - 120	100	80 - 120	<0.0001	mg/L	4.1	20		
8878655	Dissolved Iron (Fe)	2023/08/25	107	80 - 120	100	80 - 120	<0.005	mg/L	1.6	20		
8878655	Dissolved Lead (Pb)	2023/08/25	102	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8878655	Dissolved Lithium (Li)	2023/08/25	113	80 - 120	104	80 - 120	<0.0005	mg/L	0.011	20		
8878655	Dissolved Magnesium (Mg)	2023/08/25	NC	80 - 120	99	80 - 120	<0.005	mg/L	0.84	20		
8878655	Dissolved Manganese (Mn)	2023/08/25	NC	80 - 120	99	80 - 120	<0.0002	mg/L	2.2	20		
8878655	Dissolved Molybdenum (Mo)	2023/08/25	117	80 - 120	103	80 - 120	<0.00005	mg/L	3.2	20		
8878655	Dissolved Nickel (Ni)	2023/08/25	105	80 - 120	98	80 - 120	<0.0001	mg/L	3.4	20		
8878655	Dissolved Phosphorus (P)	2023/08/25	117	80 - 120	99	80 - 120	<0.005	mg/L	3.5	20		
8878655	Dissolved Potassium (K)	2023/08/25	NC	80 - 120	101	80 - 120	<0.02	mg/L	1.5	20		
8878655	Dissolved Rubidium (Rb)	2023/08/25	111	80 - 120	103	80 - 120	<0.00002	mg/L	2.2	N/A		
8878655	Dissolved Selenium (Se)	2023/08/25	112	80 - 120	101	80 - 120	<0.0002	mg/L	NC	20		
8878655	Dissolved Silicon (Si)	2023/08/25	NC	80 - 120	101	80 - 120	<0.005	mg/L	0.035	20		
8878655	Dissolved Silver (Ag)	2023/08/25	108	80 - 120	102	80 - 120	<0.00001	mg/L	18	20		
8878655	Dissolved Sodium (Na)	2023/08/25	NC	80 - 120	100	80 - 120	<0.01	mg/L	0.91	20		
8878655	Dissolved Strontium (Sr)	2023/08/25	NC	80 - 120	100	80 - 120	<0.0001	mg/L	2.1	20		
8878655	Dissolved Tellurium (Te)	2023/08/25	110	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8878655	Dissolved Thallium (Tl)	2023/08/25	103	80 - 120	98	80 - 120	<0.000005	mg/L	NC	20		
8878655	Dissolved Thorium (Th)	2023/08/25	96	80 - 120	99	80 - 120	<0.0002	mg/L	NC	20		
8878655	Dissolved Tin (Sn)	2023/08/25	117	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		
8878655	Dissolved Titanium (Ti)	2023/08/25	111	80 - 120	98	80 - 120	<0.0005	mg/L	NC	20		
8878655	Dissolved Tungsten (W)	2023/08/25	NC	80 - 120	101	80 - 120	<0.0001	mg/L	1.3	20		
8878655	Dissolved Uranium (U)	2023/08/25	108	80 - 120	105	80 - 120	<0.00001	mg/L	2.1	20		
8878655	Dissolved Vanadium (V)	2023/08/25	113	80 - 120	100	80 - 120	<0.00005	mg/L	NC	20		
8878655	Dissolved Zinc (Zn)	2023/08/25	106	80 - 120	99	80 - 120	<0.0005	mg/L	0.34	20		
8878655	Dissolved Zirconium (Zr)	2023/08/25	120	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Due to a high concentration of NOx, the sample required dilution. The detection limit was adjusted accordingly.

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

(3) POTENTIAL EXCEEDANCE FOR PARAMETER

(4) Matrix Spike exceeds acceptance limits, probable matrix interference

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Cristina Carriere, Senior Scientific Specialist

<original signed by>

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

<original signed by>

Mike MacGillivray, Scientific Specialist (Inorganics)

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: GROUNDWATER SAMPLING PROGRAM
Your C.O.C. #: 745285

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/18
Report #: R7770544
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3N6294
Received: 2023/08/04, 14:55

Sample Matrix: Water
Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	6	N/A	2023/08/17	ATL SOP-00205	SM 24 2310B m
Acidity (CaCO3) in water (1)	2	N/A	2023/08/18	ATL SOP-00205	SM 24 2310B m
Alkalinity	8	N/A	2023/08/10	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	8	N/A	2023/08/11	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	8	N/A	2023/08/09	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	8	N/A	2023/08/10	CAM SOP-00414	SM 23 2510 m
Dissolved Organic Carbon (DOC) (3)	1	N/A	2023/08/09	CAM SOP-00446	SM 23 5310 B m
Petroleum Hydro. CCME F1 & BTEX in Water	1	N/A	2023/08/11	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (4)	4	2023/08/10	2023/08/11	CAM SOP-00316	CCME PHC-CWS m
Fluoride	8	2023/08/08	2023/08/10	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	8	N/A	2023/08/16	CAM SOP 00102/00408/00447	SM 2340 B
Dissolved Mercury (low level)	8	2023/08/09	2023/08/09	CAM SOP-00453	EPA 7470 m
Mercury (low level)	8	2023/08/10	2023/08/11	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	8	2023/08/08	2023/08/11	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	8	N/A	2023/08/16	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	2	N/A	2023/08/14	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	1	N/A	2023/08/15	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	5	N/A	2023/08/16	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	8	2023/08/09	2023/08/10	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	8	N/A	2023/08/10	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	7	2023/08/14	2023/08/14	CAL SOP-00270	SM 23 4500-CN m
Cyanide, Strong Acid Dissociable (SAD) (2)	1	2023/08/15	2023/08/15	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	8	2023/08/12	2023/08/12	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	3	N/A	2023/08/10	CAM SOP-00441	USGS I-2522-90 m
Total Ammonia-N	5	N/A	2023/08/11	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (5)	6	N/A	2023/08/08	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Nitrate & Nitrite as Nitrogen in Water (5)	2	N/A	2023/08/09	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	8	2023/08/08	2023/08/10	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (6)	7	N/A	2023/08/05		Field pH Meter
Sulphate by Automated Turbidimetry	8	N/A	2023/08/09	CAM SOP-00464	SM 23 4500-SO42- E m

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: GROUNDWATER SAMPLING PROGRAM
Your C.O.C. #: 745285

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/18
Report #: R7770544
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3N6294
Received: 2023/08/04, 14:55

Sample Matrix: Water
Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Dissolved Solids	8	2023/08/09	2023/08/10	CAM SOP-00428	SM 23 2540C m
Field Temperature (6)	7	N/A	2023/08/05		Field Thermometer
Total Kjeldahl Nitrogen in Water	8	2023/08/09	2023/08/10	CAM SOP-00938	OMOE E3516 m
Low Level Total Suspended Solids	8	2023/08/09	2023/08/10	CAM SOP-00428	SM 23 2540D m
Turbidity	8	N/A	2023/08/09	CAM SOP-00417	SM 23 2130 B m
Volatile Organic Compounds and F1 PHCs	3	N/A	2023/08/10	CAM SOP-00230	EPA 8260C m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
(4) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following “Alberta Environment’s Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003”. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
(5) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(6) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6294
Report Date: 2023/08/18

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: W

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WPN591			WPN592			WPN593		
Sampling Date		2023/08/03 10:00			2023/08/03 11:00			2023/08/03 23:36		
COC Number		745285			745285			745285		
	UNITS	MW07-18	RDL	QC Batch	MW08-18	RDL	QC Batch	MW09-18	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	590	1.0	8836536	220	1.0	8836536	360	1.0	8836536
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.1	1.0	8836536	<1.0	1.0	8836536	2.3	1.0	8836536
Hardness (CaCO3)	mg/L	1400	1.0	8836204	980	1.0	8836204	1400	1.0	8836204
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8836536	<1.0	1.0	8836536	<1.0	1.0	8836536
Field Measurements										
Field Temperature	Celsius	23.6	N/A	ONSITE	19.4	N/A	ONSITE	20.1	N/A	ONSITE
Field Measured pH	pH	6.91		ONSITE	7.13		ONSITE	7.11		ONSITE
Inorganics										
Acidity	mg/L	84	5.0	8858164	22	5.0	8858164	28	5.0	8858164
Total Ammonia-N	mg/L	0.19	0.050	8842313	2.5 (1)	0.050	8847520	1.3	0.050	8841397
Conductivity	mS/cm	2.28	0.001	8838953	2.87	0.001	8838953	2.77	0.001	8838953
Free Cyanide (CN)	ug/L	<2.0 (2)	2.0	8856240	<2.0 (2)	2.0	8856240	<2.0 (2)	2.0	8856240
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.0367	0.00050	8854849	0.0241	0.00050	8854849	0.0519	0.00050	8854849
Total Dissolved Solids	mg/L	1980	10	8840522	2320	10	8840572	2240	10	8840522
Fluoride (F-)	mg/L	0.15	0.10	8838964	0.63	0.10	8838964	0.34	0.10	8838964
Total Kjeldahl Nitrogen (TKN)	mg/L	0.82	0.20	8842276	2.8	0.10	8842276	3.5	0.10	8842528
pH	pH	7.57		8838968	7.61		8838968	7.83		8838968
Total Phosphorus (P)	mg/L	1.2	0.010	8854864	2.0	0.10	8854864	0.44	0.0050	8854864
Total Suspended Solids	mg/L	4800	5	8840507	2300	5	8840507	71	3	8840507
Dissolved Sulphate (SO4)	mg/L	930	5.0	8838261	1500	5.0	8838261	1400	5.0	8838261
Turbidity	NTU	5.2	0.1	8838911	10	0.1	8838911	2.6	0.1	8838911
Alkalinity (Total as CaCO3)	mg/L	590	1.0	8838929	220	1.0	8838929	360	1.0	8838929
Dissolved Chloride (Cl-)	mg/L	12	1.0	8838258	15	1.0	8838258	1.8	1.0	8838258
Nitrite (N)	mg/L	<0.010	0.010	8838867	<0.010	0.010	8838867	0.037	0.010	8838830
Nitrate (N)	mg/L	<0.10	0.10	8838867	<0.10	0.10	8838867	0.26	0.10	8838830
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8838867	<0.10	0.10	8838867	0.29	0.10	8838830

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Result is reported from TKN. KPJ 2023/08/14
(2) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6294
Report Date: 2023/08/18

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: W

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WPN593			WPN594		WPN595		
Sampling Date		2023/08/03 23:36			2023/08/03 12:00		2023/08/03 12:19		
COC Number		745285			745285		745285		
	UNITS	MW09-18 Lab-Dup	RDL	QC Batch	G6-BR-14	QC Batch	G6-OB-14	RDL	QC Batch
Calculated Parameters									
Bicarb. Alkalinity (calc. as CaCO3)	mg/L				290	8836536	120	1.0	8836536
Carb. Alkalinity (calc. as CaCO3)	mg/L				3.1	8836536	<1.0	1.0	8836536
Hardness (CaCO3)	mg/L				260	8836204	120	1.0	8836204
Hydrox. Alkalinity (calc. as CaCO3)	mg/L				<1.0	8836536	<1.0	1.0	8836536
Field Measurements									
Field Temperature	Celsius				12.9	ONSITE	14.5	N/A	ONSITE
Field Measured pH	pH				7.36	ONSITE	7.84		ONSITE
Inorganics									
Acidity	mg/L				9.2	8861053	<5.0	5.0	8858164
Total Ammonia-N	mg/L				0.59 (1)	8841397	<0.050	0.050	8841397
Conductivity	mS/cm				0.523	8838953	0.220	0.001	8838953
Free Cyanide (CN)	ug/L				<2.0 (2)	8856240	<2.0 (2)	2.0	8856240
Strong Acid Dissoc. Cyanide (CN)	mg/L				<0.00050	8856241	<0.00050	0.00050	8854849
Total Dissolved Solids	mg/L				285	8840522	90	10	8840522
Fluoride (F-)	mg/L				0.32	8838964	<0.10	0.10	8838964
Total Kjeldahl Nitrogen (TKN)	mg/L	3.7	0.10	8842528	0.52 (1)	8842286	<0.10	0.10	8842276
pH	pH				8.04	8838968	7.96		8838968
Total Phosphorus (P)	mg/L				0.075	8854864	0.013	0.0010	8854864
Total Suspended Solids	mg/L				18	8840507	64	1	8840507
Dissolved Sulphate (SO4)	mg/L				<1.0	8840084	2.3	1.0	8840084
Turbidity	NTU				2.0	8838911	2.5	0.1	8838911
Alkalinity (Total as CaCO3)	mg/L				300	8838929	120	1.0	8838929
Dissolved Chloride (Cl-)	mg/L				<1.0	8840083	<1.0	1.0	8840083
Nitrite (N)	mg/L				<0.010	8838830	<0.010	0.010	8838830
Nitrate (N)	mg/L				<0.10	8838830	<0.10	0.10	8838830

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) TKN < NH4: Both values fall within acceptable RPD limits for duplicates and are likely equivalent.
(2) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6294
Report Date: 2023/08/18

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: W

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WPN593			WPN594		WPN595		
Sampling Date		2023/08/03 23:36			2023/08/03 12:00		2023/08/03 12:19		
COC Number		745285			745285		745285		
	UNITS	**MW09-18 Lab-Dup**	**RDL**	**QC Batch**	**G6-BR-14**	**QC Batch**	**G6-OB-14**	**RDL**	**QC Batch**
Nitrate + Nitrite (N)	mg/L				<0.10	8838830	<0.10	0.10	8838830

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6294
Report Date: 2023/08/18

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: W

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WPN595			WPN596			WPN596		
Sampling Date		2023/08/03 12:19			2023/08/03 14:43			2023/08/03 14:43		
COC Number		745285			745285			745285		
	UNITS	G6-OB-14 Lab-Dup	RDL	QC Batch	MWS-14-07-OB	RDL	QC Batch	MWS-14-07-OB Lab-Dup	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L				280	1.0	8836536			
Carb. Alkalinity (calc. as CaCO3)	mg/L				2.6	1.0	8836536			
Hardness (CaCO3)	mg/L				280	1.0	8836204			
Hydrox. Alkalinity (calc. as CaCO3)	mg/L				<1.0	1.0	8836536			
Field Measurements										
Field Temperature	Celsius				13.6	N/A	ONSITE			
Field Measured pH	pH				7.15		ONSITE			
Inorganics										
Acidity	mg/L				17	5.0	8861053			
Total Ammonia-N	mg/L				<0.050	0.050	8842313	<0.050	0.050	8842313
Conductivity	mS/cm	0.222	0.001	8838953	0.521	0.001	8838953			
Free Cyanide (CN)	ug/L				<2.0 (1)	2.0	8856240			
Strong Acid Dissoc. Cyanide (CN)	mg/L				<0.00050	0.00050	8854849			
Total Dissolved Solids	mg/L				260	10	8840522			
Fluoride (F-)	mg/L	<0.10	0.10	8838964	<0.10	0.10	8838964			
Total Kjeldahl Nitrogen (TKN)	mg/L				0.12	0.10	8842276			
Dissolved Organic Carbon	mg/L				2.4	0.40	8836626			
pH	pH	8.05		8838968	7.98		8838968			
Total Phosphorus (P)	mg/L				0.0035	0.0010	8854864			
Total Suspended Solids	mg/L				10	1	8840507	10	1	8840507
Dissolved Sulphate (SO4)	mg/L				5.9	1.0	8838261			
Turbidity	NTU				0.5	0.1	8838911			
Alkalinity (Total as CaCO3)	mg/L	120	1.0	8838929	290	1.0	8838929			
Dissolved Chloride (Cl-)	mg/L				<1.0	1.0	8838258			
Nitrite (N)	mg/L				<0.010	0.010	8838830			
Nitrate (N)	mg/L				<0.10	0.10	8838830			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6294
Report Date: 2023/08/18

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: W

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WPN595			WPN596			WPN596		
Sampling Date		2023/08/03 12:19			2023/08/03 14:43			2023/08/03 14:43		
COC Number		745285			745285			745285		
	UNITS	**G6-OB-14 Lab-Dup**	**RDL**	**QC Batch**	**MWS-14-07-OB**	**RDL**	**QC Batch**	**MWS-14-07-OB Lab-Dup**	**RDL**	**QC Batch**
Nitrate + Nitrite (N)	mg/L				<0.10	0.10	8838830			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6294
Report Date: 2023/08/18

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: W

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WPN597			WPN597			WPN598		
Sampling Date		2023/08/03 15:14			2023/08/03 15:14			2023/08/03 08:00		
COC Number		745285			745285			745285		
	UNITS	MWS-14-07-BR	RDL	QC Batch	MWS-14-07-BR Lab-Dup	RDL	QC Batch	DUPLICATE 4	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	330	1.0	8836536				280	1.0	8836536
Carb. Alkalinity (calc. as CaCO3)	mg/L	3.0	1.0	8836536				3.0	1.0	8836536
Hardness (CaCO3)	mg/L	280	1.0	8836204				280	1.0	8836204
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8836536				<1.0	1.0	8836536
Field Measurements										
Field Temperature	Celsius	9.9	N/A	ONSITE						
Field Measured pH	pH	7.05		ONSITE						
Inorganics										
Acidity	mg/L	20	5.0	8858164	19	5.0	8858164	19	5.0	8858164
Total Ammonia-N	mg/L	0.085	0.050	8842313				<0.050	0.050	8842313
Conductivity	mS/cm	0.617	0.001	8838953				0.512	0.001	8838953
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	8856240				<2.0 (1)	2.0	8856240
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8854849				<0.00050	0.00050	8854849
Total Dissolved Solids	mg/L	325	10	8840522				280	10	8840522
Fluoride (F-)	mg/L	<0.10	0.10	8838964				<0.10	0.10	8838964
Total Kjeldahl Nitrogen (TKN)	mg/L	0.20	0.10	8842276				0.10	0.10	8842276
pH	pH	7.98		8838968				8.07		8838968
Total Phosphorus (P)	mg/L	0.0017	0.0010	8854864				<0.0010	0.0010	8854864
Total Suspended Solids	mg/L	9	1	8840507				3	1	8840515
Dissolved Sulphate (SO4)	mg/L	13	1.0	8838261				5.3	1.0	8838261
Turbidity	NTU	0.9	0.1	8838911				0.2	0.1	8838911
Alkalinity (Total as CaCO3)	mg/L	340	1.0	8838929				280	1.0	8838929
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	8838258				<1.0	1.0	8838258
Nitrite (N)	mg/L	<0.010	0.010	8838830				<0.010	0.010	8838830
Nitrate (N)	mg/L	<0.10	0.10	8838830				<0.10	0.10	8838830
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8838830				<0.10	0.10	8838830

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6294
Report Date: 2023/08/18

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: W

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WPN598		
Sampling Date		2023/08/03 08:00		
COC Number		745285		
	UNITS	DUPLICATE 4 Lab-Dup	RDL	QC Batch
Inorganics				
Total Phosphorus (P)	mg/L	<0.0010	0.0010	8854864
Total Suspended Solids	mg/L	3	1	8840515

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN591			WPN591			WPN592		
Sampling Date		2023/08/03 10:00			2023/08/03 10:00			2023/08/03 11:00		
COC Number		745285			745285			745285		
	UNITS	MW07-18	RDL	QC Batch	MW07-18 Lab-Dup	RDL	QC Batch	MW08-18	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0025	0.0025	8853726				0.0037	0.0025	8853726
. Aluminum (Al)	mg/L	6.64	0.0025	8844598				7.26	0.005	8850735
Dissolved Antimony (Sb)	mg/L	0.0008	0.0005	8853726				0.0006	0.0005	8853726
. Antimony (Sb)	mg/L	0.0006	0.0005	8844598				<0.001	0.001	8850735
Dissolved Arsenic (As)	mg/L	1.33	0.005	8853726				8.56	0.01	8853726
. Arsenic (As)	mg/L	2.15	0.005	8844598				9.82	0.05	8850735
Dissolved Barium (Ba)	mg/L	0.135	0.001	8853726				0.016	0.001	8853726
. Barium (Ba)	mg/L	0.126	0.001	8844598				0.055	0.002	8850735
Dissolved Beryllium (Be)	mg/L	<0.00025	0.00025	8853726				<0.00025	0.00025	8853726
. Beryllium (Be)	mg/L	0.00033	0.00025	8844598				<0.0005	0.0005	8850735
Dissolved Bismuth (Bi)	mg/L	<0.0005	0.0005	8853726				<0.0005	0.0005	8853726
. Bismuth (Bi)	mg/L	<0.0005	0.0005	8844598				<0.001	0.001	8850735
Dissolved Boron (B)	mg/L	0.016	0.005	8853726				0.102	0.005	8853726
. Boron (B)	mg/L	0.028	0.005	8844598				0.13	0.01	8850735
Dissolved Cadmium (Cd)	mg/L	<0.00005	0.00005	8853726				<0.00005	0.00005	8853726
. Cadmium (Cd)	mg/L	0.000137	0.000025	8844598				0.00015	0.00005	8850735
Dissolved Calcium (Ca)	mg/L	415	0.2	8853726				249	0.1	8853726
. Calcium (Ca)	mg/L	650	1	8844598				376	0.2	8850735
Dissolved Cesium (Cs)	mg/L	<0.0001	0.0001	8853726				<0.0001	0.0001	8853726
. Cesium (Cs)	mg/L	0.0010	0.0001	8844598				0.0014	0.0002	8850735
Dissolved Chromium (Cr)	mg/L	<0.0025	0.0025	8853726				<0.0025	0.0025	8853726
. Chromium (Cr)	mg/L	0.0336	0.0025	8844598				0.044	0.005	8850735
Dissolved Cobalt (Co)	mg/L	0.00737	0.00025	8853726				0.00286	0.00025	8853726
. Cobalt (Co)	mg/L	0.0184	0.00025	8844598				0.0153	0.0005	8850735
Dissolved Copper (Cu)	mg/L	<0.0005	0.0005	8853726				0.0040	0.0005	8853726
. Copper (Cu)	mg/L	0.0291	0.0005	8844598				0.023	0.001	8850735
Dissolved Iron (Fe)	mg/L	12.6	0.025	8853726				15.0	0.025	8853726
. Iron (Fe)	mg/L	36.9	0.025	8844598				53.4	0.05	8850735
Dissolved Lead (Pb)	mg/L	<0.00025	0.00025	8853726				<0.00025	0.00025	8853726
. Lead (Pb)	mg/L	0.0101	0.00025	8844598				0.0277	0.0005	8850735

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN591			WPN591			WPN592		
Sampling Date		2023/08/03 10:00			2023/08/03 10:00			2023/08/03 11:00		
COC Number		745285			745285			745285		
	UNITS	MW07-18	RDL	QC Batch	MW07-18 Lab-Dup	RDL	QC Batch	MW08-18	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0118	0.0025	8853726				0.0986	0.0025	8853726
. Lithium (Li)	mg/L	0.0211	0.0025	8844598				0.120	0.005	8850735
Dissolved Magnesium (Mg)	mg/L	92.6	0.025	8853726				85.6	0.025	8853726
. Magnesium (Mg)	mg/L	148	0.025	8844598				124	0.05	8850735
Dissolved Manganese (Mn)	mg/L	1.25	0.001	8853726				0.620	0.001	8853726
. Manganese (Mn)	mg/L	2.12	0.001	8844598				1.83	0.002	8850735
Mercury (Hg)	ug/L	0.02	0.01	8844731	0.01	0.01	8844731	<0.01	0.01	8844731
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8841715	<0.01	0.01	8841715	<0.01	0.01	8841511
Dissolved Molybdenum (Mo)	mg/L	0.00047	0.00025	8853726				0.00880	0.00025	8853726
. Molybdenum (Mo)	mg/L	0.00029	0.00025	8844598				0.0055	0.0005	8850735
Dissolved Nickel (Ni)	mg/L	0.0071	0.0005	8853726				0.0045	0.0005	8853726
. Nickel (Ni)	mg/L	0.0371	0.0005	8844598				0.062	0.001	8850735
Dissolved Phosphorus (P)	mg/L	0.048	0.025	8853726				0.065	0.025	8853726
. Phosphorus (P)	mg/L	0.819	0.025	8844598				1.04	0.05	8850735
Dissolved Potassium (K)	mg/L	11.6	0.1	8853726				33.5	0.1	8853726
. Potassium (K)	mg/L	16.4	0.1	8844598				34.5	0.2	8850735
Dissolved Rubidium (Rb)	mg/L	0.0078	0.0001	8853726				0.0102	0.0001	8853726
. Rubidium (Rb)	mg/L	0.0229	0.0001	8844598				0.0255	0.0002	8850735
Dissolved Selenium (Se)	mg/L	<0.001	0.001	8853726				<0.001	0.001	8853726
. Selenium (Se)	mg/L	<0.00025	0.00025	8844598				<0.0005	0.0005	8850735
Dissolved Silicon (Si)	mg/L	11.6	0.025	8853726				4.53	0.025	8853726
. Silicon (Si)	mg/L	20.1	0.025	8844598				12.9	0.05	8850735
Dissolved Silver (Ag)	mg/L	<0.00005	0.00005	8853726				<0.00005	0.00005	8853726
. Silver (Ag)	mg/L	<0.00005	0.00005	8844598				<0.0001	0.0001	8850735
Dissolved Sodium (Na)	mg/L	23.0	0.05	8853726				273	0.05	8853726
. Sodium (Na)	mg/L	26.4	0.05	8844598				287	0.1	8850735
Dissolved Strontium (Sr)	mg/L	1.03	0.0005	8853726				1.87	0.0005	8853726
. Strontium (Sr)	mg/L	1.35	0.0005	8844598				2.36	0.001	8850735
Dissolved Sulphur (S)	mg/L	270	0.5	8839778				450	5	8839778
Total Sulphur (S)	mg/L	300	0.5	8840999				510	5	8840999
Dissolved Tellurium (Te)	mg/L	<0.0005	0.0005	8853726				<0.0005	0.0005	8853726

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN591			WPN591			WPN592		
Sampling Date		2023/08/03 10:00			2023/08/03 10:00			2023/08/03 11:00		
COC Number		745285			745285			745285		
	UNITS	MW07-18	RDL	QC Batch	MW07-18 Lab-Dup	RDL	QC Batch	MW08-18	RDL	QC Batch
. Tellurium (Te)	mg/L	<0.0005	0.0005	8844598				<0.001	0.001	8850735
Dissolved Thallium (Tl)	mg/L	<0.000025	0.000025	8853726				<0.000025	0.000025	8853726
. Thallium (Tl)	mg/L	0.000100	0.000025	8844598				0.00013	0.00005	8850735
Dissolved Thorium (Th)	mg/L	<0.001	0.001	8853726				<0.001	0.001	8853726
. Thorium (Th)	mg/L	0.004	0.001	8844598				0.004	0.002	8850735
Dissolved Tin (Sn)	mg/L	<0.0005	0.0005	8853726				<0.0005	0.0005	8853726
. Tin (Sn)	mg/L	<0.0005	0.0005	8844598				<0.001	0.001	8850735
Dissolved Titanium (Ti)	mg/L	<0.0025	0.0025	8853726				<0.0025	0.0025	8853726
. Titanium (Ti)	mg/L	0.310	0.005	8844598				0.238	0.005	8850735
Dissolved Tungsten (W)	mg/L	<0.0005	0.0005	8853726				0.0007	0.0005	8853726
. Tungsten (W)	mg/L	0.0007	0.0005	8844598				0.001	0.001	8850735
Dissolved Uranium (U)	mg/L	0.00120	0.00005	8853726				0.00240	0.00005	8853726
. Uranium (U)	mg/L	0.00213	0.00005	8844598				0.0036	0.0001	8850735
Dissolved Vanadium (V)	mg/L	<0.00025	0.00025	8853726				<0.00025	0.00025	8853726
. Vanadium (V)	mg/L	0.0248	0.00025	8844598				0.0246	0.0005	8850735
Dissolved Zinc (Zn)	mg/L	0.0060	0.0025	8853726				0.0028	0.0025	8853726
. Zinc (Zn)	mg/L	0.0440	0.0025	8844598				0.079	0.005	8850735
Dissolved Zirconium (Zr)	mg/L	<0.0005	0.0005	8853726				<0.0005	0.0005	8853726
. Zirconium (Zr)	mg/L	0.0050	0.0005	8844598				0.002	0.001	8850735

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN593			WPN594		WPN595		
Sampling Date		2023/08/03 23:36			2023/08/03 12:00		2023/08/03 12:19		
COC Number		745285			745285		745285		
	UNITS	MW09-18	RDL	QC Batch	G6-BR-14	RDL	G6-OB-14	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	mg/L	0.0037	0.0025	8853726	0.0024	0.0005	0.0827	0.0005	8853726
. Aluminum (Al)	mg/L	0.077	0.005	8850735	0.0601	0.0005	0.188	0.0005	8850752
Dissolved Antimony (Sb)	mg/L	0.0006	0.0005	8853726	<0.0001	0.0001	<0.0001	0.0001	8853726
. Antimony (Sb)	mg/L	<0.001	0.001	8850735	<0.0001	0.0001	<0.0001	0.0001	8850752
Dissolved Arsenic (As)	mg/L	0.320	0.001	8853726	0.0011	0.0001	0.0004	0.0001	8853726
. Arsenic (As)	mg/L	0.346	0.001	8850735	0.0010	0.0001	0.0005	0.0001	8850752
Dissolved Barium (Ba)	mg/L	0.044	0.001	8853726	0.0480	0.0002	0.0083	0.0002	8853726
. Barium (Ba)	mg/L	0.042	0.002	8850735	0.0514	0.0002	0.0099	0.0002	8850752
Dissolved Beryllium (Be)	mg/L	<0.00025	0.00025	8853726	<0.00005	0.00005	<0.00005	0.00005	8853726
. Beryllium (Be)	mg/L	<0.0005	0.0005	8850735	<0.00005	0.00005	<0.00005	0.00005	8850752
Dissolved Bismuth (Bi)	mg/L	<0.0005	0.0005	8853726	<0.0001	0.0001	<0.0001	0.0001	8853726
. Bismuth (Bi)	mg/L	<0.001	0.001	8850735	<0.0001	0.0001	<0.0001	0.0001	8850752
Dissolved Boron (B)	mg/L	0.039	0.005	8853726	0.027	0.001	0.005	0.001	8853726
. Boron (B)	mg/L	0.04	0.01	8850735	0.031	0.001	0.005	0.001	8850752
Dissolved Cadmium (Cd)	mg/L	<0.00005	0.00005	8853726	<0.00001	0.00001	<0.00001	0.00001	8853726
. Cadmium (Cd)	mg/L	<0.00005	0.00005	8850735	<0.000005	0.000005	<0.000005	0.000005	8850752
Dissolved Calcium (Ca)	mg/L	271	0.2	8853726	68.2	0.1	34.9	0.02	8853726
. Calcium (Ca)	mg/L	250	0.2	8850735	68.9	0.1	37.8	0.02	8850752
Dissolved Cesium (Cs)	mg/L	<0.0001	0.0001	8853726	0.00053	0.00002	<0.00002	0.00002	8853726
. Cesium (Cs)	mg/L	<0.0002	0.0002	8850735	0.00068	0.00002	0.00002	0.00002	8850752
Dissolved Chromium (Cr)	mg/L	<0.0025	0.0025	8853726	<0.0005	0.0005	0.0009	0.0005	8853726
. Chromium (Cr)	mg/L	<0.005	0.005	8850735	<0.0005	0.0005	0.0012	0.0005	8850752
Dissolved Cobalt (Co)	mg/L	0.00124	0.00025	8853726	<0.00005	0.00005	0.00009	0.00005	8853726
. Cobalt (Co)	mg/L	0.0016	0.0005	8850735	0.00007	0.00005	0.00020	0.00005	8850752
Dissolved Copper (Cu)	mg/L	0.0017	0.0005	8853726	0.0005	0.0001	0.0004	0.0001	8853726
. Copper (Cu)	mg/L	0.004	0.001	8850735	0.0003	0.0001	0.0006	0.0001	8850752
Dissolved Iron (Fe)	mg/L	2.28	0.025	8853726	0.839	0.005	0.116	0.005	8853726
. Iron (Fe)	mg/L	1.85	0.05	8850735	0.918	0.005	0.260	0.005	8850752
Dissolved Lead (Pb)	mg/L	<0.00025	0.00025	8853726	<0.00005	0.00005	0.00010	0.00005	8853726
. Lead (Pb)	mg/L	<0.0005	0.0005	8850735	0.00028	0.00005	0.00020	0.00005	8850752
Dissolved Lithium (Li)	mg/L	0.128	0.0025	8853726	0.0072	0.0005	0.0009	0.0005	8853726

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN593			WPN594		WPN595		
Sampling Date		2023/08/03 23:36			2023/08/03 12:00		2023/08/03 12:19		
COC Number		745285			745285		745285		
	UNITS	MW09-18	RDL	QC Batch	G6-BR-14	RDL	G6-OB-14	RDL	QC Batch
. Lithium (Li)	mg/L	0.146	0.005	8850735	0.0077	0.0005	0.0010	0.0005	8850752
Dissolved Magnesium (Mg)	mg/L	174	0.025	8853726	22.8	0.005	7.97	0.005	8853726
. Magnesium (Mg)	mg/L	165	0.05	8850735	23.0	0.005	8.72	0.005	8850752
Dissolved Manganese (Mn)	mg/L	0.291	0.001	8853726	0.0440	0.0002	0.0067	0.0002	8853726
. Manganese (Mn)	mg/L	0.266	0.002	8850735	0.0499	0.0002	0.0135	0.0002	8850752
Mercury (Hg)	ug/L	<0.01	0.01	8844731	<0.01	0.01	<0.01	0.01	8844731
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8841715	<0.01	0.01	<0.01	0.01	8841715
Dissolved Molybdenum (Mo)	mg/L	0.00753	0.00025	8853726	0.00054	0.00005	0.00009	0.00005	8853726
. Molybdenum (Mo)	mg/L	0.0076	0.0005	8850735	0.00046	0.00005	0.00007	0.00005	8850752
Dissolved Nickel (Ni)	mg/L	0.0051	0.0005	8853726	<0.0001	0.0001	0.0003	0.0001	8853726
. Nickel (Ni)	mg/L	0.006	0.001	8850735	0.0002	0.0001	0.0005	0.0001	8850752
Dissolved Phosphorus (P)	mg/L	0.218	0.025	8853726	0.043	0.005	0.012	0.005	8853726
. Phosphorus (P)	mg/L	0.65	0.05	8850735	0.057	0.005	0.019	0.005	8850752
Dissolved Potassium (K)	mg/L	28.3	0.1	8853726	2.22	0.02	0.32	0.02	8853726
. Potassium (K)	mg/L	28.0	0.2	8850735	2.31	0.02	0.33	0.02	8850752
Dissolved Rubidium (Rb)	mg/L	0.0103	0.0001	8853726	0.00078	0.00002	0.00043	0.00002	8853726
. Rubidium (Rb)	mg/L	0.0119	0.0002	8850735	0.00091	0.00002	0.00059	0.00002	8850752
Dissolved Selenium (Se)	mg/L	<0.001	0.001	8853726	<0.0002	0.0002	<0.0002	0.0002	8853726
. Selenium (Se)	mg/L	<0.0005	0.0005	8850735	<0.00005	0.00005	0.00006	0.00005	8850752
Dissolved Silicon (Si)	mg/L	9.30	0.025	8853726	8.52	0.025	4.82	0.025	8853726
. Silicon (Si)	mg/L	9.51	0.05	8850735	8.54	0.025	5.05	0.025	8850752
Dissolved Silver (Ag)	mg/L	<0.00005	0.00005	8853726	<0.00001	0.00001	<0.00001	0.00001	8853726
. Silver (Ag)	mg/L	<0.0001	0.0001	8850735	<0.00001	0.00001	<0.00001	0.00001	8850752
Dissolved Sodium (Na)	mg/L	194	0.05	8853726	13.5	0.01	1.90	0.01	8853726
. Sodium (Na)	mg/L	183	0.1	8850735	14.2	0.01	1.98	0.01	8850752
Dissolved Strontium (Sr)	mg/L	1.93	0.0005	8853726	0.302	0.0001	0.0308	0.0001	8853726
. Strontium (Sr)	mg/L	1.90	0.001	8850735	0.317	0.0001	0.0324	0.0001	8850752
Dissolved Sulphur (S)	mg/L	490	0.5	8839778	<0.5	0.5	0.6	0.5	8839778
Total Sulphur (S)	mg/L	460	0.5	8840999	<0.5	0.5	0.7	0.5	8840999
Dissolved Tellurium (Te)	mg/L	<0.0005	0.0005	8853726	<0.0001	0.0001	<0.0001	0.0001	8853726
. Tellurium (Te)	mg/L	<0.001	0.001	8850735	<0.0001	0.0001	<0.0001	0.0001	8850752
Dissolved Thallium (Tl)	mg/L	<0.000025	0.000025	8853726	<0.000005	0.000005	<0.000005	0.000005	8853726

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN593			WPN594		WPN595		
Sampling Date		2023/08/03 23:36			2023/08/03 12:00		2023/08/03 12:19		
COC Number		745285			745285		745285		
	UNITS	MW09-18	RDL	QC Batch	G6-BR-14	RDL	G6-OB-14	RDL	QC Batch
. Thallium (Tl)	mg/L	0.00005	0.00005	8850735	<0.000005	0.000005	0.000006	0.000005	8850752
Dissolved Thorium (Th)	mg/L	<0.001	0.001	8853726	<0.0002	0.0002	<0.0002	0.0002	8853726
. Thorium (Th)	mg/L	<0.002	0.002	8850735	<0.0002	0.0002	<0.0002	0.0002	8850752
Dissolved Tin (Sn)	mg/L	<0.0005	0.0005	8853726	<0.0001	0.0001	<0.0001	0.0001	8853726
. Tin (Sn)	mg/L	<0.001	0.001	8850735	<0.0001	0.0001	<0.0001	0.0001	8850752
Dissolved Titanium (Ti)	mg/L	<0.0025	0.0025	8853726	0.0007	0.0005	0.0057	0.0005	8853726
. Titanium (Ti)	mg/L	<0.005	0.005	8850735	0.0045	0.0005	0.0109	0.0005	8850752
Dissolved Tungsten (W)	mg/L	0.0005	0.0005	8853726	0.0004	0.0001	<0.0001	0.0001	8853726
. Tungsten (W)	mg/L	<0.001	0.001	8850735	0.0004	0.0001	<0.0001	0.0001	8850752
Dissolved Uranium (U)	mg/L	0.00681	0.00005	8853726	0.00002	0.00001	0.00014	0.00001	8853726
. Uranium (U)	mg/L	0.0071	0.0001	8850735	0.00005	0.00001	0.00015	0.00001	8850752
Dissolved Vanadium (V)	mg/L	0.00208	0.00025	8853726	<0.00005	0.00005	0.00130	0.00005	8853726
. Vanadium (V)	mg/L	0.0041	0.0005	8850735	0.00018	0.00005	0.00157	0.00005	8850752
Dissolved Zinc (Zn)	mg/L	0.0028	0.0025	8853726	0.0010	0.0005	0.0011	0.0005	8853726
. Zinc (Zn)	mg/L	<0.005	0.005	8850735	0.0012	0.0005	0.0015	0.0005	8850752
Dissolved Zirconium (Zr)	mg/L	<0.0005	0.0005	8853726	0.0004	0.0001	<0.0001	0.0001	8853726
. Zirconium (Zr)	mg/L	<0.001	0.001	8850735	0.0006	0.0001	0.0001	0.0001	8850752

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN595			WPN596		
Sampling Date		2023/08/03 12:19			2023/08/03 14:43		
COC Number		745285			745285		
	UNITS	G6-OB-14 Lab-Dup	RDL	QC Batch	MWS-14-07-OB	RDL	QC Batch
Metals							
Dissolved Aluminum (Al)	mg/L	0.0830	0.0005	8853726	0.0013	0.0005	8853726
. Aluminum (Al)	mg/L				0.0305	0.0005	8850752
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8853726	<0.0001	0.0001	8853726
. Antimony (Sb)	mg/L				<0.0001	0.0001	8850752
Dissolved Arsenic (As)	mg/L	0.0004	0.0001	8853726	0.0012	0.0001	8853726
. Arsenic (As)	mg/L				0.0021	0.0001	8850752
Dissolved Barium (Ba)	mg/L	0.0084	0.0002	8853726	0.0166	0.0002	8853726
. Barium (Ba)	mg/L				0.0182	0.0002	8850752
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8853726	<0.00005	0.00005	8853726
. Beryllium (Be)	mg/L				<0.00005	0.00005	8850752
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8853726	<0.0001	0.0001	8853726
. Bismuth (Bi)	mg/L				<0.0001	0.0001	8850752
Dissolved Boron (B)	mg/L	0.005	0.001	8853726	0.005	0.001	8853726
. Boron (B)	mg/L				0.005	0.001	8850752
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8853726	0.00001	0.00001	8853726
. Cadmium (Cd)	mg/L				0.000020	0.000005	8850752
Dissolved Calcium (Ca)	mg/L	34.7	0.02	8853726	83.0	0.1	8853726
. Calcium (Ca)	mg/L				86.4	0.1	8850752
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	8853726	0.00005	0.00002	8853726
. Cesium (Cs)	mg/L				0.00005	0.00002	8850752
Dissolved Chromium (Cr)	mg/L	0.0009	0.0005	8853726	<0.0005	0.0005	8853726
. Chromium (Cr)	mg/L				<0.0005	0.0005	8850752
Dissolved Cobalt (Co)	mg/L	0.00009	0.00005	8853726	0.00007	0.00005	8853726
. Cobalt (Co)	mg/L				0.00025	0.00005	8850752
Dissolved Copper (Cu)	mg/L	0.0004	0.0001	8853726	0.0017	0.0001	8853726
. Copper (Cu)	mg/L				0.0025	0.0001	8850752
Dissolved Iron (Fe)	mg/L	0.117	0.005	8853726	0.008	0.005	8853726
. Iron (Fe)	mg/L				0.078	0.005	8850752
Dissolved Lead (Pb)	mg/L	0.00011	0.00005	8853726	<0.00005	0.00005	8853726
. Lead (Pb)	mg/L				0.00008	0.00005	8850752

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN595			WPN596		
Sampling Date		2023/08/03 12:19			2023/08/03 14:43		
COC Number		745285			745285		
	UNITS	G6-OB-14 Lab-Dup	RDL	QC Batch	MWS-14-07-OB	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0009	0.0005	8853726	0.0015	0.0005	8853726
. Lithium (Li)	mg/L				0.0016	0.0005	8850752
Dissolved Magnesium (Mg)	mg/L	8.07	0.005	8853726	17.6	0.005	8853726
. Magnesium (Mg)	mg/L				18.2	0.005	8850752
Dissolved Manganese (Mn)	mg/L	0.0068	0.0002	8853726	0.0060	0.0002	8853726
. Manganese (Mn)	mg/L				0.0422	0.0002	8850752
Mercury (Hg)	ug/L				<0.01	0.01	8844731
Dissolved Mercury (Hg)	ug/L				<0.01	0.01	8841715
Dissolved Molybdenum (Mo)	mg/L	0.00008	0.00005	8853726	0.00046	0.00005	8853726
. Molybdenum (Mo)	mg/L				0.00048	0.00005	8850752
Dissolved Nickel (Ni)	mg/L	0.0003	0.0001	8853726	0.0019	0.0001	8853726
. Nickel (Ni)	mg/L				0.0022	0.0001	8850752
Dissolved Phosphorus (P)	mg/L	0.011	0.005	8853726	<0.005	0.005	8853726
. Phosphorus (P)	mg/L				0.006	0.005	8850752
Dissolved Potassium (K)	mg/L	0.32	0.02	8853726	1.18	0.02	8853726
. Potassium (K)	mg/L				1.31	0.02	8850752
Dissolved Rubidium (Rb)	mg/L	0.00043	0.00002	8853726	0.00273	0.00002	8853726
. Rubidium (Rb)	mg/L				0.00284	0.00002	8850752
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8853726	<0.0002	0.0002	8853726
. Selenium (Se)	mg/L				0.00012	0.00005	8850752
Dissolved Silicon (Si)	mg/L	4.76	0.025	8853726	4.93	0.005	8853726
. Silicon (Si)	mg/L				4.87	0.025	8850752
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8853726	<0.00001	0.00001	8853726
. Silver (Ag)	mg/L				<0.00001	0.00001	8850752
Dissolved Sodium (Na)	mg/L	1.93	0.01	8853726	2.54	0.01	8853726
. Sodium (Na)	mg/L				3.18	0.01	8850752
Dissolved Strontium (Sr)	mg/L	0.0313	0.0001	8853726	0.0723	0.0001	8853726
. Strontium (Sr)	mg/L				0.0745	0.0001	8850752
Dissolved Sulphur (S)	mg/L				1.8	0.5	8839778
Total Sulphur (S)	mg/L				1.8	0.5	8840999
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8853726	<0.0001	0.0001	8853726

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN595			WPN596		
Sampling Date		2023/08/03 12:19			2023/08/03 14:43		
COC Number		745285			745285		
	UNITS	G6-OB-14 Lab-Dup	RDL	QC Batch	MWS-14-07-OB	RDL	QC Batch
. Tellurium (Te)	mg/L				<0.0001	0.0001	8850752
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8853726	<0.000005	0.000005	8853726
. Thallium (Tl)	mg/L				0.000006	0.000005	8850752
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8853726	<0.0002	0.0002	8853726
. Thorium (Th)	mg/L				<0.0002	0.0002	8850752
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8853726	<0.0001	0.0001	8853726
. Tin (Sn)	mg/L				<0.0001	0.0001	8850752
Dissolved Titanium (Ti)	mg/L	0.0056	0.0005	8853726	<0.0005	0.0005	8853726
. Titanium (Ti)	mg/L				0.0022	0.0005	8850752
Dissolved Tungsten (W)	mg/L	<0.0001	0.0001	8853726	<0.0001	0.0001	8853726
. Tungsten (W)	mg/L				<0.0001	0.0001	8850752
Dissolved Uranium (U)	mg/L	0.00014	0.00001	8853726	0.00038	0.00001	8853726
. Uranium (U)	mg/L				0.00041	0.00001	8850752
Dissolved Vanadium (V)	mg/L	0.00128	0.00005	8853726	0.00010	0.00005	8853726
. Vanadium (V)	mg/L				0.00019	0.00005	8850752
Dissolved Zinc (Zn)	mg/L	0.0011	0.0005	8853726	0.0013	0.0005	8853726
. Zinc (Zn)	mg/L				0.0020	0.0005	8850752
Dissolved Zirconium (Zr)	mg/L	<0.0001	0.0001	8853726	0.0002	0.0001	8853726
. Zirconium (Zr)	mg/L				0.0002	0.0001	8850752

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN597			WPN598		
Sampling Date		2023/08/03 15:14			2023/08/03 08:00		
COC Number		745285			745285		
	UNITS	MWS-14-07-BR	RDL	QC Batch	DUPLICATE 4	RDL	QC Batch
Metals							
Dissolved Aluminum (Al)	mg/L	0.0016	0.0005	8853726	0.0011	0.0005	8853726
. Aluminum (Al)	mg/L	0.0074	0.0005	8850752	0.0098	0.0005	8850752
Dissolved Antimony (Sb)	mg/L	0.0001	0.0001	8853726	<0.0001	0.0001	8853726
. Antimony (Sb)	mg/L	0.0002	0.0001	8850752	<0.0001	0.0001	8850752
Dissolved Arsenic (As)	mg/L	0.0011	0.0001	8853726	0.0012	0.0001	8853726
. Arsenic (As)	mg/L	0.0023	0.0001	8850752	0.0012	0.0001	8850752
Dissolved Barium (Ba)	mg/L	0.0166	0.0002	8853726	0.0170	0.0002	8853726
. Barium (Ba)	mg/L	0.0200	0.0002	8850752	0.0172	0.0002	8850752
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8853726	<0.00005	0.00005	8853726
. Beryllium (Be)	mg/L	<0.00005	0.00005	8850752	<0.00005	0.00005	8850752
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8853726	<0.0001	0.0001	8853726
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8850752	<0.0001	0.0001	8850752
Dissolved Boron (B)	mg/L	0.010	0.001	8853726	0.004	0.001	8853726
. Boron (B)	mg/L	0.022	0.001	8850752	0.005	0.001	8850752
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8853726	0.00001	0.00001	8853726
. Cadmium (Cd)	mg/L	0.000010	0.000005	8850752	0.000014	0.000005	8850752
Dissolved Calcium (Ca)	mg/L	83.0	0.1	8853726	84.9	0.1	8853726
. Calcium (Ca)	mg/L	76.9	0.1	8850752	82.6	0.1	8850752
Dissolved Cesium (Cs)	mg/L	0.00008	0.00002	8853726	0.00005	0.00002	8853726
. Cesium (Cs)	mg/L	0.00012	0.00002	8850752	0.00005	0.00002	8850752
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8853726	<0.0005	0.0005	8853726
. Chromium (Cr)	mg/L	<0.0005	0.0005	8850752	<0.0005	0.0005	8850752
Dissolved Cobalt (Co)	mg/L	0.00051	0.00005	8853726	0.00007	0.00005	8853726
. Cobalt (Co)	mg/L	0.00078	0.00005	8850752	0.00010	0.00005	8850752
Dissolved Copper (Cu)	mg/L	0.0011	0.0001	8853726	0.0017	0.0001	8853726
. Copper (Cu)	mg/L	0.0022	0.0001	8850752	0.0022	0.0001	8850752
Dissolved Iron (Fe)	mg/L	0.228	0.005	8853726	0.006	0.005	8853726
. Iron (Fe)	mg/L	0.875	0.005	8850752	0.021	0.005	8850752
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8853726	0.00006	0.00005	8853726
. Lead (Pb)	mg/L	0.00013	0.00005	8850752	<0.00005	0.00005	8850752
Dissolved Lithium (Li)	mg/L	0.0018	0.0005	8853726	0.0015	0.0005	8853726

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN597			WPN598		
Sampling Date		2023/08/03 15:14			2023/08/03 08:00		
COC Number		745285			745285		
	UNITS	MWS-14-07-BR	RDL	QC Batch	DUPLICATE 4	RDL	QC Batch
. Lithium (Li)	mg/L	0.0025	0.0005	8850752	0.0016	0.0005	8850752
Dissolved Magnesium (Mg)	mg/L	17.6	0.005	8853726	17.6	0.005	8853726
. Magnesium (Mg)	mg/L	17.4	0.005	8850752	18.0	0.005	8850752
Dissolved Manganese (Mn)	mg/L	0.0597	0.0002	8853726	0.0066	0.0002	8853726
. Manganese (Mn)	mg/L	0.142	0.0002	8850752	0.0120	0.0002	8850752
Mercury (Hg)	ug/L	<0.01	0.01	8844731	<0.01	0.01	8844731
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8841511	<0.01	0.01	8841715
Dissolved Molybdenum (Mo)	mg/L	0.00153	0.00005	8853726	0.00046	0.00005	8853726
. Molybdenum (Mo)	mg/L	0.00370	0.00005	8850752	0.00043	0.00005	8850752
Dissolved Nickel (Ni)	mg/L	0.0030	0.0001	8853726	0.0019	0.0001	8853726
. Nickel (Ni)	mg/L	0.0028	0.0001	8850752	0.0020	0.0001	8850752
Dissolved Phosphorus (P)	mg/L	<0.005	0.005	8853726	<0.005	0.005	8853726
. Phosphorus (P)	mg/L	0.007	0.005	8850752	<0.005	0.005	8850752
Dissolved Potassium (K)	mg/L	1.41	0.02	8853726	1.17	0.02	8853726
. Potassium (K)	mg/L	1.67	0.02	8850752	1.18	0.02	8850752
Dissolved Rubidium (Rb)	mg/L	0.00287	0.00002	8853726	0.00270	0.00002	8853726
. Rubidium (Rb)	mg/L	0.00294	0.00002	8850752	0.00278	0.00002	8850752
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8853726	<0.0002	0.0002	8853726
. Selenium (Se)	mg/L	0.00008	0.00005	8850752	0.00012	0.00005	8850752
Dissolved Silicon (Si)	mg/L	4.95	0.025	8853726	4.87	0.005	8853726
. Silicon (Si)	mg/L	5.24	0.025	8850752	4.58	0.025	8850752
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8853726	<0.00001	0.00001	8853726
. Silver (Ag)	mg/L	<0.00001	0.00001	8850752	<0.00001	0.00001	8850752
Dissolved Sodium (Na)	mg/L	16.3	0.01	8853726	2.49	0.01	8853726
. Sodium (Na)	mg/L	43.8	0.01	8850752	2.29	0.01	8850752
Dissolved Strontium (Sr)	mg/L	0.0895	0.0001	8853726	0.0731	0.0001	8853726
. Strontium (Sr)	mg/L	0.106	0.0001	8850752	0.0737	0.0001	8850752
Dissolved Sulphur (S)	mg/L	2.9	0.5	8839778	1.8	0.5	8839778
Total Sulphur (S)	mg/L	4.5	0.5	8840999	1.8	0.5	8840999
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8853726	<0.0001	0.0001	8853726
. Tellurium (Te)	mg/L	<0.0001	0.0001	8850752	<0.0001	0.0001	8850752
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8853726	<0.000005	0.000005	8853726

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WPN597			WPN598		
Sampling Date		2023/08/03 15:14			2023/08/03 08:00		
COC Number		745285			745285		
	UNITS	MWS-14-07-BR	RDL	QC Batch	DUPLICATE 4	RDL	QC Batch
. Thallium (Tl)	mg/L	<0.000005	0.000005	8850752	0.000006	0.000005	8850752
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8853726	<0.0002	0.0002	8853726
. Thorium (Th)	mg/L	<0.0002	0.0002	8850752	<0.0002	0.0002	8850752
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8853726	<0.0001	0.0001	8853726
. Tin (Sn)	mg/L	0.0002	0.0001	8850752	<0.0001	0.0001	8850752
Dissolved Titanium (Ti)	mg/L	<0.0005	0.0005	8853726	<0.0005	0.0005	8853726
. Titanium (Ti)	mg/L	0.0007	0.0005	8850752	0.0009	0.0005	8850752
Dissolved Tungsten (W)	mg/L	0.0009	0.0001	8853726	<0.0001	0.0001	8853726
. Tungsten (W)	mg/L	0.0023	0.0001	8850752	<0.0001	0.0001	8850752
Dissolved Uranium (U)	mg/L	0.00073	0.00001	8853726	0.00038	0.00001	8853726
. Uranium (U)	mg/L	0.00137	0.00001	8850752	0.00040	0.00001	8850752
Dissolved Vanadium (V)	mg/L	0.00013	0.00005	8853726	0.00010	0.00005	8853726
. Vanadium (V)	mg/L	0.00036	0.00005	8850752	0.00012	0.00005	8850752
Dissolved Zinc (Zn)	mg/L	0.0048	0.0005	8853726	0.0014	0.0005	8853726
. Zinc (Zn)	mg/L	0.0064	0.0005	8850752	0.0016	0.0005	8850752
Dissolved Zirconium (Zr)	mg/L	0.0004	0.0001	8853726	0.0002	0.0001	8853726
. Zirconium (Zr)	mg/L	0.0009	0.0001	8850752	0.0002	0.0001	8850752

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VOLATILE ORGANICS BY GC/MS (WATER)

Bureau Veritas ID		WPN591	WPN592	WPN593		
Sampling Date		2023/08/03 10:00	2023/08/03 11:00	2023/08/03 23:36		
COC Number		745285	745285	745285		
	UNITS	MW07-18	MW08-18	MW09-18	RDL	QC Batch
Volatile Organics						
Benzene	ug/L	<0.17	<0.17	<0.17	0.17	8843657
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	8843657
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	8843657
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	8843657
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	8843657
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	8843657
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	8843657
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	8843657
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	8843657
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	8843657
Toluene	ug/L	1.7	<0.20	<0.20	0.20	8843657
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	8843657
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	8843657
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	8843657
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	8843657
F1 (C6-C10)	ug/L	<25	<25	<25	25	8843657
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	8843657
Surrogate Recovery (%)						
4-Bromofluorobenzene	%	96	97	96		8843657
D4-1,2-Dichloroethane	%	116	116	117		8843657
D8-Toluene	%	92	93	93		8843657

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		WPN591	WPN592	WPN593			WPN596		
Sampling Date		2023/08/03 10:00	2023/08/03 11:00	2023/08/03 23:36			2023/08/03 14:43		
COC Number		745285	745285	745285			745285		
	UNITS	MW07-18	MW08-18	MW09-18	RDL	QC Batch	MWS-14-07-OB	RDL	QC Batch
BTEX & F1 Hydrocarbons									
F1 (C6-C10)	ug/L						<25	25	8845656
F2-F4 Hydrocarbons									
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	8843298	<100	100	8843298
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	8843298	<200	200	8843298
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	8843298	<200	200	8843298
Reached Baseline at C50	ug/L	Yes	Yes	Yes		8843298	Yes		8843298
Surrogate Recovery (%)									
1,4-Difluorobenzene	%						101		8845656
4-Bromofluorobenzene	%						99		8845656
D10-o-Xylene	%						89		8845656
D4-1,2-Dichloroethane	%						98		8845656
o-Terphenyl	%	97	98	99		8843298	98		8843298

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WPN591 **Collected:** 2023/08/03
Sample ID: MW07-18 **Shipped:**
Matrix: Water **Received:** 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8858164	N/A	2023/08/17	Brent Boudreau
Alkalinity	AT	8838929	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8836536	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8838258	N/A	2023/08/09	Alina Dobreanu
Conductivity	AT	8838953	N/A	2023/08/10	Surinder Rai
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8843298	2023/08/10	2023/08/11	Emir Danisman
Fluoride	ISE	8838964	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8836204	N/A	2023/08/16	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8841715	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8844731	2023/08/10	2023/08/11	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8853726	N/A	2023/08/16	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8844598	N/A	2023/08/15	Nan Raykha
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8856240	N/A	2023/08/10	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854849	2023/08/14	2023/08/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8842313	N/A	2023/08/11	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8838867	N/A	2023/08/09	Chandra Nandlal
pH	AT	8838968	2023/08/08	2023/08/10	Surinder Rai
Field Measured pH	PH	ONSITE	N/A	2023/08/05	Alam Joseph
Sulphate by Automated Turbidimetry	KONE	8838261	N/A	2023/08/09	Alina Dobreanu
Total Dissolved Solids	BAL	8840522	2023/08/09	2023/08/10	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/08/05	Alam Joseph
Total Kjeldahl Nitrogen in Water	SKAL	8842276	2023/08/09	2023/08/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8840507	2023/08/09	2023/08/10	Razieh Tabesh
Turbidity	AT	8838911	N/A	2023/08/09	Leily Karimi
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8843657	N/A	2023/08/10	Dina Wang

Bureau Veritas ID: WPN591 Dup **Collected:** 2023/08/03
Sample ID: MW07-18 **Shipped:**
Matrix: Water **Received:** 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Mercury (low level)	CV/AA	8841715	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8844731	2023/08/10	2023/08/11	Jaswinder Kaur

Bureau Veritas ID: WPN592 **Collected:** 2023/08/03
Sample ID: MW08-18 **Shipped:**
Matrix: Water **Received:** 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8858164	N/A	2023/08/17	Brent Boudreau
Alkalinity	AT	8838929	N/A	2023/08/10	Surinder Rai

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WPN592
Sample ID: MW08-18
Matrix: Water

Collected: 2023/08/03
Shipped:
Received: 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Carbonate, Bicarbonate and Hydroxide	CALC	8836536	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8838258	N/A	2023/08/09	Alina Dobreanu
Conductivity	AT	8838953	N/A	2023/08/10	Surinder Rai
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8843298	2023/08/10	2023/08/11	Emir Danisman
Fluoride	ISE	8838964	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8836204	N/A	2023/08/16	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8841511	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8844731	2023/08/10	2023/08/11	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8853726	N/A	2023/08/16	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8850735	N/A	2023/08/14	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8856240	N/A	2023/08/10	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854849	2023/08/14	2023/08/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8847520	N/A	2023/08/11	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8838867	N/A	2023/08/09	Chandra Nandlal
pH	AT	8838968	2023/08/08	2023/08/10	Surinder Rai
Field Measured pH	PH	ONSITE	N/A	2023/08/05	Alam Joseph
Sulphate by Automated Turbidimetry	KONE	8838261	N/A	2023/08/09	Alina Dobreanu
Total Dissolved Solids	BAL	8840572	2023/08/09	2023/08/10	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/08/05	Alam Joseph
Total Kjeldahl Nitrogen in Water	SKAL	8842276	2023/08/09	2023/08/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8840507	2023/08/09	2023/08/10	Razieh Tabesh
Turbidity	AT	8838911	N/A	2023/08/09	Leily Karimi
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8843657	N/A	2023/08/10	Dina Wang

Bureau Veritas ID: WPN593
Sample ID: MW09-18
Matrix: Water

Collected: 2023/08/03
Shipped:
Received: 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8858164	N/A	2023/08/17	Brent Boudreau
Alkalinity	AT	8838929	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8836536	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8838258	N/A	2023/08/09	Alina Dobreanu
Conductivity	AT	8838953	N/A	2023/08/10	Surinder Rai
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8843298	2023/08/10	2023/08/11	Emir Danisman
Fluoride	ISE	8838964	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8836204	N/A	2023/08/16	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8841715	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8844731	2023/08/10	2023/08/11	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8853726	N/A	2023/08/16	Prempal Bhatti

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WPN593
Sample ID: MW09-18
Matrix: Water

Collected: 2023/08/03
Shipped:
Received: 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Metals in Water by ICPMS (low level)	ICP1/MS	8850735	N/A	2023/08/14	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8856240	N/A	2023/08/10	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854849	2023/08/14	2023/08/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8841397	N/A	2023/08/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8838830	N/A	2023/08/08	Chandra Nandlal
pH	AT	8838968	2023/08/08	2023/08/10	Surinder Rai
Field Measured pH	PH	ONSITE	N/A	2023/08/05	Alam Joseph
Sulphate by Automated Turbidimetry	KONE	8838261	N/A	2023/08/09	Alina Dobreanu
Total Dissolved Solids	BAL	8840522	2023/08/09	2023/08/10	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/08/05	Alam Joseph
Total Kjeldahl Nitrogen in Water	SKAL	8842528	2023/08/09	2023/08/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8840507	2023/08/09	2023/08/10	Razieh Tabesh
Turbidity	AT	8838911	N/A	2023/08/09	Leily Karimi
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8843657	N/A	2023/08/10	Dina Wang

Bureau Veritas ID: WPN593 Dup
Sample ID: MW09-18
Matrix: Water

Collected: 2023/08/03
Shipped:
Received: 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Kjeldahl Nitrogen in Water	SKAL	8842528	2023/08/09	2023/08/10	Kruti Jitesh Patel

Bureau Veritas ID: WPN594
Sample ID: G6-BR-14
Matrix: Water

Collected: 2023/08/03
Shipped:
Received: 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8861053	N/A	2023/08/18	Brent Boudreau
Alkalinity	AT	8838929	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8836536	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8840083	N/A	2023/08/09	Massarat Jan
Conductivity	AT	8838953	N/A	2023/08/10	Surinder Rai
Fluoride	ISE	8838964	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8836204	N/A	2023/08/16	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8841715	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8844731	2023/08/10	2023/08/11	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8853726	N/A	2023/08/16	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8850752	N/A	2023/08/16	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8856240	N/A	2023/08/10	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8856241	2023/08/15	2023/08/15	Ming Dong

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6294
Report Date: 2023/08/18

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: W

TEST SUMMARY

Bureau Veritas ID: WPN594
Sample ID: G6-BR-14
Matrix: Water

Collected: 2023/08/03
Shipped:
Received: 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8841397	N/A	2023/08/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8838830	N/A	2023/08/08	Chandra Nandlal
pH	AT	8838968	2023/08/08	2023/08/10	Surinder Rai
Field Measured pH	PH	ONSITE	N/A	2023/08/05	Alam Joseph
Sulphate by Automated Turbidimetry	KONE	8840084	N/A	2023/08/09	Massarat Jan
Total Dissolved Solids	BAL	8840522	2023/08/09	2023/08/10	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/08/05	Alam Joseph
Total Kjeldahl Nitrogen in Water	SKAL	8842286	2023/08/09	2023/08/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8840507	2023/08/09	2023/08/10	Razieh Tabesh
Turbidity	AT	8838911	N/A	2023/08/09	Leily Karimi

Bureau Veritas ID: WPN595
Sample ID: G6-OB-14
Matrix: Water

Collected: 2023/08/03
Shipped:
Received: 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8858164	N/A	2023/08/17	Brent Boudreau
Alkalinity	AT	8838929	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8836536	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8840083	N/A	2023/08/09	Massarat Jan
Conductivity	AT	8838953	N/A	2023/08/10	Surinder Rai
Fluoride	ISE	8838964	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8836204	N/A	2023/08/16	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8841715	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8844731	2023/08/10	2023/08/11	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8853726	N/A	2023/08/16	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8850752	N/A	2023/08/16	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8856240	N/A	2023/08/10	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854849	2023/08/14	2023/08/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8841397	N/A	2023/08/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8838830	N/A	2023/08/08	Chandra Nandlal
pH	AT	8838968	2023/08/08	2023/08/10	Surinder Rai
Field Measured pH	PH	ONSITE	N/A	2023/08/05	Alam Joseph
Sulphate by Automated Turbidimetry	KONE	8840084	N/A	2023/08/09	Massarat Jan
Total Dissolved Solids	BAL	8840522	2023/08/09	2023/08/10	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/08/05	Alam Joseph
Total Kjeldahl Nitrogen in Water	SKAL	8842276	2023/08/09	2023/08/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8840507	2023/08/09	2023/08/10	Razieh Tabesh
Turbidity	AT	8838911	N/A	2023/08/09	Leily Karimi

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WPN595 Dup
Sample ID: G6-OB-14
Matrix: Water

Collected: 2023/08/03
Shipped:
Received: 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8838929	N/A	2023/08/10	Surinder Rai
Conductivity	AT	8838953	N/A	2023/08/10	Surinder Rai
Fluoride	ISE	8838964	2023/08/08	2023/08/10	Surinder Rai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8853726	N/A	2023/08/16	Prempal Bhatti
pH	AT	8838968	2023/08/08	2023/08/10	Surinder Rai

Bureau Veritas ID: WPN596
Sample ID: MWS-14-07-OB
Matrix: Water

Collected: 2023/08/03
Shipped:
Received: 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8861053	N/A	2023/08/18	Brent Boudreau
Alkalinity	AT	8838929	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8836536	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8838258	N/A	2023/08/09	Alina Dobreanu
Conductivity	AT	8838953	N/A	2023/08/10	Surinder Rai
Dissolved Organic Carbon (DOC)	TOCV/NDIR	8836626	N/A	2023/08/09	Nimarta Singh
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	8845656	N/A	2023/08/11	Anca Ganea
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8843298	2023/08/10	2023/08/11	Emir Danisman
Fluoride	ISE	8838964	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8836204	N/A	2023/08/16	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8841715	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8844731	2023/08/10	2023/08/11	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8853726	N/A	2023/08/16	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8850752	N/A	2023/08/16	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8856240	N/A	2023/08/10	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854849	2023/08/14	2023/08/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8842313	N/A	2023/08/11	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8838830	N/A	2023/08/08	Chandra Nandlal
pH	AT	8838968	2023/08/08	2023/08/10	Surinder Rai
Field Measured pH	PH	ONSITE	N/A	2023/08/05	Alam Joseph
Sulphate by Automated Turbidimetry	KONE	8838261	N/A	2023/08/09	Alina Dobreanu
Total Dissolved Solids	BAL	8840522	2023/08/09	2023/08/10	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/08/05	Alam Joseph
Total Kjeldahl Nitrogen in Water	SKAL	8842276	2023/08/09	2023/08/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8840507	2023/08/09	2023/08/10	Razieh Tabesh
Turbidity	AT	8838911	N/A	2023/08/09	Leily Karimi

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WPN596 Dup
Sample ID: MWS-14-07-OB
Matrix: Water

Collected: 2023/08/03
Shipped:
Received: 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Ammonia-N	LACH/NH4	8842313	N/A	2023/08/11	Prabhjot Kaur
Low Level Total Suspended Solids	BAL	8840507	2023/08/09	2023/08/10	Razieh Tabesh

Bureau Veritas ID: WPN597
Sample ID: MWS-14-07-BR
Matrix: Water

Collected: 2023/08/03
Shipped:
Received: 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8858164	N/A	2023/08/17	Brent Boudreau
Alkalinity	AT	8838929	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8836536	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8838258	N/A	2023/08/09	Alina Dobreanu
Conductivity	AT	8838953	N/A	2023/08/10	Surinder Rai
Fluoride	ISE	8838964	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8836204	N/A	2023/08/16	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8841511	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8844731	2023/08/10	2023/08/11	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8853726	N/A	2023/08/16	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8850752	N/A	2023/08/16	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8856240	N/A	2023/08/10	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854849	2023/08/14	2023/08/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8842313	N/A	2023/08/11	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8838830	N/A	2023/08/08	Chandra Nandlal
pH	AT	8838968	2023/08/08	2023/08/10	Surinder Rai
Field Measured pH	PH	ONSITE	N/A	2023/08/05	Alam Joseph
Sulphate by Automated Turbidimetry	KONE	8838261	N/A	2023/08/09	Alina Dobreanu
Total Dissolved Solids	BAL	8840522	2023/08/09	2023/08/10	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/08/05	Alam Joseph
Total Kjeldahl Nitrogen in Water	SKAL	8842276	2023/08/09	2023/08/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8840507	2023/08/09	2023/08/10	Razieh Tabesh
Turbidity	AT	8838911	N/A	2023/08/09	Leily Karimi

Bureau Veritas ID: WPN597 Dup
Sample ID: MWS-14-07-BR
Matrix: Water

Collected: 2023/08/03
Shipped:
Received: 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8858164	N/A	2023/08/17	Brent Boudreau

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WPN598
Sample ID: DUPLICATE 4
Matrix: Water

Collected: 2023/08/03
Shipped:
Received: 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8858164	N/A	2023/08/17	Brent Boudreau
Alkalinity	AT	8838929	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8836536	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8838258	N/A	2023/08/09	Alina Dobreanu
Conductivity	AT	8838953	N/A	2023/08/10	Surinder Rai
Fluoride	ISE	8838964	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8836204	N/A	2023/08/16	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8841715	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8844731	2023/08/10	2023/08/11	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8853726	N/A	2023/08/16	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8850752	N/A	2023/08/16	Prempal Bhatti
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8856240	N/A	2023/08/10	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854849	2023/08/14	2023/08/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8842313	N/A	2023/08/11	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8838830	N/A	2023/08/08	Chandra Nandlal
pH	AT	8838968	2023/08/08	2023/08/10	Surinder Rai
Sulphate by Automated Turbidimetry	KONE	8838261	N/A	2023/08/09	Alina Dobreanu
Total Dissolved Solids	BAL	8840522	2023/08/09	2023/08/10	Tina Teng
Total Kjeldahl Nitrogen in Water	SKAL	8842276	2023/08/09	2023/08/10	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8840515	2023/08/09	2023/08/10	Shaneil Hall
Turbidity	AT	8838911	N/A	2023/08/09	Leily Karimi

Bureau Veritas ID: WPN598 Dup
Sample ID: DUPLICATE 4
Matrix: Water

Collected: 2023/08/03
Shipped:
Received: 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Low Level Total Suspended Solids	BAL	8840515	2023/08/09	2023/08/10	Shaneil Hall

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	0.7°C
Package 2	1.3°C
Package 3	2.3°C
Package 4	0.7°C

Sample WPN591 [MW07-18] : TKN Analysis: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.
Acidity sample contained headspace.

ICPMS Metals Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly

TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.

Sample WPN592 [MW08-18] : Metals: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.
Acidity sample contained headspace.
TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.

Sample WPN593 [MW09-18] : Metal Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.
Acidity sample contained headspace.
TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.

Sample WPN594 [G6-BR-14] : TKN < Ammonia: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample WPN595 [G6-OB-14] : Acidity sample contained headspace.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8843298	o-Terphenyl	2023/08/10	100	60 - 130	99	60 - 130	94	%				
8843657	4-Bromofluorobenzene	2023/08/10	100	70 - 130	101	70 - 130	96	%				
8843657	D4-1,2-Dichloroethane	2023/08/10	109	70 - 130	103	70 - 130	107	%				
8843657	D8-Toluene	2023/08/10	104	70 - 130	105	70 - 130	95	%				
8845656	1,4-Difluorobenzene	2023/08/11	102	70 - 130	103	70 - 130	96	%				
8845656	4-Bromofluorobenzene	2023/08/11	97	70 - 130	97	70 - 130	102	%				
8845656	D10-o-Xylene	2023/08/11	88	70 - 130	88	70 - 130	86	%				
8845656	D4-1,2-Dichloroethane	2023/08/11	99	70 - 130	99	70 - 130	96	%				
8836626	Dissolved Organic Carbon	2023/08/09	96	80 - 120	96	80 - 120	<0.40	mg/L	3.5	20		
8838258	Dissolved Chloride (Cl-)	2023/08/09	NC	80 - 120	97	80 - 120	<1.0	mg/L	0.95	20		
8838261	Dissolved Sulphate (SO4)	2023/08/09	NC	75 - 125	98	80 - 120	<1.0	mg/L	1.1	20		
8838830	Nitrate (N)	2023/08/08	NC	80 - 120	95	80 - 120	<0.10	mg/L	2.5	20		
8838830	Nitrite (N)	2023/08/08	102	80 - 120	104	80 - 120	<0.010	mg/L	3.8	20		
8838867	Nitrate (N)	2023/08/09	91	80 - 120	93	80 - 120	<0.10	mg/L	NC	20		
8838867	Nitrite (N)	2023/08/09	105	80 - 120	104	80 - 120	<0.010	mg/L	NC	20		
8838911	Turbidity	2023/08/09			100	80 - 120	<0.1	NTU	1.0	20		
8838929	Alkalinity (Total as CaCO3)	2023/08/10			96	85 - 115	<1.0	mg/L	1.0	20		
8838953	Conductivity	2023/08/10			100	85 - 115	<0.001	mS/cm	0.91	10		
8838964	Fluoride (F-)	2023/08/10	96	80 - 120	98	80 - 120	<0.10	mg/L	NC	20		
8838968	pH	2023/08/10			102	98 - 103			1.2	N/A		
8839778	Dissolved Sulphur (S)	2023/08/11	NC	80 - 120	99	80 - 120	<0.5	mg/L	0.20	25		
8840083	Dissolved Chloride (Cl-)	2023/08/09	NC	80 - 120	96	80 - 120	<1.0	mg/L	0.67	20		
8840084	Dissolved Sulphate (SO4)	2023/08/09	NC	75 - 125	104	80 - 120	<1.0	mg/L	1.1	20		
8840507	Total Suspended Solids	2023/08/10			95	85 - 115	<1	mg/L	0	20		
8840515	Total Suspended Solids	2023/08/10			102	85 - 115	<1	mg/L	6.9	20		
8840522	Total Dissolved Solids	2023/08/10			95	90 - 110	<10	mg/L	2.6	20		
8840572	Total Dissolved Solids	2023/08/10			97	90 - 110	<10	mg/L	3.0	20		
8840999	Total Sulphur (S)	2023/08/10	NC	80 - 120	99	80 - 120	<0.5	mg/L				
8841397	Total Ammonia-N	2023/08/10	NC	75 - 125	103	80 - 120	<0.050	mg/L	0.74	20		
8841511	Dissolved Mercury (Hg)	2023/08/09	98	75 - 125	101	80 - 120	<0.01	ug/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8841715	Dissolved Mercury (Hg)	2023/08/09	97	75 - 125	102	80 - 120	<0.01	ug/L	NC	20		
8842276	Total Kjeldahl Nitrogen (TKN)	2023/08/10	88	80 - 120	95	80 - 120	<0.10	mg/L	NC (1)	20	95	80 - 120
8842286	Total Kjeldahl Nitrogen (TKN)	2023/08/10	97	80 - 120	99	80 - 120	<0.10	mg/L	NC	20	92	80 - 120
8842313	Total Ammonia-N	2023/08/11	102	75 - 125	102	80 - 120	<0.050	mg/L	NC	20		
8842528	Total Kjeldahl Nitrogen (TKN)	2023/08/10	NC	80 - 120	104	80 - 120	<0.10	mg/L	5.9	20	105	80 - 120
8843298	F2 (C10-C16 Hydrocarbons)	2023/08/10	106	60 - 130	102	60 - 130	<100	ug/L	NC	30		
8843298	F3 (C16-C34 Hydrocarbons)	2023/08/10	106	60 - 130	103	60 - 130	<200	ug/L	NC	30		
8843298	F4 (C34-C50 Hydrocarbons)	2023/08/10	107	60 - 130	105	60 - 130	<200	ug/L	NC	30		
8843657	1,1,2,2-Tetrachloroethane	2023/08/10	103	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
8843657	1,2-Dichlorobenzene	2023/08/10	98	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
8843657	1,4-Dichlorobenzene	2023/08/10	113	70 - 130	118	70 - 130	<0.50	ug/L	NC	30		
8843657	Benzene	2023/08/10	86	70 - 130	86	70 - 130	<0.17	ug/L	NC	30		
8843657	Chloroform	2023/08/10	93	70 - 130	91	70 - 130	<0.20	ug/L	NC	30		
8843657	cis-1,2-Dichloroethylene	2023/08/10	94	70 - 130	92	70 - 130	<0.50	ug/L	NC	30		
8843657	Ethylbenzene	2023/08/10	88	70 - 130	91	70 - 130	<0.20	ug/L	NC	30		
8843657	F1 (C6-C10) - BTEX	2023/08/10					<25	ug/L	NC	30		
8843657	F1 (C6-C10)	2023/08/10	91	60 - 140	96	60 - 140	<25	ug/L	NC	30		
8843657	Methylene Chloride(Dichloromethane)	2023/08/10	96	70 - 130	93	70 - 130	<2.0	ug/L	NC	30		
8843657	o-Xylene	2023/08/10	89	70 - 130	93	70 - 130	<0.20	ug/L	NC	30		
8843657	p+m-Xylene	2023/08/10	90	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
8843657	Tetrachloroethylene	2023/08/10	88	70 - 130	90	70 - 130	<0.20	ug/L	NC	30		
8843657	Toluene	2023/08/10	91	70 - 130	92	70 - 130	<0.20	ug/L	4.9	30		
8843657	Total Xylenes	2023/08/10					<0.20	ug/L	NC	30		
8843657	trans-1,3-Dichloropropene	2023/08/10	108	70 - 130	105	70 - 130	<0.40	ug/L	NC	30		
8843657	Trichloroethylene	2023/08/10	94	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
8844598	. Aluminum (Al)	2023/08/10	NC	80 - 120	97	80 - 120	<0.0005	mg/L	0.72 (2)	20		
8844598	. Antimony (Sb)	2023/08/10	115	80 - 120	106	80 - 120	<0.0001	mg/L				
8844598	. Arsenic (As)	2023/08/10	111	80 - 120	99	80 - 120	<0.0001	mg/L				
8844598	. Barium (Ba)	2023/08/10	107	80 - 120	102	80 - 120	<0.0002	mg/L				
8844598	. Beryllium (Be)	2023/08/10	108	80 - 120	95	80 - 120	<0.00005	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8844598	. Bismuth (Bi)	2023/08/10	97	80 - 120	98	80 - 120	<0.0001	mg/L				
8844598	. Boron (B)	2023/08/10	96	80 - 120	87	80 - 120	<0.001	mg/L				
8844598	. Cadmium (Cd)	2023/08/10	109	80 - 120	99	80 - 120	<0.000005	mg/L				
8844598	. Calcium (Ca)	2023/08/10	NC	80 - 120	99	80 - 120	<0.02	mg/L				
8844598	. Cesium (Cs)	2023/08/10	103	80 - 120	101	80 - 120	<0.00002	mg/L				
8844598	. Chromium (Cr)	2023/08/10	103	80 - 120	92	80 - 120	<0.0005	mg/L				
8844598	. Cobalt (Co)	2023/08/10	103	80 - 120	98	80 - 120	<0.00005	mg/L				
8844598	. Copper (Cu)	2023/08/10	NC	80 - 120	103	80 - 120	<0.0001	mg/L				
8844598	. Iron (Fe)	2023/08/10	104	80 - 120	97	80 - 120	<0.005	mg/L				
8844598	. Lead (Pb)	2023/08/10	103	80 - 120	99	80 - 120	<0.00005	mg/L				
8844598	. Lithium (Li)	2023/08/10	113	80 - 120	103	80 - 120	<0.0005	mg/L				
8844598	. Magnesium (Mg)	2023/08/10	NC	80 - 120	95	80 - 120	<0.005	mg/L				
8844598	. Manganese (Mn)	2023/08/10	102	80 - 120	94	80 - 120	<0.0002	mg/L				
8844598	. Molybdenum (Mo)	2023/08/10	118	80 - 120	106	80 - 120	<0.00005	mg/L				
8844598	. Nickel (Ni)	2023/08/10	100	80 - 120	94	80 - 120	<0.0001	mg/L				
8844598	. Phosphorus (P)	2023/08/10	116	80 - 120	102	80 - 120	<0.005	mg/L				
8844598	. Potassium (K)	2023/08/10	108	80 - 120	99	80 - 120	<0.02	mg/L				
8844598	. Rubidium (Rb)	2023/08/10	106	80 - 120	98	80 - 120	<0.00002	mg/L				
8844598	. Selenium (Se)	2023/08/10	105	80 - 120	97	80 - 120	<0.00005	mg/L				
8844598	. Silicon (Si)	2023/08/10	106	80 - 120	97	80 - 120	<0.005	mg/L				
8844598	. Silver (Ag)	2023/08/10	106	80 - 120	100	80 - 120	<0.00001	mg/L				
8844598	. Sodium (Na)	2023/08/10	NC	80 - 120	95	80 - 120	<0.01	mg/L				
8844598	. Strontium (Sr)	2023/08/10	NC	80 - 120	97	80 - 120	<0.0001	mg/L				
8844598	. Tellurium (Te)	2023/08/10	113	80 - 120	100	80 - 120	<0.0001	mg/L				
8844598	. Thallium (Tl)	2023/08/10	105	80 - 120	101	80 - 120	<0.000005	mg/L				
8844598	. Thorium (Th)	2023/08/10	98	80 - 120	100	80 - 120	<0.0002	mg/L				
8844598	. Tin (Sn)	2023/08/10	112	80 - 120	103	80 - 120	<0.0001	mg/L				
8844598	. Titanium (Ti)	2023/08/10	103	80 - 120	100	80 - 120	<0.0005	mg/L				
8844598	. Tungsten (W)	2023/08/10	106	80 - 120	101	80 - 120	<0.0001	mg/L				
8844598	. Uranium (U)	2023/08/10	104	80 - 120	101	80 - 120	<0.00001	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8844598	. Vanadium (V)	2023/08/10	105	80 - 120	94	80 - 120	<0.00005	mg/L				
8844598	. Zinc (Zn)	2023/08/10	105	80 - 120	96	80 - 120	<0.0005	mg/L				
8844598	. Zirconium (Zr)	2023/08/10	112	80 - 120	100	80 - 120	<0.0001	mg/L				
8844731	Mercury (Hg)	2023/08/11	93	75 - 125	102	80 - 120	<0.01	ug/L	5.4	20		
8845656	F1 (C6-C10)	2023/08/11	93	60 - 140	95	60 - 140	<25	ug/L	NC	30		
8847520	Total Ammonia-N	2023/08/11	99	75 - 125	99	80 - 120	<0.050	mg/L	NC	20		
8850735	. Aluminum (Al)	2023/08/14	NC	80 - 120	99	80 - 120	<0.0005	mg/L	0.33	20		
8850735	. Antimony (Sb)	2023/08/14	113	80 - 120	101	80 - 120	<0.0001	mg/L				
8850735	. Arsenic (As)	2023/08/14	112	80 - 120	101	80 - 120	<0.0001	mg/L				
8850735	. Barium (Ba)	2023/08/14	106	80 - 120	99	80 - 120	<0.0002	mg/L				
8850735	. Beryllium (Be)	2023/08/14	101	80 - 120	95	80 - 120	<0.00005	mg/L				
8850735	. Bismuth (Bi)	2023/08/14	101	80 - 120	101	80 - 120	<0.0001	mg/L				
8850735	. Boron (B)	2023/08/14	96	80 - 120	93	80 - 120	<0.001	mg/L				
8850735	. Cadmium (Cd)	2023/08/14	106	80 - 120	96	80 - 120	<0.000005	mg/L				
8850735	. Calcium (Ca)	2023/08/14	NC	80 - 120	101	80 - 120	<0.02	mg/L				
8850735	. Cesium (Cs)	2023/08/14	102	80 - 120	98	80 - 120	<0.00002	mg/L				
8850735	. Chromium (Cr)	2023/08/14	101	80 - 120	95	80 - 120	<0.0005	mg/L				
8850735	. Cobalt (Co)	2023/08/14	110	80 - 120	100	80 - 120	<0.00005	mg/L				
8850735	. Copper (Cu)	2023/08/14	112	80 - 120	98	80 - 120	<0.0001	mg/L				
8850735	. Iron (Fe)	2023/08/14	110	80 - 120	101	80 - 120	<0.005	mg/L				
8850735	. Lead (Pb)	2023/08/14	103	80 - 120	100	80 - 120	<0.00005	mg/L				
8850735	. Lithium (Li)	2023/08/14	117	80 - 120	107	80 - 120	<0.0005	mg/L				
8850735	. Magnesium (Mg)	2023/08/14	NC	80 - 120	106	80 - 120	<0.005	mg/L				
8850735	. Manganese (Mn)	2023/08/14	104	80 - 120	98	80 - 120	<0.0002	mg/L				
8850735	. Molybdenum (Mo)	2023/08/14	110	80 - 120	95	80 - 120	<0.00005	mg/L				
8850735	. Nickel (Ni)	2023/08/14	102	80 - 120	99	80 - 120	<0.0001	mg/L				
8850735	. Phosphorus (P)	2023/08/14	128 (3)	80 - 120	109	80 - 120	<0.005	mg/L				
8850735	. Potassium (K)	2023/08/14	108	80 - 120	103	80 - 120	<0.02	mg/L				
8850735	. Rubidium (Rb)	2023/08/14	109	80 - 120	101	80 - 120	<0.00002	mg/L				
8850735	. Selenium (Se)	2023/08/14	110	80 - 120	103	80 - 120	<0.00005	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8850735	. Silicon (Si)	2023/08/14	98	80 - 120	97	80 - 120	<0.005	mg/L				
8850735	. Silver (Ag)	2023/08/14	102	80 - 120	95	80 - 120	<0.00001	mg/L				
8850735	. Sodium (Na)	2023/08/14	NC	80 - 120	98	80 - 120	<0.01	mg/L				
8850735	. Strontium (Sr)	2023/08/14	NC	80 - 120	99	80 - 120	<0.0001	mg/L				
8850735	. Tellurium (Te)	2023/08/14	110	80 - 120	96	80 - 120	<0.0001	mg/L				
8850735	. Thallium (Tl)	2023/08/14	105	80 - 120	103	80 - 120	<0.000005	mg/L				
8850735	. Thorium (Th)	2023/08/14	96	80 - 120	98	80 - 120	<0.0002	mg/L				
8850735	. Tin (Sn)	2023/08/14	111	80 - 120	101	80 - 120	<0.0001	mg/L				
8850735	. Titanium (Ti)	2023/08/14	103	80 - 120	99	80 - 120	<0.0005	mg/L				
8850735	. Tungsten (W)	2023/08/14	107	80 - 120	102	80 - 120	<0.0001	mg/L				
8850735	. Uranium (U)	2023/08/14	105	80 - 120	100	80 - 120	<0.00001	mg/L				
8850735	. Vanadium (V)	2023/08/14	106	80 - 120	98	80 - 120	<0.00005	mg/L				
8850735	. Zinc (Zn)	2023/08/14	106	80 - 120	98	80 - 120	<0.0005	mg/L				
8850735	. Zirconium (Zr)	2023/08/14	114	80 - 120	101	80 - 120	<0.0001	mg/L				
8850752	. Aluminum (Al)	2023/08/15	NC	80 - 120	98	80 - 120	<0.0005	mg/L	0.83	20		
8850752	. Antimony (Sb)	2023/08/15	123 (3)	80 - 120	111	80 - 120	<0.0001	mg/L				
8850752	. Arsenic (As)	2023/08/15	109	80 - 120	100	80 - 120	<0.0001	mg/L				
8850752	. Barium (Ba)	2023/08/15	105	80 - 120	99	80 - 120	<0.0002	mg/L				
8850752	. Beryllium (Be)	2023/08/15	108	80 - 120	99	80 - 120	<0.00005	mg/L				
8850752	. Bismuth (Bi)	2023/08/15	84	80 - 120	97	80 - 120	<0.0001	mg/L				
8850752	. Boron (B)	2023/08/15	104	80 - 120	97	80 - 120	<0.001	mg/L				
8850752	. Cadmium (Cd)	2023/08/15	110	80 - 120	100	80 - 120	<0.000005	mg/L				
8850752	. Calcium (Ca)	2023/08/15	NC	80 - 120	100	80 - 120	<0.02	mg/L				
8850752	. Cesium (Cs)	2023/08/15	105	80 - 120	99	80 - 120	<0.00002	mg/L				
8850752	. Chromium (Cr)	2023/08/15	105	80 - 120	99	80 - 120	<0.0005	mg/L				
8850752	. Cobalt (Co)	2023/08/15	103	80 - 120	99	80 - 120	<0.00005	mg/L				
8850752	. Copper (Cu)	2023/08/15	107	80 - 120	100	80 - 120	<0.0001	mg/L				
8850752	. Iron (Fe)	2023/08/15	108	80 - 120	102	80 - 120	<0.005	mg/L				
8850752	. Lead (Pb)	2023/08/15	102	80 - 120	98	80 - 120	<0.00005	mg/L				
8850752	. Lithium (Li)	2023/08/15	110	80 - 120	103	80 - 120	<0.0005	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8850752	. Magnesium (Mg)	2023/08/15	NC	80 - 120	98	80 - 120	<0.005	mg/L				
8850752	. Manganese (Mn)	2023/08/15	105	80 - 120	100	80 - 120	<0.0002	mg/L				
8850752	. Molybdenum (Mo)	2023/08/15	118	80 - 120	105	80 - 120	<0.00005	mg/L				
8850752	. Nickel (Ni)	2023/08/15	102	80 - 120	100	80 - 120	<0.0001	mg/L				
8850752	. Phosphorus (P)	2023/08/15	117	80 - 120	102	80 - 120	<0.005	mg/L				
8850752	. Potassium (K)	2023/08/15	108	80 - 120	100	80 - 120	<0.02	mg/L				
8850752	. Rubidium (Rb)	2023/08/15	107	80 - 120	101	80 - 120	<0.00002	mg/L				
8850752	. Selenium (Se)	2023/08/15	111	80 - 120	100	80 - 120	<0.00005	mg/L				
8850752	. Silicon (Si)	2023/08/15	111	80 - 120	99	80 - 120	<0.005	mg/L				
8850752	. Silver (Ag)	2023/08/15	112	80 - 120	105	80 - 120	<0.00001	mg/L				
8850752	. Sodium (Na)	2023/08/15	NC	80 - 120	99	80 - 120	<0.01	mg/L				
8850752	. Strontium (Sr)	2023/08/15	NC	80 - 120	101	80 - 120	<0.0001	mg/L				
8850752	. Tellurium (Te)	2023/08/15	112	80 - 120	102	80 - 120	<0.0001	mg/L				
8850752	. Thallium (Tl)	2023/08/15	104	80 - 120	98	80 - 120	<0.000005	mg/L				
8850752	. Thorium (Th)	2023/08/15	100	80 - 120	101	80 - 120	<0.0002	mg/L				
8850752	. Tin (Sn)	2023/08/15	115	80 - 120	102	80 - 120	<0.0001	mg/L				
8850752	. Titanium (Ti)	2023/08/15	108	80 - 120	96	80 - 120	<0.0005	mg/L				
8850752	. Tungsten (W)	2023/08/15	109	80 - 120	102	80 - 120	<0.0001	mg/L				
8850752	. Uranium (U)	2023/08/15	105	80 - 120	99	80 - 120	<0.00001	mg/L				
8850752	. Vanadium (V)	2023/08/15	108	80 - 120	100	80 - 120	<0.00005	mg/L				
8850752	. Zinc (Zn)	2023/08/15	105	80 - 120	99	80 - 120	<0.0005	mg/L				
8850752	. Zirconium (Zr)	2023/08/15	121 (3)	80 - 120	107	80 - 120	<0.0001	mg/L				
8853726	Dissolved Aluminum (Al)	2023/08/16	NC	80 - 120	98	80 - 120	<0.0005	mg/L	0.29	20		
8853726	Dissolved Antimony (Sb)	2023/08/16	115	80 - 120	112	80 - 120	<0.0001	mg/L	NC	20		
8853726	Dissolved Arsenic (As)	2023/08/16	107	80 - 120	99	80 - 120	<0.0001	mg/L	4.6	20		
8853726	Dissolved Barium (Ba)	2023/08/16	107	80 - 120	101	80 - 120	<0.0002	mg/L	1.5	20		
8853726	Dissolved Beryllium (Be)	2023/08/16	107	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8853726	Dissolved Bismuth (Bi)	2023/08/16	70 (3)	80 - 120	95	80 - 120	<0.0001	mg/L	NC	20		
8853726	Dissolved Boron (B)	2023/08/16	100	80 - 120	94	80 - 120	<0.001	mg/L	0.62	20		
8853726	Dissolved Cadmium (Cd)	2023/08/16	111	80 - 120	99	80 - 120	<0.00001	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8853726	Dissolved Calcium (Ca)	2023/08/16	NC	80 - 120	101	80 - 120	<0.02	mg/L	0.52	20		
8853726	Dissolved Cesium (Cs)	2023/08/16	106	80 - 120	102	80 - 120	<0.00002	mg/L	NC	N/A		
8853726	Dissolved Chromium (Cr)	2023/08/16	104	80 - 120	97	80 - 120	<0.0005	mg/L	1.0	20		
8853726	Dissolved Cobalt (Co)	2023/08/16	103	80 - 120	97	80 - 120	<0.00005	mg/L	0	20		
8853726	Dissolved Copper (Cu)	2023/08/16	106	80 - 120	100	80 - 120	<0.0001	mg/L	0.75	20		
8853726	Dissolved Iron (Fe)	2023/08/16	106	80 - 120	100	80 - 120	<0.005	mg/L	1.5	20		
8853726	Dissolved Lead (Pb)	2023/08/16	104	80 - 120	95	80 - 120	<0.00005	mg/L	16	20		
8853726	Dissolved Lithium (Li)	2023/08/16	109	80 - 120	100	80 - 120	<0.0005	mg/L	4.0	20		
8853726	Dissolved Magnesium (Mg)	2023/08/16	NC	80 - 120	97	80 - 120	<0.005	mg/L	1.3	20		
8853726	Dissolved Manganese (Mn)	2023/08/16	104	80 - 120	97	80 - 120	<0.0002	mg/L	0.85	20		
8853726	Dissolved Molybdenum (Mo)	2023/08/16	116	80 - 120	104	80 - 120	<0.00005	mg/L	10	20		
8853726	Dissolved Nickel (Ni)	2023/08/16	100	80 - 120	97	80 - 120	<0.0001	mg/L	2.4	20		
8853726	Dissolved Phosphorus (P)	2023/08/16	115	80 - 120	101	80 - 120	<0.005	mg/L	4.8	20		
8853726	Dissolved Potassium (K)	2023/08/16	107	80 - 120	100	80 - 120	<0.02	mg/L	0.57	20		
8853726	Dissolved Rubidium (Rb)	2023/08/16	108	80 - 120	101	80 - 120	<0.00002	mg/L	0	N/A		
8853726	Dissolved Selenium (Se)	2023/08/16	108	80 - 120	99	80 - 120	<0.0002	mg/L	NC	20		
8853726	Dissolved Silicon (Si)	2023/08/16	271 (3)	80 - 120	101	80 - 120	<0.005	mg/L	1.3	20		
8853726	Dissolved Silver (Ag)	2023/08/16	112	80 - 120	104	80 - 120	<0.00001	mg/L	NC	20		
8853726	Dissolved Sodium (Na)	2023/08/16	104	80 - 120	97	80 - 120	<0.01	mg/L	1.4	20		
8853726	Dissolved Strontium (Sr)	2023/08/16	110	80 - 120	100	80 - 120	<0.0001	mg/L	1.6	20		
8853726	Dissolved Tellurium (Te)	2023/08/16	113	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8853726	Dissolved Thallium (Tl)	2023/08/16	108	80 - 120	96	80 - 120	<0.000005	mg/L	NC	20		
8853726	Dissolved Thorium (Th)	2023/08/16	102	80 - 120	98	80 - 120	<0.0002	mg/L	NC	20		
8853726	Dissolved Tin (Sn)	2023/08/16	115	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		
8853726	Dissolved Titanium (Ti)	2023/08/16	106	80 - 120	100	80 - 120	<0.0005	mg/L	1.0	20		
8853726	Dissolved Tungsten (W)	2023/08/16	112	80 - 120	98	80 - 120	<0.0001	mg/L	NC	20		
8853726	Dissolved Uranium (U)	2023/08/16	107	80 - 120	97	80 - 120	<0.00001	mg/L	2.1	20		
8853726	Dissolved Vanadium (V)	2023/08/16	106	80 - 120	98	80 - 120	<0.00005	mg/L	1.6	20		
8853726	Dissolved Zinc (Zn)	2023/08/16	104	80 - 120	97	80 - 120	<0.0005	mg/L	1.4	20		
8853726	Dissolved Zirconium (Zr)	2023/08/16	121 (3)	80 - 120	107	80 - 120	<0.0001	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8854849	Strong Acid Dissoc. Cyanide (CN)	2023/08/14	93	80 - 120	103	80 - 120	<0.00050	mg/L	NC	20		
8854864	Total Phosphorus (P)	2023/08/12	109	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20	85	80 - 120
8856240	Free Cyanide (CN)	2023/08/10	95	80 - 120	93	80 - 120	<2.0	ug/L				
8856241	Strong Acid Dissoc. Cyanide (CN)	2023/08/15	91	80 - 120	96	80 - 120	<0.00050	mg/L				
8858164	Acidity	2023/08/17	80	80 - 120	103	80 - 120	<5.0	mg/L	3.1	25		
8861053	Acidity	2023/08/18	90	80 - 120	104	80 - 120	<5.0	mg/L	2.7	25		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Due to a high concentration of NOx, the sample required dilution. The detection limit was adjusted accordingly.

(2) POTENTIAL EXCEEDANCE FOR PARAMETER

(3) Matrix Spike exceeds acceptance limits, probable matrix interference

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Cristina Carriere, Senior Scientific Specialist

<original signed by>

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

<original signed by>

Mike MacGillivray, Scientific Specialist (Inorganics)

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 743851

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/22
Report #: R7776672
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3N6453
Received: 2023/08/02, 16:37

Sample Matrix: Ground Water
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	3	N/A	2023/08/17	ATL SOP-00205	SM 24 2310B m
Acidity (CaCO3) in water (1)	1	N/A	2023/08/18	ATL SOP-00205	SM 24 2310B m
Alkalinity	4	N/A	2023/08/10	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	4	N/A	2023/08/11	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	1	N/A	2023/08/10	CAM SOP-00463	SM 23 4500-Cl E m
Chloride by Automated Colourimetry	1	N/A	2023/08/11	CAM SOP-00463	SM 23 4500-Cl E m
Chloride by Automated Colourimetry	2	N/A	2023/08/09	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	4	N/A	2023/08/10	CAM SOP-00414	SM 23 2510 m
Petroleum Hydro. CCME F1 & BTEX in Water	2	N/A	2023/08/10	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (3)	2	2023/08/09	2023/08/11	CAM SOP-00316	CCME PHC-CWS m
Fluoride	4	2023/08/08	2023/08/10	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	1	N/A	2023/08/16	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO3)	3	N/A	2023/08/17	CAM SOP 00102/00408/00447	SM 2340 B
Mercury in Water by CVAA	1	2023/08/10	2023/08/11	CAM SOP-00453	EPA 7470A m
Dissolved Mercury (low level)	4	2023/08/09	2023/08/09	CAM SOP-00453	EPA 7470 m
Mercury (low level)	3	2023/08/09	2023/08/09	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	2	2023/08/21	2023/08/22	CAM SOP-00408	EPA 6010D m
Dissolved Metals Analysis by ICP	2	2023/08/08	2023/08/11	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	1	N/A	2023/08/15	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS (low level)	3	N/A	2023/08/16	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	1	N/A	2023/08/14	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	3	N/A	2023/08/15	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	2	2023/08/21	2023/08/21	CAM SOP-00408	EPA 6010D m
Total Metals Analysis by ICP	2	2023/08/09	2023/08/10	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	4	N/A	2023/08/15	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	4	2023/08/14	2023/08/14	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	3	2023/08/12	2023/08/12	AB SOP-00024	SM 24 4500-P A,B,F m
Total Phosphorus Low Level Total (2)	1	2023/08/14	2023/08/15	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	4	N/A	2023/08/10	CAM SOP-00441	USGS I-2522-90 m

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 743851

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/22
Report #: R7776672
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3N6453
Received: 2023/08/02, 16:37

Sample Matrix: Ground Water
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Nitrate & Nitrite as Nitrogen in Water (4)	4	N/A	2023/08/09	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	4	2023/08/08	2023/08/10	CAM SOP-00413	SM 4500H+ B m
Sulphate by Automated Turbidimetry	2	N/A	2023/08/10	CAM SOP-00464	SM 23 4500-SO42- E m
Sulphate by Automated Turbidimetry	2	N/A	2023/08/09	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	4	2023/08/09	2023/08/10	CAM SOP-00428	SM 23 2540C m
Total Kjeldahl Nitrogen in Water	4	2023/08/09	2023/08/11	CAM SOP-00938	OMOE E3516 m
Low Level Total Suspended Solids	4	2023/08/09	2023/08/10	CAM SOP-00428	SM 23 2540D m
Turbidity	4	N/A	2023/08/10	CAM SOP-00417	SM 23 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following “Alberta Environment’s Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003”. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
(4) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6453
Report Date: 2023/08/22

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WPO525			WPO525			WPO526		
Sampling Date		2023/08/01 00:10			2023/08/01 00:10			2023/08/01 13:27		
COC Number		743851			743851			743851		
	UNITS	MW19-BR-21	RDL	QC Batch	MW19-BR-21 Lab-Dup	RDL	QC Batch	MW19-OB-21	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	240	1.0	8838471				300	1.0	8838471
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.1	1.0	8838471				3.0	1.0	8838471
Hardness (CaCO3)	mg/L	450	1.0	8838588				240	1.0	8838588
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8838471				<1.0	1.0	8838471
Inorganics										
Acidity	mg/L	9.6	5.0	8858164				9.0	5.0	8858164
Total Ammonia-N	mg/L	0.91	0.050	8840945				0.24	0.050	8840945
Conductivity	mS/cm	0.920	0.001	8840110	0.917	0.001	8840110	0.951	0.001	8840110
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	8854865				2.6 (1)	2.0	8854865
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.00120	0.00050	8854839				0.00709	0.00050	8854849
Total Dissolved Solids	mg/L	590	10	8840572				550	10	8840572
Fluoride (F-)	mg/L	0.22	0.10	8840181	0.21	0.10	8840181	0.13	0.10	8840181
Total Kjeldahl Nitrogen (TKN)	mg/L	1.1	0.10	8841280				0.36	0.10	8841280
pH	pH	7.98		8840112	8.01		8840112	8.02		8840112
Total Phosphorus (P)	mg/L	0.18	0.0010	8854864				0.22 (2)	0.0020	8854864
Total Suspended Solids	mg/L	120	1	8840566				540	1	8840566
Dissolved Sulphate (SO4)	mg/L	30	1.0	8843132				58	1.0	8843132
Turbidity	NTU	5.0	0.1	8840086				4.6	0.1	8840086
Alkalinity (Total as CaCO3)	mg/L	240	1.0	8840106	240	1.0	8840106	300	1.0	8840106
Dissolved Chloride (Cl-)	mg/L	120	1.0	8843115				96	1.0	8843115
Nitrite (N)	mg/L	<0.010	0.010	8840114				<0.010	0.010	8840114
Nitrate (N)	mg/L	<0.10	0.10	8840114				<0.10	0.10	8840114
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8840114				<0.10	0.10	8840114

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WPO527			WPO528		
Sampling Date		2023/08/01 14:22			2023/08/01 14:41		
COC Number		743851			743851		
	UNITS	G7-OB2-14	RDL	QC Batch	G7-OB1-14	RDL	QC Batch
Calculated Parameters							
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	190	1.0	8838471	160	1.0	8838471
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.8	1.0	8838471	1.9	1.0	8838471
Hardness (CaCO3)	mg/L	210	1.0	8838588	170	1.0	8838588
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8838471	<1.0	1.0	8838471
Inorganics							
Acidity	mg/L	<5.0	5.0	8861053	<5.0	5.0	8858164
Total Ammonia-N	mg/L	0.079	0.050	8840945	<0.050	0.050	8840945
Conductivity	mS/cm	0.338	0.001	8840110	0.286	0.001	8840110
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	8854865	2.3 (1)	2.0	8854865
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8854839	<0.00050 (2)	0.00050	8854839
Total Dissolved Solids	mg/L	215	10	8840572	160	10	8840572
Fluoride (F-)	mg/L	0.12	0.10	8840181	0.11	0.10	8840181
Total Kjeldahl Nitrogen (TKN)	mg/L	0.64	0.20	8841280	0.28	0.10	8841280
pH	pH	8.20		8840112	8.10		8840112
Total Phosphorus (P)	mg/L	1.7	0.010	8854864	0.070	0.0010	8854866
Total Suspended Solids	mg/L	2100	3	8840566	370	1	8840566
Dissolved Sulphate (SO4)	mg/L	1.5	1.0	8840084	<1.0	1.0	8840084
Turbidity	NTU	12	0.1	8840086	7.0	0.1	8840086
Alkalinity (Total as CaCO3)	mg/L	190	1.0	8840106	160	1.0	8840106
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	8840083	<1.0	1.0	8840083
Nitrite (N)	mg/L	0.013	0.010	8840114	<0.010	0.010	8840114
Nitrate (N)	mg/L	<0.10	0.10	8840114	<0.10	0.10	8840114
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8840114	<0.10	0.10	8840114

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6453
Report Date: 2023/08/22

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WPO525			WPO525			WPO526		
Sampling Date		2023/08/01 00:10			2023/08/01 00:10			2023/08/01 13:27		
COC Number		743851			743851			743851		
	UNITS	MW19-BR-21	RDL	QC Batch	MW19-BR-21 Lab-Dup	RDL	QC Batch	MW19-OB-21	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0036	0.0005	8842342				0.0076	0.0005	8842342
. Aluminum (Al)	mg/L	1.31	0.0005	8850735				0.712	0.0025	8850735
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8842342				<0.0001	0.0001	8842342
. Antimony (Sb)	mg/L	0.0002	0.0001	8850735				<0.0005	0.0005	8850735
Dissolved Arsenic (As)	mg/L	0.0816	0.0001	8842342				0.405	0.001	8842342
. Arsenic (As)	mg/L	0.0855	0.0005	8850735				0.514	0.001	8850735
Dissolved Barium (Ba)	mg/L	0.141	0.0002	8842342				0.0168	0.0002	8842342
. Barium (Ba)	mg/L	0.166	0.0002	8850735				0.024	0.001	8850735
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8842342				<0.00005	0.00005	8842342
. Beryllium (Be)	mg/L	<0.00005	0.00005	8850735				<0.00025	0.00025	8850735
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8842342				<0.0001	0.0001	8842342
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8850735				<0.0005	0.0005	8850735
Dissolved Boron (B)	mg/L	0.032	0.001	8842342				0.022	0.001	8842342
. Boron (B)	mg/L	0.032	0.001	8850735				0.023	0.005	8850735
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8842342				0.00001	0.00001	8842342
. Cadmium (Cd)	mg/L	0.000018	0.000005	8850735				0.000057	0.000025	8850735
Dissolved Calcium (Ca)	mg/L	113	0.1	8842342				66.2	0.2	8842342
. Calcium (Ca)	mg/L	109	0.1	8850735				92.4	0.1	8850735
Dissolved Cesium (Cs)	mg/L	0.00118	0.00002	8842342				<0.00002	0.00002	8842342
. Cesium (Cs)	mg/L	0.00132	0.00002	8850735				0.0001	0.0001	8850735
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8842342				<0.0005	0.0005	8842342
. Chromium (Cr)	mg/L	0.0049	0.0005	8850735				0.0049	0.0025	8850735
Dissolved Cobalt (Co)	mg/L	0.00148	0.00005	8842342				0.00222	0.00005	8842342
. Cobalt (Co)	mg/L	0.00188	0.00005	8850735				0.00511	0.00025	8850735
Dissolved Copper (Cu)	mg/L	<0.0001	0.0001	8842342				0.0035	0.0001	8842342
. Copper (Cu)	mg/L	0.0025	0.0001	8850735				0.0700	0.0005	8850735
Dissolved Iron (Fe)	mg/L	4.98	0.005	8842342				0.239	0.005	8842342
. Iron (Fe)	mg/L	9.88	0.025	8850735				2.59	0.025	8850735
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8842342				<0.00005	0.00005	8842342
. Lead (Pb)	mg/L	0.00133	0.00005	8850735				0.00240	0.00025	8850735

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6453
Report Date: 2023/08/22

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WPO525			WPO525			WPO526		
Sampling Date		2023/08/01 00:10			2023/08/01 00:10			2023/08/01 13:27		
COC Number		743851			743851			743851		
	UNITS	MW19-BR-21	RDL	QC Batch	MW19-BR-21 Lab-Dup	RDL	QC Batch	MW19-OB-21	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0081	0.0005	8842342				0.0021	0.0005	8842342
. Lithium (Li)	mg/L	0.0098	0.0005	8850735				0.0031	0.0025	8850735
Dissolved Magnesium (Mg)	mg/L	40.0	0.005	8842342				18.3	0.005	8842342
. Magnesium (Mg)	mg/L	39.4	0.025	8850735				25.1	0.025	8850735
Dissolved Manganese (Mn)	mg/L	0.399	0.0002	8842342				0.749	0.0002	8842342
. Manganese (Mn)	mg/L	0.495	0.0002	8850735				0.831	0.001	8850735
Mercury (Hg)	ug/L	<0.01	0.01	8841716				0.07	0.01	8841716
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8841511				0.02	0.01	8841511
Dissolved Molybdenum (Mo)	mg/L	0.00224	0.00005	8842342				0.00170	0.00005	8842342
. Molybdenum (Mo)	mg/L	0.00241	0.00005	8850735				0.00124	0.00025	8850735
Dissolved Nickel (Ni)	mg/L	0.0026	0.0001	8842342				0.0014	0.0001	8842342
. Nickel (Ni)	mg/L	0.0046	0.0001	8850735				0.0054	0.0005	8850735
Dissolved Phosphorus (P)	mg/L	0.014	0.005	8842342				0.009	0.005	8842342
. Phosphorus (P)	mg/L	0.093	0.005	8850735				0.142	0.025	8850735
Dissolved Potassium (K)	mg/L	5.27	0.02	8842342				6.43	0.02	8842342
. Potassium (K)	mg/L	5.31	0.02	8850735				6.4	0.1	8850735
Dissolved Rubidium (Rb)	mg/L	0.00412	0.00002	8842342				0.00014	0.00002	8842342
. Rubidium (Rb)	mg/L	0.00421	0.00002	8850735				0.0011	0.0001	8850735
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8842342				<0.0002	0.0002	8842342
. Selenium (Se)	mg/L	0.00009	0.00005	8850735				<0.00025	0.00025	8850735
Dissolved Silicon (Si)	mg/L	8.22	0.025	8842342				5.01	0.05	8842342
. Silicon (Si)	mg/L	9.00	0.025	8850735				6.12	0.025	8850735
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8842342				<0.00001	0.00001	8842342
. Silver (Ag)	mg/L	<0.00001	0.00001	8850735				<0.00005	0.00005	8850735
Dissolved Sodium (Na)	mg/L	14.9	0.01	8842342				122	0.1	8842342
. Sodium (Na)	mg/L	14.0	0.01	8850735				117	0.05	8850735
Dissolved Strontium (Sr)	mg/L	1.09	0.0001	8842342				0.292	0.0001	8842342
. Strontium (Sr)	mg/L	1.09	0.0001	8850735				0.307	0.0005	8850735
Dissolved Sulphur (S)	mg/L	11	0.5	8865922	10	0.5	8865922	19	0.5	8865922
Total Sulphur (S)	mg/L	11	0.5	8865666				20	0.5	8865666
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8842342				<0.0001	0.0001	8842342

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WPO525			WPO525			WPO526		
Sampling Date		2023/08/01 00:10			2023/08/01 00:10			2023/08/01 13:27		
COC Number		743851			743851			743851		
	UNITS	MW19-BR-21	RDL	QC Batch	MW19-BR-21 Lab-Dup	RDL	QC Batch	MW19-OB-21	RDL	QC Batch
. Tellurium (Te)	mg/L	<0.0001	0.0001	8850735				<0.0005	0.0005	8850735
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8842342				0.000012	0.000005	8842342
. Thallium (Tl)	mg/L	0.000009	0.000005	8850735				0.000072	0.000025	8850735
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8842342				<0.0001	0.0001	8842342
. Tin (Sn)	mg/L	0.0008	0.0001	8850735				<0.0005	0.0005	8850735
Dissolved Titanium (Ti)	mg/L	<0.0005	0.0005	8842342				0.0007	0.0005	8842342
. Titanium (Ti)	mg/L	0.0070	0.0005	8850735				0.0419	0.0025	8850735
Dissolved Tungsten (W)	mg/L	0.0059	0.0001	8842342				<0.0001	0.0001	8842342
. Tungsten (W)	mg/L	0.0067	0.0001	8850735				<0.0005	0.0005	8850735
Dissolved Uranium (U)	mg/L	0.00144	0.00001	8842342				0.00021	0.00001	8842342
. Uranium (U)	mg/L	0.00140	0.00001	8850735				0.00029	0.00005	8850735
Dissolved Vanadium (V)	mg/L	0.00006	0.00005	8842342				0.00034	0.00005	8842342
. Vanadium (V)	mg/L	0.00203	0.00005	8850735				0.00295	0.00025	8850735
Dissolved Zinc (Zn)	mg/L	0.0010	0.0005	8842342				0.0011	0.0005	8842342
. Zinc (Zn)	mg/L	0.206	0.0005	8850735				0.0089	0.0025	8850735
Dissolved Zirconium (Zr)	mg/L	0.0001	0.0001	8842342				0.0012	0.0001	8842342
. Zirconium (Zr)	mg/L	0.0008	0.0001	8850735				0.0028	0.0005	8850735

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WPO527			WPO528		
Sampling Date		2023/08/01 14:22			2023/08/01 14:41		
COC Number		743851			743851		
	UNITS	G7-OB2-14	RDL	QC Batch	G7-OB1-14	RDL	QC Batch
Metals							
Dissolved Aluminum (Al)	mg/L	0.0063	0.0005	8842342	0.0387	0.0005	8842342
. Aluminum (Al)	mg/L	4.77	0.005	8850735	0.506	0.0005	8850735
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8842342	<0.0001	0.0001	8842342
. Antimony (Sb)	mg/L	<0.001	0.001	8850735	<0.0001	0.0001	8850735
Dissolved Arsenic (As)	mg/L	0.0011	0.0001	8842342	0.0009	0.0001	8842342
. Arsenic (As)	mg/L	0.004	0.001	8850735	0.0010	0.0001	8850735
Dissolved Barium (Ba)	mg/L	0.0220	0.0002	8842342	0.0102	0.0002	8842342
. Barium (Ba)	mg/L	0.076	0.002	8850735	0.0120	0.0002	8850735
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8842342	<0.00005	0.00005	8842342
. Beryllium (Be)	mg/L	<0.0005	0.0005	8850735	<0.00005	0.00005	8850735
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8842342	<0.0001	0.0001	8842342
. Bismuth (Bi)	mg/L	<0.001	0.001	8850735	<0.0001	0.0001	8850735
Dissolved Boron (B)	mg/L	0.007	0.001	8842342	0.005	0.001	8842342
. Boron (B)	mg/L	0.04	0.01	8850735	0.006	0.001	8850735
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8842342	<0.00001	0.00001	8842342
. Cadmium (Cd)	mg/L	0.00021	0.00005	8850735	0.000011	0.000005	8850735
Dissolved Calcium (Ca)	mg/L	64.7	0.1	8842342	52.6	0.1	8842342
. Calcium (Ca)	mg/L	599	1	8850735	65.7	0.1	8850735
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	8842342	<0.00002	0.00002	8842342
. Cesium (Cs)	mg/L	0.0004	0.0002	8850735	0.00006	0.00002	8850735
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8842342	<0.0005	0.0005	8842342
. Chromium (Cr)	mg/L	0.020	0.005	8850735	0.0014	0.0005	8850735
Dissolved Cobalt (Co)	mg/L	<0.00005	0.00005	8842342	<0.00005	0.00005	8842342
. Cobalt (Co)	mg/L	0.0084	0.0005	8850735	0.00044	0.00005	8850735
Dissolved Copper (Cu)	mg/L	0.0007	0.0001	8842342	0.0006	0.0001	8842342
. Copper (Cu)	mg/L	0.022	0.001	8850735	0.0012	0.0001	8850735
Dissolved Iron (Fe)	mg/L	0.585	0.005	8842342	0.667	0.005	8842342
. Iron (Fe)	mg/L	11.0	0.05	8850735	1.41	0.005	8850735
Dissolved Lead (Pb)	mg/L	0.00005	0.00005	8842342	0.00006	0.00005	8842342
. Lead (Pb)	mg/L	0.0117	0.0005	8850735	0.00052	0.00005	8850735
Dissolved Lithium (Li)	mg/L	0.0012	0.0005	8842342	0.0008	0.0005	8842342

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WPO527			WPO528		
Sampling Date		2023/08/01 14:22			2023/08/01 14:41		
COC Number		743851			743851		
	UNITS	G7-OB2-14	RDL	QC Batch	G7-OB1-14	RDL	QC Batch
. Lithium (Li)	mg/L	0.011	0.005	8850735	0.0016	0.0005	8850735
Dissolved Magnesium (Mg)	mg/L	11.6	0.005	8842342	8.84	0.005	8842342
. Magnesium (Mg)	mg/L	180	0.05	8850735	12.2	0.005	8850735
Dissolved Manganese (Mn)	mg/L	0.0429	0.0002	8842342	0.0628	0.0002	8842342
. Manganese (Mn)	mg/L	0.803	0.002	8850735	0.100	0.0002	8850735
Mercury (Hg)	mg/L	<0.00010	0.00010	8844089			
Mercury (Hg)	ug/L				<0.01	0.01	8841716
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8841511	<0.01	0.01	8841511
Dissolved Molybdenum (Mo)	mg/L	0.00026	0.00005	8842342	0.00019	0.00005	8842342
. Molybdenum (Mo)	mg/L	<0.0005	0.0005	8850735	0.00014	0.00005	8850735
Dissolved Nickel (Ni)	mg/L	0.0007	0.0001	8842342	0.0002	0.0001	8842342
. Nickel (Ni)	mg/L	0.016	0.001	8850735	0.0010	0.0001	8850735
Dissolved Phosphorus (P)	mg/L	0.015	0.005	8842342	0.031	0.005	8842342
. Phosphorus (P)	mg/L	2.19	0.05	8850735	0.075	0.005	8850735
Dissolved Potassium (K)	mg/L	1.00	0.02	8842342	0.67	0.02	8842342
. Potassium (K)	mg/L	1.8	0.2	8850735	0.70	0.02	8850735
Dissolved Rubidium (Rb)	mg/L	0.00229	0.00002	8842342	0.00117	0.00002	8842342
. Rubidium (Rb)	mg/L	0.0109	0.0002	8850735	0.00197	0.00002	8850735
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8842342	<0.0002	0.0002	8842342
. Selenium (Se)	mg/L	<0.0005	0.0005	8850735	<0.00005	0.00005	8850735
Dissolved Silicon (Si)	mg/L	5.56	0.025	8842342	4.99	0.005	8842342
. Silicon (Si)	mg/L	10.8	0.05	8850735	5.50	0.025	8850735
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8842342	<0.00001	0.00001	8842342
. Silver (Ag)	mg/L	<0.0001	0.0001	8850735	<0.00001	0.00001	8850735
Dissolved Sodium (Na)	mg/L	2.49	0.01	8842342	1.91	0.01	8842342
. Sodium (Na)	mg/L	2.5	0.1	8850735	1.88	0.01	8850735
Dissolved Strontium (Sr)	mg/L	0.0668	0.0001	8842342	0.0508	0.0001	8842342
. Strontium (Sr)	mg/L	0.341	0.001	8850735	0.0587	0.0001	8850735
Dissolved Sulphur (S)	mg/L	0.7	0.5	8839778	<0.5	0.5	8839778
Total Sulphur (S)	mg/L	1.6	0.5	8840999	<0.5	0.5	8840999
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8842342	<0.0001	0.0001	8842342
. Tellurium (Te)	mg/L	<0.001	0.001	8850735	<0.0001	0.0001	8850735

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WPO527			WPO528		
Sampling Date		2023/08/01 14:22			2023/08/01 14:41		
COC Number		743851			743851		
	UNITS	G7-OB2-14	RDL	QC Batch	G7-OB1-14	RDL	QC Batch
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8842342	<0.000005	0.000005	8842342
. Thallium (Tl)	mg/L	0.00020	0.00005	8850735	0.000010	0.000005	8850735
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8842342	<0.0002	0.0002	8842342
. Thorium (Th)	mg/L	<0.002	0.002	8850735	0.0002	0.0002	8850735
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8842342	<0.0001	0.0001	8842342
. Tin (Sn)	mg/L	<0.001	0.001	8850735	<0.0001	0.0001	8850735
Dissolved Titanium (Ti)	mg/L	0.0011	0.0005	8842342	0.0032	0.0005	8842342
. Titanium (Ti)	mg/L	0.144	0.005	8850735	0.0262	0.0005	8850735
Dissolved Tungsten (W)	mg/L	<0.0001	0.0001	8842342	<0.0001	0.0001	8842342
. Tungsten (W)	mg/L	<0.001	0.001	8850735	<0.0001	0.0001	8850735
Dissolved Uranium (U)	mg/L	0.00003	0.00001	8842342	0.00001	0.00001	8842342
. Uranium (U)	mg/L	0.0030	0.0001	8850735	0.00006	0.00001	8850735
Dissolved Vanadium (V)	mg/L	0.00114	0.00005	8842342	0.00055	0.00005	8842342
. Vanadium (V)	mg/L	0.0218	0.0005	8850735	0.00165	0.00005	8850735
Dissolved Zinc (Zn)	mg/L	0.0021	0.0005	8842342	0.0013	0.0005	8842342
. Zinc (Zn)	mg/L	0.034	0.005	8850735	0.0030	0.0005	8850735
Dissolved Zirconium (Zr)	mg/L	0.0016	0.0001	8842342	0.0010	0.0001	8842342
. Zirconium (Zr)	mg/L	0.006	0.001	8850735	0.0016	0.0001	8850735

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		WPO527	WPO528		
Sampling Date		2023/08/01 14:22	2023/08/01 14:41		
COC Number		743851	743851		
	UNITS	G7-OB2-14	G7-OB1-14	RDL	QC Batch
BTEX & F1 Hydrocarbons					
F1 (C6-C10)	ug/L	<25	<25	25	8842789
F2-F4 Hydrocarbons					
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	100	8840905
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	200	8840905
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	200	8840905
Reached Baseline at C50	ug/L	Yes	Yes		8840905
Surrogate Recovery (%)					
1,4-Difluorobenzene	%	98	102		8842789
4-Bromofluorobenzene	%	97	104		8842789
D10-o-Xylene	%	92	99		8842789
D4-1,2-Dichloroethane	%	109	109		8842789
o-Terphenyl	%	102	103		8840905

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6453
Report Date: 2023/08/22

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

TEST SUMMARY

Bureau Veritas ID: WPO525
Sample ID: MW19-BR-21
Matrix: Ground Water

Collected: 2023/08/01
Shipped:
Received: 2023/08/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8858164	N/A	2023/08/17	Brent Boudreau
Alkalinity	AT	8840106	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8838471	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8843115	N/A	2023/08/10	Massarat Jan
Conductivity	AT	8840110	N/A	2023/08/10	Surinder Rai
Fluoride	ISE	8840181	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8838588	N/A	2023/08/16	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8841511	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8841716	2023/08/09	2023/08/09	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8865922	2023/08/21	2023/08/22	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8842342	N/A	2023/08/15	Nan Raykha
Metals in Water by ICPMS (low level)	ICP1/MS	8850735	N/A	2023/08/15	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8865666	2023/08/21	2023/08/21	Suban Kanapathippllai
Cyanide (Free)	SPEC	8854865	N/A	2023/08/15	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854839	2023/08/14	2023/08/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8840945	N/A	2023/08/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8840114	N/A	2023/08/09	Chandra Nandlal
pH	AT	8840112	2023/08/08	2023/08/10	Surinder Rai
Sulphate by Automated Turbidimetry	KONE	8843132	N/A	2023/08/10	Massarat Jan
Total Dissolved Solids	BAL	8840572	2023/08/09	2023/08/10	Tina Teng
Total Kjeldahl Nitrogen in Water	SKAL	8841280	2023/08/09	2023/08/11	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8840566	2023/08/09	2023/08/10	Shaneil Hall
Turbidity	AT	8840086	N/A	2023/08/10	Kien Tran

Bureau Veritas ID: WPO525 Dup
Sample ID: MW19-BR-21
Matrix: Ground Water

Collected: 2023/08/01
Shipped:
Received: 2023/08/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8840106	N/A	2023/08/10	Surinder Rai
Conductivity	AT	8840110	N/A	2023/08/10	Surinder Rai
Fluoride	ISE	8840181	2023/08/08	2023/08/10	Surinder Rai
Dissolved Metals Analysis by ICP	ICP	8865922	2023/08/21	2023/08/22	Suban Kanapathippllai
pH	AT	8840112	2023/08/08	2023/08/10	Surinder Rai

Bureau Veritas ID: WPO526
Sample ID: MW19-OB-21
Matrix: Ground Water

Collected: 2023/08/01
Shipped:
Received: 2023/08/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8858164	N/A	2023/08/17	Brent Boudreau
Alkalinity	AT	8840106	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8838471	N/A	2023/08/11	Automated Statchk

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6453
Report Date: 2023/08/22

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

TEST SUMMARY

Bureau Veritas ID: WPO526
Sample ID: MW19-OB-21
Matrix: Ground Water

Collected: 2023/08/01
Shipped:
Received: 2023/08/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	8843115	N/A	2023/08/11	Massarat Jan
Conductivity	AT	8840110	N/A	2023/08/10	Surinder Rai
Fluoride	ISE	8840181	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8838588	N/A	2023/08/17	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8841511	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8841716	2023/08/09	2023/08/09	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8865922	2023/08/21	2023/08/22	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8842342	N/A	2023/08/16	Nan Raykha
Metals in Water by ICPMS (low level)	ICP1/MS	8850735	N/A	2023/08/15	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8865666	2023/08/21	2023/08/21	Suban Kanapathippllai
Cyanide (Free)	SPEC	8854865	N/A	2023/08/15	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854849	2023/08/14	2023/08/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8840945	N/A	2023/08/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8840114	N/A	2023/08/09	Chandra Nandlal
pH	AT	8840112	2023/08/08	2023/08/10	Surinder Rai
Sulphate by Automated Turbidimetry	KONE	8843132	N/A	2023/08/10	Massarat Jan
Total Dissolved Solids	BAL	8840572	2023/08/09	2023/08/10	Tina Teng
Total Kjeldahl Nitrogen in Water	SKAL	8841280	2023/08/09	2023/08/11	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8840566	2023/08/09	2023/08/10	Shaneil Hall
Turbidity	AT	8840086	N/A	2023/08/10	Kien Tran

Bureau Veritas ID: WPO527
Sample ID: G7-OB2-14
Matrix: Ground Water

Collected: 2023/08/01
Shipped:
Received: 2023/08/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8861053	N/A	2023/08/18	Brent Boudreau
Alkalinity	AT	8840106	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8838471	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8840083	N/A	2023/08/09	Massarat Jan
Conductivity	AT	8840110	N/A	2023/08/10	Surinder Rai
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	8842789	N/A	2023/08/10	Ravinder Gaidhu
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8840905	2023/08/09	2023/08/11	Emir Danisman
Fluoride	ISE	8840181	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8838588	N/A	2023/08/17	Automated Statchk
Mercury in Water by CVAA	CV/AA	8844089	2023/08/10	2023/08/11	Jaswinder Kaur
Dissolved Mercury (low level)	CV/AA	8841511	2023/08/09	2023/08/09	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8842342	N/A	2023/08/16	Nan Raykha
Metals in Water by ICPMS (low level)	ICP1/MS	8850735	N/A	2023/08/15	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8854865	N/A	2023/08/15	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854839	2023/08/14	2023/08/14	Ming Dong

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WPO527
Sample ID: G7-OB2-14
Matrix: Ground Water

Collected: 2023/08/01
Shipped:
Received: 2023/08/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Phosphorus Low Level Total	KONE	8854864	2023/08/12	2023/08/12	Carlo Truong
Total Ammonia-N	LACH/NH4	8840945	N/A	2023/08/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8840114	N/A	2023/08/09	Chandra Nandlal
pH	AT	8840112	2023/08/08	2023/08/10	Surinder Rai
Sulphate by Automated Turbidimetry	KONE	8840084	N/A	2023/08/09	Massarat Jan
Total Dissolved Solids	BAL	8840572	2023/08/09	2023/08/10	Tina Teng
Total Kjeldahl Nitrogen in Water	SKAL	8841280	2023/08/09	2023/08/11	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8840566	2023/08/09	2023/08/10	Shaneil Hall
Turbidity	AT	8840086	N/A	2023/08/10	Kien Tran

Bureau Veritas ID: WPO528
Sample ID: G7-OB1-14
Matrix: Ground Water

Collected: 2023/08/01
Shipped:
Received: 2023/08/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8858164	N/A	2023/08/17	Brent Boudreau
Alkalinity	AT	8840106	N/A	2023/08/10	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	8838471	N/A	2023/08/11	Automated Statchk
Chloride by Automated Colourimetry	KONE	8840083	N/A	2023/08/09	Massarat Jan
Conductivity	AT	8840110	N/A	2023/08/10	Surinder Rai
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	8842789	N/A	2023/08/10	Ravinder Gaidhu
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8840905	2023/08/09	2023/08/11	Emir Danisman
Fluoride	ISE	8840181	2023/08/08	2023/08/10	Surinder Rai
Hardness (calculated as CaCO3)		8838588	N/A	2023/08/17	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8841511	2023/08/09	2023/08/09	Jaswinder Kaur
Mercury (low level)	CV/AA	8841716	2023/08/09	2023/08/09	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8839778	2023/08/08	2023/08/11	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8842342	N/A	2023/08/16	Nan Raykha
Metals in Water by ICPMS (low level)	ICP1/MS	8850735	N/A	2023/08/14	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8840999	2023/08/09	2023/08/10	Suban Kanapathippllai
Cyanide (Free)	SPEC	8854865	N/A	2023/08/15	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8854839	2023/08/14	2023/08/14	Ming Dong
Total Phosphorus Low Level Total	KONE	8854866	2023/08/14	2023/08/15	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8840945	N/A	2023/08/10	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8840114	N/A	2023/08/09	Chandra Nandlal
pH	AT	8840112	2023/08/08	2023/08/10	Surinder Rai
Sulphate by Automated Turbidimetry	KONE	8840084	N/A	2023/08/09	Massarat Jan
Total Dissolved Solids	BAL	8840572	2023/08/09	2023/08/10	Tina Teng
Total Kjeldahl Nitrogen in Water	SKAL	8841280	2023/08/09	2023/08/11	Kruti Jitesh Patel
Low Level Total Suspended Solids	BAL	8840566	2023/08/09	2023/08/10	Shaneil Hall
Turbidity	AT	8840086	N/A	2023/08/10	Kien Tran

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	13.0°C
Package 2	14.0°C

Sample WPO525 [MW19-BR-21] : Acidity sample contained headspace.
TSS Analysis was performed past sample holding time. This may increase the variability associated with these results.

Sample WPO526 [MW19-OB-21] : Metal Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.
Acidity sample contained headspace.
TSS Analysis was performed past sample holding time. This may increase the variability associated with these results.

Sample WPO527 [G7-OB2-14] : Metal Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Acidity sample contained headspae.

TSS Analysis was performed past sample holding time. This may increase the variability associated with these results.
TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.

Sample WPO528 [G7-OB1-14] : Acidity sample contained headspace.
TSS/TDS Analysis was performed past sample holding time. This may increase the variability associated with these results.
TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8840905	o-Terphenyl	2023/08/11	105	60 - 130	102	60 - 130	103	%				
8842789	1,4-Difluorobenzene	2023/08/10	100	70 - 130	95	70 - 130	99	%				
8842789	4-Bromofluorobenzene	2023/08/10	107	70 - 130	94	70 - 130	95	%				
8842789	D10-o-Xylene	2023/08/10	89	70 - 130	98	70 - 130	95	%				
8842789	D4-1,2-Dichloroethane	2023/08/10	98	70 - 130	92	70 - 130	98	%				
8839778	Dissolved Sulphur (S)	2023/08/11	NC	80 - 120	99	80 - 120	<0.5	mg/L	0.20	25		
8840083	Dissolved Chloride (Cl-)	2023/08/09	NC	80 - 120	96	80 - 120	<1.0	mg/L	0.67	20		
8840084	Dissolved Sulphate (SO4)	2023/08/09	NC	75 - 125	104	80 - 120	<1.0	mg/L	1.1	20		
8840086	Turbidity	2023/08/10			99	80 - 120	<0.1	NTU	4.3	20		
8840106	Alkalinity (Total as CaCO3)	2023/08/10			96	85 - 115	<1.0	mg/L	0.24	20		
8840110	Conductivity	2023/08/10			99	85 - 115	<0.001	mS/cm	0.33	10		
8840112	pH	2023/08/10			102	98 - 103			0.33	N/A		
8840114	Nitrate (N)	2023/08/09	87	80 - 120	97	80 - 120	<0.10	mg/L	NC	20		
8840114	Nitrite (N)	2023/08/09	104	80 - 120	106	80 - 120	<0.010	mg/L	NC	20		
8840181	Fluoride (F-)	2023/08/10	94	80 - 120	98	80 - 120	<0.10	mg/L	4.8	20		
8840566	Total Suspended Solids	2023/08/10			97	85 - 115	<1	mg/L	5.5	20		
8840572	Total Dissolved Solids	2023/08/10			97	90 - 110	<10	mg/L	3.0	20		
8840905	F2 (C10-C16 Hydrocarbons)	2023/08/11	117	60 - 130	115	60 - 130	<100	ug/L	NC	30		
8840905	F3 (C16-C34 Hydrocarbons)	2023/08/11	116	60 - 130	117	60 - 130	<200	ug/L	NC	30		
8840905	F4 (C34-C50 Hydrocarbons)	2023/08/11	116	60 - 130	116	60 - 130	<200	ug/L	NC	30		
8840945	Total Ammonia-N	2023/08/10	NC	75 - 125	101	80 - 120	<0.050	mg/L	4.8	20		
8840999	Total Sulphur (S)	2023/08/10	NC	80 - 120	99	80 - 120	<0.5	mg/L				
8841280	Total Kjeldahl Nitrogen (TKN)	2023/08/11	103	80 - 120	97	80 - 120	<0.10	mg/L	4.0	20	100	80 - 120
8841511	Dissolved Mercury (Hg)	2023/08/09	98	75 - 125	101	80 - 120	<0.01	ug/L	NC	20		
8841716	Mercury (Hg)	2023/08/09	101	75 - 125	100	80 - 120	<0.01	ug/L	NC	20		
8842342	Dissolved Aluminum (Al)	2023/08/15	106	80 - 120	96	80 - 120	<0.0005	mg/L	6.3	20		
8842342	Dissolved Antimony (Sb)	2023/08/15	111	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8842342	Dissolved Arsenic (As)	2023/08/15	NC	80 - 120	99	80 - 120	<0.0001	mg/L	0.13	20		
8842342	Dissolved Barium (Ba)	2023/08/15	101	80 - 120	95	80 - 120	<0.0002	mg/L	0.045	20		
8842342	Dissolved Beryllium (Be)	2023/08/15	114	80 - 120	99	80 - 120	<0.00005	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8842342	Dissolved Bismuth (Bi)	2023/08/15	95	80 - 120	93	80 - 120	<0.0001	mg/L	NC	20		
8842342	Dissolved Boron (B)	2023/08/15	111	80 - 120	100	80 - 120	<0.001	mg/L	0.75	20		
8842342	Dissolved Cadmium (Cd)	2023/08/15	109	80 - 120	97	80 - 120	<0.00001	mg/L	NC	20		
8842342	Dissolved Calcium (Ca)	2023/08/15	NC	80 - 120	103	80 - 120	<0.02	mg/L	1.7	20		
8842342	Dissolved Cesium (Cs)	2023/08/15	97	80 - 120	95	80 - 120	<0.00002	mg/L	NC	N/A		
8842342	Dissolved Chromium (Cr)	2023/08/15	107	80 - 120	100	80 - 120	<0.0005	mg/L	NC	20		
8842342	Dissolved Cobalt (Co)	2023/08/15	106	80 - 120	104	80 - 120	<0.00005	mg/L	NC	20		
8842342	Dissolved Copper (Cu)	2023/08/15	108	80 - 120	101	80 - 120	<0.0001	mg/L	0.091	20		
8842342	Dissolved Iron (Fe)	2023/08/15	106	80 - 120	101	80 - 120	<0.005	mg/L	1.5	20		
8842342	Dissolved Lead (Pb)	2023/08/15	103	80 - 120	95	80 - 120	<0.00005	mg/L	NC	20		
8842342	Dissolved Lithium (Li)	2023/08/15	109	80 - 120	101	80 - 120	<0.0005	mg/L	1.1	20		
8842342	Dissolved Magnesium (Mg)	2023/08/15	NC	80 - 120	101	80 - 120	<0.005	mg/L	0.65	20		
8842342	Dissolved Manganese (Mn)	2023/08/15	105	80 - 120	97	80 - 120	<0.0002	mg/L	2.1	20		
8842342	Dissolved Molybdenum (Mo)	2023/08/15	117	80 - 120	103	80 - 120	<0.00005	mg/L	1.2	20		
8842342	Dissolved Nickel (Ni)	2023/08/15	102	80 - 120	98	80 - 120	<0.0001	mg/L	2.7	20		
8842342	Dissolved Phosphorus (P)	2023/08/15	122 (1)	80 - 120	103	80 - 120	<0.005	mg/L	8.2	20		
8842342	Dissolved Potassium (K)	2023/08/15	110	80 - 120	103	80 - 120	<0.02	mg/L	0.86	20		
8842342	Dissolved Rubidium (Rb)	2023/08/15	103	80 - 120	98	80 - 120	<0.00002	mg/L	NC	N/A		
8842342	Dissolved Selenium (Se)	2023/08/15	112	80 - 120	101	80 - 120	<0.0002	mg/L	NC	20		
8842342	Dissolved Silicon (Si)	2023/08/15	101	80 - 120	100	80 - 120	<0.005	mg/L	1.2	20		
8842342	Dissolved Silver (Ag)	2023/08/15	106	80 - 120	99	80 - 120	<0.00001	mg/L	NC	20		
8842342	Dissolved Sodium (Na)	2023/08/15	NC	80 - 120	105	80 - 120	<0.01	mg/L	1.2	20		
8842342	Dissolved Strontium (Sr)	2023/08/15	102	80 - 120	96	80 - 120	<0.0001	mg/L	1.5	20		
8842342	Dissolved Tellurium (Te)	2023/08/15	111	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8842342	Dissolved Thallium (Tl)	2023/08/15	104	80 - 120	97	80 - 120	<0.000005	mg/L	NC	20		
8842342	Dissolved Thorium (Th)	2023/08/15	97	80 - 120	96	80 - 120	<0.0002	mg/L				
8842342	Dissolved Tin (Sn)	2023/08/15	112	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8842342	Dissolved Titanium (Ti)	2023/08/15	106	80 - 120	95	80 - 120	<0.0005	mg/L	NC	20		
8842342	Dissolved Tungsten (W)	2023/08/15	110	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		
8842342	Dissolved Uranium (U)	2023/08/15	106	80 - 120	96	80 - 120	<0.00001	mg/L	2.2	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8842342	Dissolved Vanadium (V)	2023/08/15	104	80 - 120	98	80 - 120	<0.00005	mg/L	1.2	20		
8842342	Dissolved Zinc (Zn)	2023/08/15	104	80 - 120	97	80 - 120	<0.0005	mg/L	5.6	20		
8842342	Dissolved Zirconium (Zr)	2023/08/15	111	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8842789	F1 (C6-C10)	2023/08/10	90	60 - 140	96	60 - 140	<25	ug/L	NC	30		
8843115	Dissolved Chloride (Cl-)	2023/08/10	NC	80 - 120	97	80 - 120	<1.0	mg/L	5.7	20		
8843132	Dissolved Sulphate (SO4)	2023/08/10	91	75 - 125	97	80 - 120	<1.0	mg/L	NC	20		
8844089	Mercury (Hg)	2023/08/11	106	75 - 125	107	80 - 120	<0.00010	mg/L	NC	20		
8850735	. Aluminum (Al)	2023/08/14	NC	80 - 120	99	80 - 120	<0.0005	mg/L	0.33	20		
8850735	. Antimony (Sb)	2023/08/14	113	80 - 120	101	80 - 120	<0.0001	mg/L				
8850735	. Arsenic (As)	2023/08/14	112	80 - 120	101	80 - 120	<0.0001	mg/L				
8850735	. Barium (Ba)	2023/08/14	106	80 - 120	99	80 - 120	<0.0002	mg/L				
8850735	. Beryllium (Be)	2023/08/14	101	80 - 120	95	80 - 120	<0.00005	mg/L				
8850735	. Bismuth (Bi)	2023/08/14	101	80 - 120	101	80 - 120	<0.0001	mg/L				
8850735	. Boron (B)	2023/08/14	96	80 - 120	93	80 - 120	<0.001	mg/L				
8850735	. Cadmium (Cd)	2023/08/14	106	80 - 120	96	80 - 120	<0.000005	mg/L				
8850735	. Calcium (Ca)	2023/08/14	NC	80 - 120	101	80 - 120	<0.02	mg/L				
8850735	. Cesium (Cs)	2023/08/14	102	80 - 120	98	80 - 120	<0.00002	mg/L				
8850735	. Chromium (Cr)	2023/08/14	101	80 - 120	95	80 - 120	<0.0005	mg/L				
8850735	. Cobalt (Co)	2023/08/14	110	80 - 120	100	80 - 120	<0.00005	mg/L				
8850735	. Copper (Cu)	2023/08/14	112	80 - 120	98	80 - 120	<0.0001	mg/L				
8850735	. Iron (Fe)	2023/08/14	110	80 - 120	101	80 - 120	<0.005	mg/L				
8850735	. Lead (Pb)	2023/08/14	103	80 - 120	100	80 - 120	<0.00005	mg/L				
8850735	. Lithium (Li)	2023/08/14	117	80 - 120	107	80 - 120	<0.0005	mg/L				
8850735	. Magnesium (Mg)	2023/08/14	NC	80 - 120	106	80 - 120	<0.005	mg/L				
8850735	. Manganese (Mn)	2023/08/14	104	80 - 120	98	80 - 120	<0.0002	mg/L				
8850735	. Molybdenum (Mo)	2023/08/14	110	80 - 120	95	80 - 120	<0.00005	mg/L				
8850735	. Nickel (Ni)	2023/08/14	102	80 - 120	99	80 - 120	<0.0001	mg/L				
8850735	. Phosphorus (P)	2023/08/14	128 (2)	80 - 120	109	80 - 120	<0.005	mg/L				
8850735	. Potassium (K)	2023/08/14	108	80 - 120	103	80 - 120	<0.02	mg/L				
8850735	. Rubidium (Rb)	2023/08/14	109	80 - 120	101	80 - 120	<0.00002	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8850735	. Selenium (Se)	2023/08/14	110	80 - 120	103	80 - 120	<0.00005	mg/L				
8850735	. Silicon (Si)	2023/08/14	98	80 - 120	97	80 - 120	<0.005	mg/L				
8850735	. Silver (Ag)	2023/08/14	102	80 - 120	95	80 - 120	<0.00001	mg/L				
8850735	. Sodium (Na)	2023/08/14	NC	80 - 120	98	80 - 120	<0.01	mg/L				
8850735	. Strontium (Sr)	2023/08/14	NC	80 - 120	99	80 - 120	<0.0001	mg/L				
8850735	. Tellurium (Te)	2023/08/14	110	80 - 120	96	80 - 120	<0.0001	mg/L				
8850735	. Thallium (Tl)	2023/08/14	105	80 - 120	103	80 - 120	<0.000005	mg/L				
8850735	. Thorium (Th)	2023/08/14	96	80 - 120	98	80 - 120	<0.0002	mg/L				
8850735	. Tin (Sn)	2023/08/14	111	80 - 120	101	80 - 120	<0.0001	mg/L				
8850735	. Titanium (Ti)	2023/08/14	103	80 - 120	99	80 - 120	<0.0005	mg/L				
8850735	. Tungsten (W)	2023/08/14	107	80 - 120	102	80 - 120	<0.0001	mg/L				
8850735	. Uranium (U)	2023/08/14	105	80 - 120	100	80 - 120	<0.00001	mg/L				
8850735	. Vanadium (V)	2023/08/14	106	80 - 120	98	80 - 120	<0.00005	mg/L				
8850735	. Zinc (Zn)	2023/08/14	106	80 - 120	98	80 - 120	<0.0005	mg/L				
8850735	. Zirconium (Zr)	2023/08/14	114	80 - 120	101	80 - 120	<0.0001	mg/L				
8854839	Strong Acid Dissoc. Cyanide (CN)	2023/08/14	97	80 - 120	103	80 - 120	<0.00050	mg/L				
8854849	Strong Acid Dissoc. Cyanide (CN)	2023/08/14	93	80 - 120	103	80 - 120	<0.00050	mg/L	NC	20		
8854864	Total Phosphorus (P)	2023/08/12	109	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20	85	80 - 120
8854865	Free Cyanide (CN)	2023/08/15	86	80 - 120	90	80 - 120	<2.0	ug/L				
8854866	Total Phosphorus (P)	2023/08/15	111	80 - 120	104	80 - 120	<0.0010	mg/L			95	80 - 120
8858164	Acidity	2023/08/17	80	80 - 120	103	80 - 120	<5.0	mg/L	3.1	25		
8861053	Acidity	2023/08/18	90	80 - 120	104	80 - 120	<5.0	mg/L	2.7	25		
8865666	Total Sulphur (S)	2023/08/21	99	80 - 120	97	80 - 120	<0.5	mg/L	1.6	25		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8865922	Dissolved Sulphur (S)	2023/08/22	NC	80 - 120	102	80 - 120	<0.5	mg/L	0.85	25		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

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

(2) Matrix Spike exceeds acceptance limits, probable matrix interference

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N6453
Report Date: 2023/08/22

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Cristina Carriere, Senior Scientific Specialist

<original signed by>

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

<original signed by>

Mike MacGillivray, Scientific Specialist (Inorganics)

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 747298

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/22
Report #: R7776812
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3O2508
Received: 2023/08/09, 17:22

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	3	N/A	2023/08/21	ATL SOP-00205	SM 24 2310B m
Alkalinity	3	N/A	2023/08/15	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	3	N/A	2023/08/16	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	3	N/A	2023/08/15	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	3	N/A	2023/08/15	CAM SOP-00414	SM 23 2510 m
Petroleum Hydrocarbons F2-F4 in Water (3)	1	2023/08/14	2023/08/14	CAM SOP-00316	CCME PHC-CWS m
Fluoride	3	2023/08/14	2023/08/15	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	2	N/A	2023/08/16	CAM SOP 00102/00408/00447	SM 2340 B
Hardness (calculated as CaCO3)	1	N/A	2023/08/18	CAM SOP 00102/00408/00447	SM 2340 B
Dissolved Mercury (low level)	3	2023/08/15	2023/08/15	CAM SOP-00453	EPA 7470 m
Mercury (low level)	2	2023/08/14	2023/08/15	CAM SOP-00453	EPA 7470 m
Mercury (low level)	1	2023/08/15	2023/08/15	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	3	2023/08/14	2023/08/17	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	2	N/A	2023/08/16	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS (low level)	1	N/A	2023/08/17	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	2	N/A	2023/08/21	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	1	N/A	2023/08/22	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	3	2023/08/16	2023/08/18	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	3	N/A	2023/08/17	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	3	2023/08/18	2023/08/18	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	3	2023/08/17	2023/08/18	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	3	N/A	2023/08/16	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (4)	3	N/A	2023/08/14	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	3	2023/08/14	2023/08/15	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (5)	1	N/A	2023/08/11		Field pH Meter
Sulphate by Automated Turbidimetry	3	N/A	2023/08/15	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	3	2023/08/14	2023/08/15	CAM SOP-00428	SM 23 2540C m
Field Temperature (5)	1	N/A	2023/08/11		Field Thermometer
Total Kjeldahl Nitrogen in Water	3	2023/08/15	2023/08/16	CAM SOP-00938	OMOE E3516 m

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 747298

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/22
Report #: R7776812
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3O2508
Received: 2023/08/09, 17:22

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Low Level Total Suspended Solids	3	2023/08/14	2023/08/15	CAM SOP-00428	SM 23 2540D m
Turbidity	3	N/A	2023/08/15	CAM SOP-00417	SM 23 2130 B m
Volatile Organic Compounds and F1 PHCs	1	N/A	2023/08/14	CAM SOP-00230	EPA 8260C m

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
(4) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(5) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O2508
Report Date: 2023/08/22

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: MF

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WQV536			WQV537			WQV537		
Sampling Date		2023/08/08 13:13			2023/08/08 13:54			2023/08/08 13:54		
COC Number		747298			747298			747298		
	UNITS	MW15-BR-14	RDL	QC Batch	MW15-OB-14	RDL	QC Batch	MW15-OB-14 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	180	1.0	8846783	230	1.0	8846783			
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.1	1.0	8846783	4.2	1.0	8846783			
Hardness (CaCO3)	mg/L	180	1.0	8847242	230	1.0	8847242			
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8846783	<1.0	1.0	8846783			
Field Measurements										
Field Temperature	Celsius	13.6	N/A	ONSITE						
Field Measured pH	pH	7.61		ONSITE						
Inorganics										
Acidity	mg/L	<5.0	5.0	8865228	6.2	5.0	8865228	6.0	5.0	8865228
Total Ammonia-N	mg/L	0.12	0.050	8854918	<0.050	0.050	8854918			
Conductivity	mS/cm	0.357	0.001	8850564	0.427	0.001	8850564			
Free Cyanide (CN)	ug/L	3.0 (1)	2.0	8863854	2.3 (1)	2.0	8863854			
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050 (2)	0.00050	8863855	<0.00050 (2)	0.00050	8863855			
Total Dissolved Solids	mg/L	215	10	8850357	240	10	8850357			
Fluoride (F-)	mg/L	0.15	0.10	8850565	<0.10	0.10	8850565			
Total Kjeldahl Nitrogen (TKN)	mg/L	0.16	0.10	8854269	0.19	0.10	8853894			
pH	pH	8.09		8850561	8.30		8850561			
Total Phosphorus (P)	mg/L	0.0031	0.0010	8863833	0.51	0.010	8863833			
Total Suspended Solids	mg/L	7	1	8850364	1000	5	8850364			
Dissolved Sulphate (SO4)	mg/L	12	1.0	8850274	9.1	1.0	8850274			
Turbidity	NTU	0.8	0.1	8850627	91	0.1	8850627			
Alkalinity (Total as CaCO3)	mg/L	180	1.0	8850556	230	1.0	8850556			
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	8850272	<1.0	1.0	8850272			
Nitrite (N)	mg/L	<0.010	0.010	8850461	<0.010	0.010	8850461			
Nitrate (N)	mg/L	<0.10	0.10	8850461	<0.10	0.10	8850461			
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8850461	<0.10	0.10	8850461			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O2508
Report Date: 2023/08/22

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: MF

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WQV538		
Sampling Date		2023/08/08 14:33		
COC Number		747298		
	UNITS	MW20-BR-21	RDL	QC Batch
Calculated Parameters				
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8846783
Carb. Alkalinity (calc. as CaCO3)	mg/L	110	1.0	8846783
Hardness (CaCO3)	mg/L	780	1.0	8848502
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	880	1.0	8846783
Inorganics				
Acidity	mg/L	<5.0	5.0	8865228
Total Ammonia-N	mg/L	1.8	0.050	8854918
Conductivity	mS/cm	4.30	0.001	8850564
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	8863854
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8863855
Total Dissolved Solids	mg/L	1080	10	8850357
Fluoride (F-)	mg/L	0.24	0.10	8850565
Total Kjeldahl Nitrogen (TKN)	mg/L	2.2	0.10	8853894
pH	pH	12.2		8850561
Total Phosphorus (P)	mg/L	0.026	0.0010	8863833
Total Suspended Solids	mg/L	190	3	8850364
Dissolved Sulphate (SO4)	mg/L	4.7	1.0	8850274
Turbidity	NTU	28	0.1	8850627
Alkalinity (Total as CaCO3)	mg/L	990	1.0	8850556
Dissolved Chloride (Cl-)	mg/L	2.8	1.0	8850272
Nitrite (N)	mg/L	<0.010	0.010	8850461
Nitrate (N)	mg/L	<0.10	0.10	8850461
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8850461

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O2508
Report Date: 2023/08/22

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: MF

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WQV536			WQV537			WQV538		
Sampling Date		2023/08/08 13:13			2023/08/08 13:54			2023/08/08 14:33		
COC Number		747298			747298			747298		
	UNITS	MW15-BR-14	RDL	QC Batch	MW15-OB-14	RDL	QC Batch	MW20-BR-21	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0041	0.0005	8853726	0.0022	0.0005	8853726	0.243	0.0005	8859749
. Aluminum (Al)	mg/L	0.0284	0.0005	8859130	3.92	0.0025	8867310	0.541	0.0025	8859130
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8853726	<0.0001	0.0001	8853726	0.0004	0.0001	8859749
. Antimony (Sb)	mg/L	0.0001	0.0001	8859130	<0.0005	0.0005	8867310	0.0010	0.0005	8859130
Dissolved Arsenic (As)	mg/L	0.0014	0.0001	8853726	0.0016	0.0001	8853726	0.0026	0.0001	8859749
. Arsenic (As)	mg/L	0.0017	0.0001	8859130	0.0029	0.0005	8867310	0.0038	0.0005	8859130
Dissolved Barium (Ba)	mg/L	0.0103	0.0002	8853726	0.0253	0.0002	8853726	0.685	0.001	8859749
. Barium (Ba)	mg/L	0.0110	0.0002	8859130	0.073	0.001	8867310	0.718	0.001	8859130
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8853726	<0.00005	0.00005	8853726	<0.00005	0.00005	8859749
. Beryllium (Be)	mg/L	<0.00005	0.00005	8859130	<0.00025	0.00025	8867310	<0.00025	0.00025	8859130
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8853726	<0.0001	0.0001	8853726	<0.0001	0.0001	8859749
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8859130	<0.0005	0.0005	8867310	<0.0005	0.0005	8859130
Dissolved Boron (B)	mg/L	0.010	0.001	8853726	0.006	0.001	8853726	0.003	0.001	8859749
. Boron (B)	mg/L	0.010	0.001	8859130	0.014	0.005	8867310	<0.005	0.005	8859130
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8853726	<0.00001	0.00001	8853726	<0.00001	0.00001	8859749
. Cadmium (Cd)	mg/L	<0.000005	0.000005	8859130	0.000174	0.000025	8867310	0.000029	0.000025	8859130
Dissolved Calcium (Ca)	mg/L	55.1	0.1	8853726	68.8	0.1	8853726	312	0.2	8859749
. Calcium (Ca)	mg/L	54.1	0.1	8859130	260	0.2	8867310	316	0.2	8859130
Dissolved Cesium (Cs)	mg/L	0.00009	0.00002	8853726	<0.00002	0.00002	8853726	0.00016	0.00002	8859749
. Cesium (Cs)	mg/L	0.00011	0.00002	8859130	0.0004	0.0001	8867310	0.0002	0.0001	8859130
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8853726	<0.0005	0.0005	8853726	<0.0005	0.0005	8859749
. Chromium (Cr)	mg/L	<0.0005	0.0005	8859130	0.0111	0.0025	8867310	<0.0025	0.0025	8859130
Dissolved Cobalt (Co)	mg/L	0.00015	0.00005	8853726	0.00036	0.00005	8853726	0.00017	0.00005	8859749
. Cobalt (Co)	mg/L	0.00012	0.00005	8859130	0.00345	0.00025	8867310	0.00040	0.00025	8859130
Dissolved Copper (Cu)	mg/L	0.0004	0.0001	8853726	0.0006	0.0001	8853726	0.0027	0.0001	8859749
. Copper (Cu)	mg/L	0.0003	0.0001	8859130	0.0274	0.0005	8867310	0.0035	0.0005	8859130
Dissolved Iron (Fe)	mg/L	0.262	0.005	8853726	0.032	0.005	8853726	<0.005	0.005	8859749
. Iron (Fe)	mg/L	0.379	0.005	8859130	5.54	0.025	8867310	0.499	0.025	8859130
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8853726	<0.00005	0.00005	8853726	0.00085	0.00005	8859749
. Lead (Pb)	mg/L	0.00008	0.00005	8859130	0.00424	0.00025	8867310	0.00185	0.00025	8859130
Dissolved Lithium (Li)	mg/L	0.0017	0.0005	8853726	0.0015	0.0005	8853726	0.0205	0.0005	8859749

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WQV536			WQV537			WQV538		
Sampling Date		2023/08/08 13:13			2023/08/08 13:54			2023/08/08 14:33		
COC Number		747298			747298			747298		
	UNITS	MW15-BR-14	RDL	QC Batch	MW15-OB-14	RDL	QC Batch	MW20-BR-21	RDL	QC Batch
. Lithium (Li)	mg/L	0.0019	0.0005	8859130	0.0067	0.0025	8867310	0.0205	0.0025	8859130
Dissolved Magnesium (Mg)	mg/L	11.4	0.005	8853726	13.9	0.005	8853726	0.020	0.005	8859749
. Magnesium (Mg)	mg/L	11.7	0.005	8859130	54.8	0.025	8867310	2.37	0.025	8859130
Dissolved Manganese (Mn)	mg/L	0.0640	0.0002	8853726	0.0176	0.0002	8853726	<0.0002	0.0002	8859749
. Manganese (Mn)	mg/L	0.0668	0.0002	8859130	0.223	0.001	8867310	0.019	0.001	8859130
Mercury (Hg)	ug/L	<0.01	0.01	8851261	0.01	0.01	8851261	<0.01	0.01	8854044
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8854034	<0.01	0.01	8853786	<0.01	0.01	8853786
Dissolved Molybdenum (Mo)	mg/L	0.00069	0.00005	8853726	0.00068	0.00005	8853726	0.0358	0.00005	8859749
. Molybdenum (Mo)	mg/L	0.00062	0.00005	8859130	<0.00025	0.00025	8867310	0.0324	0.00025	8859130
Dissolved Nickel (Ni)	mg/L	0.0001	0.0001	8853726	0.0013	0.0001	8853726	0.0073	0.0001	8859749
. Nickel (Ni)	mg/L	0.0001	0.0001	8859130	0.0113	0.0005	8867310	0.0079	0.0005	8859130
Dissolved Phosphorus (P)	mg/L	<0.005	0.005	8853726	0.007	0.005	8853726	0.006	0.005	8859749
. Phosphorus (P)	mg/L	0.006	0.005	8859130	0.572	0.025	8867310	0.051	0.025	8859130
Dissolved Potassium (K)	mg/L	1.60	0.02	8853726	1.60	0.02	8853726	23.9	0.1	8859749
. Potassium (K)	mg/L	1.63	0.02	8859130	2.6	0.1	8867310	23.8	0.1	8859130
Dissolved Rubidium (Rb)	mg/L	0.00302	0.00002	8853726	0.00234	0.00002	8853726	0.0483	0.00002	8859749
. Rubidium (Rb)	mg/L	0.00306	0.00002	8859130	0.0110	0.0001	8867310	0.0481	0.0001	8859130
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8853726	<0.0002	0.0002	8853726	0.0002	0.0002	8859749
. Selenium (Se)	mg/L	<0.00005	0.00005	8859130	<0.00025	0.00025	8867310	<0.00025	0.00025	8859130
Dissolved Silicon (Si)	mg/L	6.95	0.025	8853726	4.63	0.005	8853726	0.607	0.005	8859749
. Silicon (Si)	mg/L	7.03	0.025	8859130	12.5	0.025	8867310	2.16	0.025	8859130
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8853726	<0.00001	0.00001	8853726	<0.00001	0.00001	8859749
. Silver (Ag)	mg/L	<0.00001	0.00001	8859130	<0.00005	0.00005	8867310	<0.00005	0.00005	8859130
Dissolved Sodium (Na)	mg/L	3.10	0.01	8853726	1.80	0.01	8853726	133	0.05	8859749
. Sodium (Na)	mg/L	3.17	0.01	8859130	2.18	0.05	8867310	134	0.05	8859130
Dissolved Strontium (Sr)	mg/L	0.162	0.0001	8853726	0.0653	0.0001	8853726	2.16	0.0001	8859749
. Strontium (Sr)	mg/L	0.176	0.0001	8859130	0.172	0.0005	8867310	2.24	0.0005	8859130
Dissolved Sulphur (S)	mg/L	4.0	0.5	8850786	3.3	0.5	8850786	1.8	0.5	8850786
Total Sulphur (S)	mg/L	4.3	0.5	8855519	3.7	0.5	8855519	1.9	0.5	8855519
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8853726	<0.0001	0.0001	8853726	<0.0001	0.0001	8859749
. Tellurium (Te)	mg/L	<0.0001	0.0001	8859130	<0.0005	0.0005	8867310	<0.0005	0.0005	8859130
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8853726	0.000005	0.000005	8853726	0.000021	0.000005	8859749

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O2508
Report Date: 2023/08/22

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: MF

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WQV536			WQV537			WQV538		
Sampling Date		2023/08/08 13:13			2023/08/08 13:54			2023/08/08 14:33		
COC Number		747298			747298			747298		
	UNITS	MW15-BR-14	RDL	QC Batch	MW15-OB-14	RDL	QC Batch	MW20-BR-21	RDL	QC Batch
. Thallium (Tl)	mg/L	<0.000005	0.000005	8859130	0.000083	0.000025	8867310	<0.000025	0.000025	8859130
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8853726	<0.0002	0.0002	8853726	<0.0002	0.0002	8859749
. Thorium (Th)	mg/L	<0.0002	0.0002	8859130	<0.001	0.001	8867310	<0.001	0.001	8859130
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8853726	<0.0001	0.0001	8853726	0.0004	0.0001	8859749
. Tin (Sn)	mg/L	<0.0001	0.0001	8859130	<0.0005	0.0005	8867310	0.0009	0.0005	8859130
Dissolved Titanium (Ti)	mg/L	<0.0005	0.0005	8853726	<0.0005	0.0005	8853726	<0.0005	0.0005	8859749
. Titanium (Ti)	mg/L	0.0022	0.0005	8859130	0.169	0.005	8867310	0.0137	0.0025	8859130
Dissolved Tungsten (W)	mg/L	0.0005	0.0001	8853726	0.0004	0.0001	8853726	0.0096	0.0001	8859749
. Tungsten (W)	mg/L	0.0005	0.0001	8859130	<0.0005	0.0005	8867310	0.0079	0.0005	8859130
Dissolved Uranium (U)	mg/L	0.00023	0.00001	8853726	0.00068	0.00001	8853726	<0.00001	0.00001	8859749
. Uranium (U)	mg/L	0.00025	0.00001	8859130	0.00111	0.00005	8867310	0.00008	0.00005	8859130
Dissolved Vanadium (V)	mg/L	0.00006	0.00005	8853726	0.00029	0.00005	8853726	0.00064	0.00005	8859749
. Vanadium (V)	mg/L	0.00020	0.00005	8859130	0.0122	0.00025	8867310	0.00113	0.00025	8859130
Dissolved Zinc (Zn)	mg/L	0.0011	0.0005	8853726	0.0020	0.0005	8853726	0.835	0.0005	8859749
. Zinc (Zn)	mg/L	0.0016	0.0005	8859130	0.0752	0.0025	8867310	5.82	0.0025	8859130
Dissolved Zirconium (Zr)	mg/L	0.0002	0.0001	8853726	<0.0001	0.0001	8853726	<0.0001	0.0001	8859749
. Zirconium (Zr)	mg/L	0.0003	0.0001	8859130	0.0017	0.0005	8867310	<0.0005	0.0005	8859130

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WQV538		
Sampling Date		2023/08/08 14:33		
COC Number		747298		
	UNITS	MW20-BR-21 Lab-Dup	RDL	QC Batch
Metals				
Dissolved Aluminum (Al)	mg/L	0.265	0.0005	8859749
Dissolved Antimony (Sb)	mg/L	0.0004	0.0001	8859749
Dissolved Arsenic (As)	mg/L	0.0027	0.0001	8859749
Dissolved Barium (Ba)	mg/L	0.692	0.001	8859749
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8859749
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8859749
Dissolved Boron (B)	mg/L	0.003	0.001	8859749
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8859749
Dissolved Calcium (Ca)	mg/L	308	0.2	8859749
Dissolved Cesium (Cs)	mg/L	0.00017	0.00002	8859749
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8859749
Dissolved Cobalt (Co)	mg/L	0.00017	0.00005	8859749
Dissolved Copper (Cu)	mg/L	0.0028	0.0001	8859749
Dissolved Iron (Fe)	mg/L	<0.005	0.005	8859749
Dissolved Lead (Pb)	mg/L	0.00083	0.00005	8859749
Dissolved Lithium (Li)	mg/L	0.0210	0.0005	8859749
Dissolved Magnesium (Mg)	mg/L	0.022	0.005	8859749
Dissolved Manganese (Mn)	mg/L	<0.0002	0.0002	8859749
Mercury (Hg)	ug/L	<0.01	0.01	8854044
Dissolved Molybdenum (Mo)	mg/L	0.0360	0.00005	8859749
Dissolved Nickel (Ni)	mg/L	0.0073	0.0001	8859749
Dissolved Phosphorus (P)	mg/L	0.008	0.005	8859749
Dissolved Potassium (K)	mg/L	23.9	0.1	8859749
Dissolved Rubidium (Rb)	mg/L	0.0497	0.00002	8859749
Dissolved Selenium (Se)	mg/L	0.0002	0.0002	8859749
Dissolved Silicon (Si)	mg/L	0.668	0.005	8859749
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8859749
Dissolved Sodium (Na)	mg/L	134	0.05	8859749
Dissolved Strontium (Sr)	mg/L	2.20	0.0001	8859749
Dissolved Sulphur (S)	mg/L	1.8	0.5	8850786

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WQV538		
Sampling Date		2023/08/08 14:33		
COC Number		747298		
	UNITS	MW20-BR-21 Lab-Dup	RDL	QC Batch
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8859749
Dissolved Thallium (Tl)	mg/L	0.000013	0.000005	8859749
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8859749
Dissolved Tin (Sn)	mg/L	0.0004	0.0001	8859749
Dissolved Titanium (Ti)	mg/L	<0.0005	0.0005	8859749
Dissolved Tungsten (W)	mg/L	0.0095	0.0001	8859749
Dissolved Uranium (U)	mg/L	<0.00001	0.00001	8859749
Dissolved Vanadium (V)	mg/L	0.00066	0.00005	8859749
Dissolved Zinc (Zn)	mg/L	0.838	0.0005	8859749
Dissolved Zirconium (Zr)	mg/L	<0.0001	0.0001	8859749

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VOLATILE ORGANICS BY GC/MS (WATER)

Bureau Veritas ID		WQV537		
Sampling Date		2023/08/08 13:54		
COC Number		747298		
	UNITS	MW15-OB-14	RDL	QC Batch
Volatile Organics				
Benzene	ug/L	<0.17	0.17	8849619
Chloroform	ug/L	<0.20	0.20	8849619
1,2-Dichlorobenzene	ug/L	<0.50	0.50	8849619
1,4-Dichlorobenzene	ug/L	<0.50	0.50	8849619
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	8849619
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	8849619
Ethylbenzene	ug/L	<0.20	0.20	8849619
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	8849619
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	8849619
Tetrachloroethylene	ug/L	<0.20	0.20	8849619
Toluene	ug/L	<0.20	0.20	8849619
Trichloroethylene	ug/L	<0.20	0.20	8849619
p+m-Xylene	ug/L	<0.20	0.20	8849619
o-Xylene	ug/L	<0.20	0.20	8849619
Total Xylenes	ug/L	<0.20	0.20	8849619
F1 (C6-C10)	ug/L	<25	25	8849619
F1 (C6-C10) - BTEX	ug/L	<25	25	8849619
Surrogate Recovery (%)				
4-Bromofluorobenzene	%	101		8849619
D4-1,2-Dichloroethane	%	100		8849619
D8-Toluene	%	98		8849619

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		WQV537		
Sampling Date		2023/08/08 13:54		
COC Number		747298		
	UNITS	MW15-OB-14	RDL	QC Batch
F2-F4 Hydrocarbons				
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	8850371
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	8850371
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	8850371
Reached Baseline at C50	ug/L	Yes		8850371
Surrogate Recovery (%)				
o-Terphenyl	%	98		8850371

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WQV536
Sample ID: MW15-BR-14
Matrix: Water

Collected: 2023/08/08
Shipped:
Received: 2023/08/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8865228	N/A	2023/08/21	Brent Boudreau
Alkalinity	AT	8850556	N/A	2023/08/15	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8846783	N/A	2023/08/16	Automated Statchk
Chloride by Automated Colourimetry	KONE	8850272	N/A	2023/08/15	Alina Dobreanu
Conductivity	AT	8850564	N/A	2023/08/15	Nachiketa Gohil
Fluoride	ISE	8850565	2023/08/14	2023/08/15	Nachiketa Gohil
Hardness (calculated as CaCO3)		8847242	N/A	2023/08/16	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8854034	2023/08/15	2023/08/15	Japneet Gill
Mercury (low level)	CV/AA	8851261	2023/08/14	2023/08/15	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8850786	2023/08/14	2023/08/17	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8853726	N/A	2023/08/16	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8859130	N/A	2023/08/21	Nan Raykha
Total Metals Analysis by ICP	ICP	8855519	2023/08/16	2023/08/18	Suban Kanapathippllai
Cyanide (Free)	SPEC	8863854	N/A	2023/08/17	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8863855	2023/08/18	2023/08/18	Ming Dong
Total Phosphorus Low Level Total	KONE	8863833	2023/08/17	2023/08/18	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8854918	N/A	2023/08/16	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8850461	N/A	2023/08/14	Chandra Nandlal
pH	AT	8850561	2023/08/14	2023/08/15	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/11	Prabhjot Singh
Sulphate by Automated Turbidimetry	KONE	8850274	N/A	2023/08/15	Alina Dobreanu
Total Dissolved Solids	BAL	8850357	2023/08/14	2023/08/15	Tina Teng
Field Measured pH	PH	ONSITE	N/A	2023/08/11	Prabhjot Singh
Total Kjeldahl Nitrogen in Water	SKAL	8854269	2023/08/15	2023/08/16	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8850364	2023/08/14	2023/08/15	Tina Teng
Turbidity	AT	8850627	N/A	2023/08/15	Leily Karimi

Bureau Veritas ID: WQV537
Sample ID: MW15-OB-14
Matrix: Water

Collected: 2023/08/08
Shipped:
Received: 2023/08/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8865228	N/A	2023/08/21	Brent Boudreau
Alkalinity	AT	8850556	N/A	2023/08/15	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8846783	N/A	2023/08/16	Automated Statchk
Chloride by Automated Colourimetry	KONE	8850272	N/A	2023/08/15	Alina Dobreanu
Conductivity	AT	8850564	N/A	2023/08/15	Nachiketa Gohil
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8850371	2023/08/14	2023/08/14	Emir Danisman
Fluoride	ISE	8850565	2023/08/14	2023/08/15	Nachiketa Gohil
Hardness (calculated as CaCO3)		8847242	N/A	2023/08/16	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8853786	2023/08/15	2023/08/15	Japneet Gill
Mercury (low level)	CV/AA	8851261	2023/08/14	2023/08/15	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8850786	2023/08/14	2023/08/17	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8853726	N/A	2023/08/16	Prempal Bhatti

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O2508
Report Date: 2023/08/22

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: MF

TEST SUMMARY

Bureau Veritas ID: WQV537
Sample ID: MW15-OB-14
Matrix: Water

Collected: 2023/08/08
Shipped:
Received: 2023/08/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Metals in Water by ICPMS (low level)	ICP1/MS	8867310	N/A	2023/08/22	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8855519	2023/08/16	2023/08/18	Suban Kanapathippllai
Cyanide (Free)	SPEC	8863854	N/A	2023/08/17	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8863855	2023/08/18	2023/08/18	Ming Dong
Total Phosphorus Low Level Total	KONE	8863833	2023/08/17	2023/08/18	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8854918	N/A	2023/08/16	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8850461	N/A	2023/08/14	Chandra Nandlal
pH	AT	8850561	2023/08/14	2023/08/15	Nachiketa Gohil
Sulphate by Automated Turbidimetry	KONE	8850274	N/A	2023/08/15	Alina Dobreanu
Total Dissolved Solids	BAL	8850357	2023/08/14	2023/08/15	Tina Teng
Total Kjeldahl Nitrogen in Water	SKAL	8853894	2023/08/15	2023/08/16	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8850364	2023/08/14	2023/08/15	Tina Teng
Turbidity	AT	8850627	N/A	2023/08/15	Leily Karimi
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8849619	N/A	2023/08/14	Gladys Guerrero

Bureau Veritas ID: WQV537 Dup
Sample ID: MW15-OB-14
Matrix: Water

Collected: 2023/08/08
Shipped:
Received: 2023/08/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8865228	N/A	2023/08/21	Brent Boudreau

Bureau Veritas ID: WQV538
Sample ID: MW20-BR-21
Matrix: Water

Collected: 2023/08/08
Shipped:
Received: 2023/08/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8865228	N/A	2023/08/21	Brent Boudreau
Alkalinity	AT	8850556	N/A	2023/08/15	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8846783	N/A	2023/08/16	Automated Statchk
Chloride by Automated Colourimetry	KONE	8850272	N/A	2023/08/15	Alina Dobreanu
Conductivity	AT	8850564	N/A	2023/08/15	Nachiketa Gohil
Fluoride	ISE	8850565	2023/08/14	2023/08/15	Nachiketa Gohil
Hardness (calculated as CaCO3)		8848502	N/A	2023/08/18	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8853786	2023/08/15	2023/08/15	Japneet Gill
Mercury (low level)	CV/AA	8854044	2023/08/15	2023/08/15	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8850786	2023/08/14	2023/08/17	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8859749	N/A	2023/08/17	Prempal Bhatti
Metals in Water by ICPMS (low level)	ICP1/MS	8859130	N/A	2023/08/21	Nan Raykha
Total Metals Analysis by ICP	ICP	8855519	2023/08/16	2023/08/18	Suban Kanapathippllai
Cyanide (Free)	SPEC	8863854	N/A	2023/08/17	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8863855	2023/08/18	2023/08/18	Ming Dong
Total Phosphorus Low Level Total	KONE	8863833	2023/08/17	2023/08/18	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8854918	N/A	2023/08/16	Prabhjot Kaur

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O2508
Report Date: 2023/08/22

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: MF

TEST SUMMARY

Bureau Veritas ID: WQV538
Sample ID: MW20-BR-21
Matrix: Water

Collected: 2023/08/08
Shipped:
Received: 2023/08/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrate & Nitrite as Nitrogen in Water	LACH	8850461	N/A	2023/08/14	Chandra Nandlal
pH	AT	8850561	2023/08/14	2023/08/15	Nachiketa Gohil
Sulphate by Automated Turbidimetry	KONE	8850274	N/A	2023/08/15	Alina Dobreanu
Total Dissolved Solids	BAL	8850357	2023/08/14	2023/08/15	Tina Teng
Total Kjeldahl Nitrogen in Water	SKAL	8853894	2023/08/15	2023/08/16	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8850364	2023/08/14	2023/08/15	Tina Teng
Turbidity	AT	8850627	N/A	2023/08/15	Leily Karimi

Bureau Veritas ID: WQV538 Dup
Sample ID: MW20-BR-21
Matrix: Water

Collected: 2023/08/08
Shipped:
Received: 2023/08/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury (low level)	CV/AA	8854044	2023/08/15	2023/08/15	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8850786	2023/08/14	2023/08/17	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8859749	N/A	2023/08/17	Prempal Bhatti

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	8.7°C
Package 2	8.7°C
Package 3	6.7°C
Package 4	5.7°C

Sample WQV537 [MW15-OB-14] : Metal Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample WQV538 [MW20-BR-21] : ICPMS Metals Analysisl: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8849619	4-Bromofluorobenzene	2023/08/14	101	70 - 130	101	70 - 130	101	%				
8849619	D4-1,2-Dichloroethane	2023/08/14	100	70 - 130	98	70 - 130	98	%				
8849619	D8-Toluene	2023/08/14	101	70 - 130	100	70 - 130	97	%				
8850371	o-Terphenyl	2023/08/14	98	60 - 130	101	60 - 130	96	%				
8849619	1,1,2,2-Tetrachloroethane	2023/08/14	100	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
8849619	1,2-Dichlorobenzene	2023/08/14	95	70 - 130	94	70 - 130	<0.50	ug/L	NC	30		
8849619	1,4-Dichlorobenzene	2023/08/14	111	70 - 130	112	70 - 130	<0.50	ug/L	NC	30		
8849619	Benzene	2023/08/14	82	70 - 130	82	70 - 130	<0.17	ug/L	NC	30		
8849619	Chloroform	2023/08/14	89	70 - 130	90	70 - 130	<0.20	ug/L	NC	30		
8849619	cis-1,2-Dichloroethylene	2023/08/14	89	70 - 130	89	70 - 130	<0.50	ug/L	NC	30		
8849619	Ethylbenzene	2023/08/14	87	70 - 130	88	70 - 130	<0.20	ug/L	NC	30		
8849619	F1 (C6-C10) - BTEX	2023/08/14					<25	ug/L	NC	30		
8849619	F1 (C6-C10)	2023/08/14	86	60 - 140	87	60 - 140	<25	ug/L	NC	30		
8849619	Methylene Chloride(Dichloromethane)	2023/08/14	88	70 - 130	87	70 - 130	<2.0	ug/L	NC	30		
8849619	o-Xylene	2023/08/14	88	70 - 130	89	70 - 130	<0.20	ug/L	NC	30		
8849619	p+m-Xylene	2023/08/14	91	70 - 130	92	70 - 130	<0.20	ug/L	NC	30		
8849619	Tetrachloroethylene	2023/08/14	84	70 - 130	84	70 - 130	<0.20	ug/L	NC	30		
8849619	Toluene	2023/08/14	86	70 - 130	86	70 - 130	<0.20	ug/L	NC	30		
8849619	Total Xylenes	2023/08/14					<0.20	ug/L	NC	30		
8849619	trans-1,3-Dichloropropene	2023/08/14	105	70 - 130	99	70 - 130	<0.40	ug/L	NC	30		
8849619	Trichloroethylene	2023/08/14	93	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
8850272	Dissolved Chloride (Cl-)	2023/08/15	89	80 - 120	95	80 - 120	<1.0	mg/L	1.5	20		
8850274	Dissolved Sulphate (SO4)	2023/08/15	NC	75 - 125	104	80 - 120	<1.0	mg/L	0.54	20		
8850357	Total Dissolved Solids	2023/08/15			97	90 - 110	<10	mg/L	0.72	20		
8850364	Total Suspended Solids	2023/08/15			96	85 - 115	<1	mg/L	18	20		
8850371	F2 (C10-C16 Hydrocarbons)	2023/08/14	NC	60 - 130	90	60 - 130	<100	ug/L	NC	30		
8850371	F3 (C16-C34 Hydrocarbons)	2023/08/14	81	60 - 130	88	60 - 130	<200	ug/L	NC	30		
8850371	F4 (C34-C50 Hydrocarbons)	2023/08/14	81	60 - 130	88	60 - 130	<200	ug/L	NC	30		
8850461	Nitrate (N)	2023/08/14	100	80 - 120	102	80 - 120	<0.10	mg/L	1.3	20		
8850461	Nitrite (N)	2023/08/14	106	80 - 120	103	80 - 120	<0.010	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8850556	Alkalinity (Total as CaCO3)	2023/08/15			99	85 - 115	<1.0	mg/L	1.5	20		
8850561	pH	2023/08/15			102	98 - 103			1.0	N/A		
8850564	Conductivity	2023/08/15			101	85 - 115	<0.001	mS/cm	0.46	10		
8850565	Fluoride (F-)	2023/08/15	96	80 - 120	94	80 - 120	<0.10	mg/L	NC	20		
8850627	Turbidity	2023/08/15			99	80 - 120	<0.1	NTU	0.52	20		
8850786	Dissolved Sulphur (S)	2023/08/17	NC	80 - 120	100	80 - 120	<0.5	mg/L	0.74	25		
8851261	Mercury (Hg)	2023/08/15	101	75 - 125	99	80 - 120	<0.01	ug/L	NC	20		
8853726	Dissolved Aluminum (Al)	2023/08/16	NC	80 - 120	98	80 - 120	<0.0005	mg/L	0.29	20		
8853726	Dissolved Antimony (Sb)	2023/08/16	115	80 - 120	112	80 - 120	<0.0001	mg/L	NC	20		
8853726	Dissolved Arsenic (As)	2023/08/16	107	80 - 120	99	80 - 120	<0.0001	mg/L	4.6	20		
8853726	Dissolved Barium (Ba)	2023/08/16	107	80 - 120	101	80 - 120	<0.0002	mg/L	1.5	20		
8853726	Dissolved Beryllium (Be)	2023/08/16	107	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8853726	Dissolved Bismuth (Bi)	2023/08/16	70 (1)	80 - 120	95	80 - 120	<0.0001	mg/L	NC	20		
8853726	Dissolved Boron (B)	2023/08/16	100	80 - 120	94	80 - 120	<0.001	mg/L	0.62	20		
8853726	Dissolved Cadmium (Cd)	2023/08/16	111	80 - 120	99	80 - 120	<0.00001	mg/L	NC	20		
8853726	Dissolved Calcium (Ca)	2023/08/16	NC	80 - 120	101	80 - 120	<0.02	mg/L	0.52	20		
8853726	Dissolved Cesium (Cs)	2023/08/16	106	80 - 120	102	80 - 120	<0.00002	mg/L	NC	N/A		
8853726	Dissolved Chromium (Cr)	2023/08/16	104	80 - 120	97	80 - 120	<0.0005	mg/L	1.0	20		
8853726	Dissolved Cobalt (Co)	2023/08/16	103	80 - 120	97	80 - 120	<0.00005	mg/L	0	20		
8853726	Dissolved Copper (Cu)	2023/08/16	106	80 - 120	100	80 - 120	<0.0001	mg/L	0.75	20		
8853726	Dissolved Iron (Fe)	2023/08/16	106	80 - 120	100	80 - 120	<0.005	mg/L	1.5	20		
8853726	Dissolved Lead (Pb)	2023/08/16	104	80 - 120	95	80 - 120	<0.00005	mg/L	16	20		
8853726	Dissolved Lithium (Li)	2023/08/16	109	80 - 120	100	80 - 120	<0.0005	mg/L	4.0	20		
8853726	Dissolved Magnesium (Mg)	2023/08/16	NC	80 - 120	97	80 - 120	<0.005	mg/L	1.3	20		
8853726	Dissolved Manganese (Mn)	2023/08/16	104	80 - 120	97	80 - 120	<0.0002	mg/L	0.85	20		
8853726	Dissolved Molybdenum (Mo)	2023/08/16	116	80 - 120	104	80 - 120	<0.00005	mg/L	10	20		
8853726	Dissolved Nickel (Ni)	2023/08/16	100	80 - 120	97	80 - 120	<0.0001	mg/L	2.4	20		
8853726	Dissolved Phosphorus (P)	2023/08/16	115	80 - 120	101	80 - 120	<0.005	mg/L	4.8	20		
8853726	Dissolved Potassium (K)	2023/08/16	107	80 - 120	100	80 - 120	<0.02	mg/L	0.57	20		
8853726	Dissolved Rubidium (Rb)	2023/08/16	108	80 - 120	101	80 - 120	<0.00002	mg/L	0	N/A		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8853726	Dissolved Selenium (Se)	2023/08/16	108	80 - 120	99	80 - 120	<0.0002	mg/L	NC	20		
8853726	Dissolved Silicon (Si)	2023/08/16	271 (1)	80 - 120	101	80 - 120	<0.005	mg/L	1.3	20		
8853726	Dissolved Silver (Ag)	2023/08/16	112	80 - 120	104	80 - 120	<0.00001	mg/L	NC	20		
8853726	Dissolved Sodium (Na)	2023/08/16	104	80 - 120	97	80 - 120	<0.01	mg/L	1.4	20		
8853726	Dissolved Strontium (Sr)	2023/08/16	110	80 - 120	100	80 - 120	<0.0001	mg/L	1.6	20		
8853726	Dissolved Tellurium (Te)	2023/08/16	113	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8853726	Dissolved Thallium (Tl)	2023/08/16	108	80 - 120	96	80 - 120	<0.000005	mg/L	NC	20		
8853726	Dissolved Thorium (Th)	2023/08/16	102	80 - 120	98	80 - 120	<0.0002	mg/L	NC	20		
8853726	Dissolved Tin (Sn)	2023/08/16	115	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		
8853726	Dissolved Titanium (Ti)	2023/08/16	106	80 - 120	100	80 - 120	<0.0005	mg/L	1.0	20		
8853726	Dissolved Tungsten (W)	2023/08/16	112	80 - 120	98	80 - 120	<0.0001	mg/L	NC	20		
8853726	Dissolved Uranium (U)	2023/08/16	107	80 - 120	97	80 - 120	<0.00001	mg/L	2.1	20		
8853726	Dissolved Vanadium (V)	2023/08/16	106	80 - 120	98	80 - 120	<0.00005	mg/L	1.6	20		
8853726	Dissolved Zinc (Zn)	2023/08/16	104	80 - 120	97	80 - 120	<0.0005	mg/L	1.4	20		
8853726	Dissolved Zirconium (Zr)	2023/08/16	121 (1)	80 - 120	107	80 - 120	<0.0001	mg/L	NC	20		
8853786	Dissolved Mercury (Hg)	2023/08/15	100	75 - 125	101	80 - 120	<0.01	ug/L	NC	20		
8853894	Total Kjeldahl Nitrogen (TKN)	2023/08/16	110	80 - 120	106	80 - 120	<0.10	mg/L	3.2	20	102	80 - 120
8854034	Dissolved Mercury (Hg)	2023/08/15	96	75 - 125	99	80 - 120	<0.01	ug/L	NC	20		
8854044	Mercury (Hg)	2023/08/15	94	75 - 125	100	80 - 120	<0.01	ug/L	NC	20		
8854269	Total Kjeldahl Nitrogen (TKN)	2023/08/16	106	80 - 120	101	80 - 120	<0.10	mg/L	11	20	95	80 - 120
8854918	Total Ammonia-N	2023/08/16	101	75 - 125	103	80 - 120	<0.050	mg/L	NC	20		
8855519	Total Sulphur (S)	2023/08/18	103	80 - 120	103	80 - 120	<0.5	mg/L				
8859130	. Aluminum (Al)	2023/08/17	NC	80 - 120	101	80 - 120	<0.0005	mg/L	2.6	20		
8859130	. Antimony (Sb)	2023/08/17	119	80 - 120	104	80 - 120	<0.0001	mg/L				
8859130	. Arsenic (As)	2023/08/17	107	80 - 120	98	80 - 120	<0.0001	mg/L				
8859130	. Barium (Ba)	2023/08/17	109	80 - 120	100	80 - 120	<0.0002	mg/L				
8859130	. Beryllium (Be)	2023/08/17	118	80 - 120	104	80 - 120	<0.00005	mg/L				
8859130	. Bismuth (Bi)	2023/08/17	94	80 - 120	97	80 - 120	<0.0001	mg/L				
8859130	. Boron (B)	2023/08/17	111	80 - 120	100	80 - 120	<0.001	mg/L				
8859130	. Cadmium (Cd)	2023/08/17	112	80 - 120	99	80 - 120	<0.000005	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8859130	. Calcium (Ca)	2023/08/17	NC	80 - 120	102	80 - 120	<0.02	mg/L	3.3	20		
8859130	. Cesium (Cs)	2023/08/17	100	80 - 120	96	80 - 120	<0.00002	mg/L				
8859130	. Chromium (Cr)	2023/08/17	103	80 - 120	97	80 - 120	<0.0005	mg/L				
8859130	. Cobalt (Co)	2023/08/17	100	80 - 120	99	80 - 120	<0.00005	mg/L				
8859130	. Copper (Cu)	2023/08/17	109	80 - 120	100	80 - 120	<0.0001	mg/L	3.1	20		
8859130	. Iron (Fe)	2023/08/17	105	80 - 120	102	80 - 120	<0.005	mg/L	NC	20		
8859130	. Lead (Pb)	2023/08/17	101	80 - 120	97	80 - 120	<0.00005	mg/L				
8859130	. Lithium (Li)	2023/08/17	114	80 - 120	104	80 - 120	<0.0005	mg/L				
8859130	. Magnesium (Mg)	2023/08/17	NC	80 - 120	103	80 - 120	<0.005	mg/L	1.9	20		
8859130	. Manganese (Mn)	2023/08/17	103	80 - 120	100	80 - 120	<0.0002	mg/L	2.0	20		
8859130	. Molybdenum (Mo)	2023/08/17	119	80 - 120	104	80 - 120	<0.00005	mg/L				
8859130	. Nickel (Ni)	2023/08/17	98	80 - 120	96	80 - 120	<0.0001	mg/L				
8859130	. Phosphorus (P)	2023/08/17	NC	80 - 120	111	80 - 120	<0.005	mg/L				
8859130	. Potassium (K)	2023/08/17	104	80 - 120	105	80 - 120	<0.02	mg/L				
8859130	. Rubidium (Rb)	2023/08/17	108	80 - 120	102	80 - 120	<0.00002	mg/L				
8859130	. Selenium (Se)	2023/08/17	111	80 - 120	101	80 - 120	<0.00005	mg/L				
8859130	. Silicon (Si)	2023/08/17	114	80 - 120	101	80 - 120	<0.005	mg/L				
8859130	. Silver (Ag)	2023/08/17	109	80 - 120	100	80 - 120	<0.00001	mg/L				
8859130	. Sodium (Na)	2023/08/17	NC	80 - 120	97	80 - 120	<0.01	mg/L				
8859130	. Strontium (Sr)	2023/08/17	NC	80 - 120	99	80 - 120	<0.0001	mg/L				
8859130	. Tellurium (Te)	2023/08/17	116	80 - 120	100	80 - 120	<0.0001	mg/L				
8859130	. Thallium (Tl)	2023/08/17	103	80 - 120	98	80 - 120	<0.000005	mg/L				
8859130	. Thorium (Th)	2023/08/17	97	80 - 120	99	80 - 120	<0.0002	mg/L				
8859130	. Tin (Sn)	2023/08/17	114	80 - 120	102	80 - 120	<0.0001	mg/L				
8859130	. Titanium (Ti)	2023/08/17	109	80 - 120	99	80 - 120	<0.0005	mg/L				
8859130	. Tungsten (W)	2023/08/17	113	80 - 120	100	80 - 120	<0.0001	mg/L				
8859130	. Uranium (U)	2023/08/17	105	80 - 120	97	80 - 120	<0.00001	mg/L				
8859130	. Vanadium (V)	2023/08/17	104	80 - 120	96	80 - 120	<0.00005	mg/L				
8859130	. Zinc (Zn)	2023/08/17	105	80 - 120	98	80 - 120	<0.0005	mg/L	8.8	20		
8859130	. Zirconium (Zr)	2023/08/17	115	80 - 120	100	80 - 120	<0.0001	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8859749	Dissolved Aluminum (Al)	2023/08/17	NC	80 - 120	99	80 - 120	<0.0005	mg/L	8.7	20		
8859749	Dissolved Antimony (Sb)	2023/08/17	117	80 - 120	107	80 - 120	<0.0001	mg/L	7.9	20		
8859749	Dissolved Arsenic (As)	2023/08/17	110	80 - 120	99	80 - 120	<0.0001	mg/L	2.4	20		
8859749	Dissolved Barium (Ba)	2023/08/17	NC	80 - 120	97	80 - 120	<0.0002	mg/L	0.99	20		
8859749	Dissolved Beryllium (Be)	2023/08/17	106	80 - 120	94	80 - 120	<0.00005	mg/L	NC	20		
8859749	Dissolved Bismuth (Bi)	2023/08/17	58 (1)	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8859749	Dissolved Boron (B)	2023/08/17	104	80 - 120	93	80 - 120	<0.001	mg/L	3.0	20		
8859749	Dissolved Cadmium (Cd)	2023/08/17	106	80 - 120	98	80 - 120	<0.00001	mg/L	NC	20		
8859749	Dissolved Calcium (Ca)	2023/08/17	NC	80 - 120	102	80 - 120	<0.02	mg/L	1.4	20		
8859749	Dissolved Cesium (Cs)	2023/08/17	112	80 - 120	100	80 - 120	<0.00002	mg/L	NC	N/A		
8859749	Dissolved Chromium (Cr)	2023/08/17	114	80 - 120	98	80 - 120	<0.0005	mg/L	NC	20		
8859749	Dissolved Cobalt (Co)	2023/08/17	107	80 - 120	98	80 - 120	<0.00005	mg/L	0	20		
8859749	Dissolved Copper (Cu)	2023/08/17	116	80 - 120	99	80 - 120	<0.0001	mg/L	2.8	20		
8859749	Dissolved Iron (Fe)	2023/08/17	114	80 - 120	101	80 - 120	<0.005	mg/L	NC	20		
8859749	Dissolved Lead (Pb)	2023/08/17	99	80 - 120	100	80 - 120	<0.00005	mg/L	1.8	20		
8859749	Dissolved Lithium (Li)	2023/08/17	111	80 - 120	98	80 - 120	<0.0005	mg/L	2.4	20		
8859749	Dissolved Magnesium (Mg)	2023/08/17	125 (1)	80 - 120	98	80 - 120	<0.005	mg/L	8.7	20		
8859749	Dissolved Manganese (Mn)	2023/08/17	115	80 - 120	98	80 - 120	<0.0002	mg/L	NC	20		
8859749	Dissolved Molybdenum (Mo)	2023/08/17	125 (1)	80 - 120	102	80 - 120	<0.00005	mg/L	0.48	20		
8859749	Dissolved Nickel (Ni)	2023/08/17	102	80 - 120	98	80 - 120	<0.0001	mg/L	1.1	20		
8859749	Dissolved Phosphorus (P)	2023/08/17	134 (1)	80 - 120	100	80 - 120	<0.005	mg/L	NC	20		
8859749	Dissolved Potassium (K)	2023/08/17	NC	80 - 120	98	80 - 120	<0.02	mg/L	0.11	20		
8859749	Dissolved Rubidium (Rb)	2023/08/17	NC	80 - 120	100	80 - 120	<0.00002	mg/L	2.9	N/A		
8859749	Dissolved Selenium (Se)	2023/08/17	104	80 - 120	102	80 - 120	<0.0002	mg/L	0.85	20		
8859749	Dissolved Silicon (Si)	2023/08/17	137 (1)	80 - 120	99	80 - 120	<0.005	mg/L	9.5	20		
8859749	Dissolved Silver (Ag)	2023/08/17	92	80 - 120	103	80 - 120	<0.00001	mg/L	NC	20		
8859749	Dissolved Sodium (Na)	2023/08/17	NC	80 - 120	98	80 - 120	<0.01	mg/L	0.14	20		
8859749	Dissolved Strontium (Sr)	2023/08/17	NC	80 - 120	100	80 - 120	<0.0001	mg/L	1.6	20		
8859749	Dissolved Tellurium (Te)	2023/08/17	107	80 - 120	98	80 - 120	<0.0001	mg/L	NC	20		
8859749	Dissolved Thallium (Tl)	2023/08/17	101	80 - 120	102	80 - 120	<0.000005	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8859749	Dissolved Thorium (Th)	2023/08/17	101	80 - 120	101	80 - 120	<0.0002	mg/L	NC	20		
8859749	Dissolved Tin (Sn)	2023/08/17	119	80 - 120	101	80 - 120	<0.0001	mg/L	3.9	20		
8859749	Dissolved Titanium (Ti)	2023/08/17	125 (1)	80 - 120	97	80 - 120	<0.0005	mg/L	NC	20		
8859749	Dissolved Tungsten (W)	2023/08/17	108	80 - 120	104	80 - 120	<0.0001	mg/L	0.98	20		
8859749	Dissolved Uranium (U)	2023/08/17	106	80 - 120	102	80 - 120	<0.00001	mg/L	NC	20		
8859749	Dissolved Vanadium (V)	2023/08/17	120	80 - 120	98	80 - 120	<0.00005	mg/L	3.6	20		
8859749	Dissolved Zinc (Zn)	2023/08/17	NC	80 - 120	98	80 - 120	<0.0005	mg/L	0.33	20		
8859749	Dissolved Zirconium (Zr)	2023/08/17	137 (1)	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		
8863833	Total Phosphorus (P)	2023/08/18	106	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20	91	80 - 120
8863854	Free Cyanide (CN)	2023/08/17	93	80 - 120	92	80 - 120	<2.0	ug/L	17	20		
8863855	Strong Acid Dissoc. Cyanide (CN)	2023/08/18	95	80 - 120	100	80 - 120	<0.00050	mg/L				
8865228	Acidity	2023/08/21	62 (2)	80 - 120	104	80 - 120	<5.0	mg/L	3.3	25		
8867310	. Aluminum (Al)	2023/08/22	NC	80 - 120	101	80 - 120	<0.0005	mg/L				
8867310	. Antimony (Sb)	2023/08/22	125 (1)	80 - 120	105	80 - 120	<0.0001	mg/L				
8867310	. Arsenic (As)	2023/08/22	112	80 - 120	100	80 - 120	<0.0001	mg/L				
8867310	. Barium (Ba)	2023/08/22	106	80 - 120	97	80 - 120	<0.0002	mg/L				
8867310	. Beryllium (Be)	2023/08/22	110	80 - 120	98	80 - 120	<0.00005	mg/L				
8867310	. Bismuth (Bi)	2023/08/22	58 (1)	80 - 120	98	80 - 120	<0.0001	mg/L				
8867310	. Boron (B)	2023/08/22	106	80 - 120	96	80 - 120	<0.001	mg/L				
8867310	. Cadmium (Cd)	2023/08/22	112	80 - 120	97	80 - 120	<0.000005	mg/L				
8867310	. Calcium (Ca)	2023/08/22	NC	80 - 120	101	80 - 120	<0.02	mg/L				
8867310	. Cesium (Cs)	2023/08/22	107	80 - 120	101	80 - 120	<0.00002	mg/L				
8867310	. Chromium (Cr)	2023/08/22	107	80 - 120	98	80 - 120	<0.0005	mg/L				
8867310	. Cobalt (Co)	2023/08/22	104	80 - 120	97	80 - 120	<0.00005	mg/L				
8867310	. Copper (Cu)	2023/08/22	111	80 - 120	99	80 - 120	<0.0001	mg/L				
8867310	. Iron (Fe)	2023/08/22	111	80 - 120	102	80 - 120	<0.005	mg/L				
8867310	. Lead (Pb)	2023/08/22	107	80 - 120	98	80 - 120	<0.00005	mg/L	NC	20		
8867310	. Lithium (Li)	2023/08/22	114	80 - 120	103	80 - 120	<0.0005	mg/L				
8867310	. Magnesium (Mg)	2023/08/22	NC	80 - 120	101	80 - 120	<0.005	mg/L				
8867310	. Manganese (Mn)	2023/08/22	106	80 - 120	98	80 - 120	<0.0002	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8867310	. Molybdenum (Mo)	2023/08/22	116	80 - 120	102	80 - 120	<0.00005	mg/L				
8867310	. Nickel (Ni)	2023/08/22	103	80 - 120	97	80 - 120	<0.0001	mg/L				
8867310	. Phosphorus (P)	2023/08/22	NC	80 - 120	103	80 - 120	<0.005	mg/L				
8867310	. Potassium (K)	2023/08/22	111	80 - 120	102	80 - 120	<0.02	mg/L				
8867310	. Rubidium (Rb)	2023/08/22	108	80 - 120	101	80 - 120	<0.00002	mg/L				
8867310	. Selenium (Se)	2023/08/22	113	80 - 120	100	80 - 120	<0.00005	mg/L				
8867310	. Silicon (Si)	2023/08/22	111	80 - 120	100	80 - 120	<0.005	mg/L				
8867310	. Silver (Ag)	2023/08/22	111	80 - 120	102	80 - 120	<0.00001	mg/L				
8867310	. Sodium (Na)	2023/08/22	NC	80 - 120	102	80 - 120	<0.01	mg/L				
8867310	. Strontium (Sr)	2023/08/22	NC	80 - 120	97	80 - 120	<0.0001	mg/L				
8867310	. Tellurium (Te)	2023/08/22	115	80 - 120	99	80 - 120	<0.0001	mg/L				
8867310	. Thallium (Tl)	2023/08/22	109	80 - 120	100	80 - 120	<0.000005	mg/L				
8867310	. Thorium (Th)	2023/08/22	99	80 - 120	98	80 - 120	<0.0002	mg/L				
8867310	. Tin (Sn)	2023/08/22	115	80 - 120	100	80 - 120	<0.0001	mg/L				
8867310	. Titanium (Ti)	2023/08/22	112	80 - 120	100	80 - 120	<0.0005	mg/L				
8867310	. Tungsten (W)	2023/08/22	112	80 - 120	102	80 - 120	<0.0001	mg/L				
8867310	. Uranium (U)	2023/08/22	109	80 - 120	98	80 - 120	<0.00001	mg/L				
8867310	. Vanadium (V)	2023/08/22	110	80 - 120	99	80 - 120	<0.00005	mg/L				
8867310	. Zinc (Zn)	2023/08/22	109	80 - 120	97	80 - 120	<0.0005	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8867310	. Zirconium (Zr)	2023/08/22	123 (1)	80 - 120	105	80 - 120	<0.0001	mg/L				

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike exceeds acceptance limits, probable matrix interference

(2) Results are outside acceptance limit. Analysis was repeated with similar results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O2508
Report Date: 2023/08/22

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: MF

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Cristina Carriere, Senior Scientific Specialist

<original signed by>

Janah Rhyno, Scientific Specialist

<original signed by>

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: GROUNDWATER SAMPLING PROGRAM
Your C.O.C. #: 748672

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/28
Report #: R7785341
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3O7544
Received: 2023/08/14, 13:20

Sample Matrix: Water
Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	8	N/A	2023/08/24	ATL SOP-00205	SM 24 2310B m
Alkalinity	8	N/A	2023/08/18	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	8	N/A	2023/08/18	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	8	N/A	2023/08/18	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	8	N/A	2023/08/18	CAM SOP-00414	SM 23 2510 m
Petroleum Hydro. CCME F1 & BTEX in Water	1	N/A	2023/08/17	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (3)	2	2023/08/19	2023/08/19	CAM SOP-00316	CCME PHC-CWS m
Fluoride	8	2023/08/17	2023/08/18	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	8	N/A	2023/08/22	CAM SOP 00102/00408/00447	SM 2340 B
Dissolved Mercury in Water by CVAA	5	2023/08/18	2023/08/21	CAM SOP-00453	EPA 7470A m
Mercury in Water by CVAA	1	2023/08/24	2023/08/25	CAM SOP-00453	EPA 7470A m
Mercury in Water by CVAA	4	2023/08/25	2023/08/25	CAM SOP-00453	EPA 7470A m
Dissolved Mercury (low level)	3	2023/08/17	2023/08/21	CAM SOP-00453	EPA 7470 m
Mercury (low level)	3	2023/08/17	2023/08/21	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	8	2023/08/18	2023/08/21	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	1	N/A	2023/08/21	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS (low level)	7	N/A	2023/08/22	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	8	N/A	2023/08/22	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	8	2023/08/18	2023/08/21	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	8	N/A	2023/08/22	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	8	2023/08/21	2023/08/21	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	8	2023/08/20	2023/08/22	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	8	N/A	2023/08/21	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (4)	8	N/A	2023/08/18	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	8	2023/08/17	2023/08/18	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (5)	8	N/A	2023/08/16		Field pH Meter
Sulphate by Automated Turbidimetry	8	N/A	2023/08/18	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	8	2023/08/18	2023/08/21	CAM SOP-00428	SM 23 2540C m
Field Temperature (5)	8	N/A	2023/08/16		Field Thermometer
Total Kjeldahl Nitrogen in Water	8	2023/08/17	2023/08/18	CAM SOP-00938	OMOE E3516 m

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: GROUNDWATER SAMPLING PROGRAM
Your C.O.C. #: 748672

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/28
Report #: R7785341
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3O7544
Received: 2023/08/14, 13:20

Sample Matrix: Water
Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Suspended Solids	2	2023/08/18	2023/08/18	CAM SOP-00428	SM 23 2540D m
Low Level Total Suspended Solids	6	2023/08/17	2023/08/18	CAM SOP-00428	SM 23 2540D m
Turbidity	7	N/A	2023/08/17	CAM SOP-00417	SM 23 2130 B m
Turbidity	1	N/A	2023/08/18	CAM SOP-00417	SM 23 2130 B m
Volatile Organic Compounds and F1 PHCs	1	N/A	2023/08/21	CAM SOP-00230	EPA 8260C m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following “Alberta Environment’s Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003”. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
(4) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(5) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O7544
Report Date: 2023/08/28

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: JL

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WRX366		WRX367			WRX367		
Sampling Date		2023/08/10 09:56		2023/08/10 12:18			2023/08/10 12:18		
COC Number		748672		748672			748672		
	UNITS	Pond M1	RDL	MWS-14-03-OB1	RDL	QC Batch	MWS-14-03-OB1 Lab-Dup	RDL	QC Batch
Calculated Parameters									
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	430	1.0	170	1.0	8859121			
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.5	1.0	1.9	1.0	8859121			
Hardness (CaCO3)	mg/L	490	1.0	110	1.0	8859021			
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	<1.0	1.0	8859121			
Field Measurements									
Field Temperature	Celsius	13.8	N/A	9.5	N/A	ONSITE			
Field Measured pH	pH	6.95		8.11		ONSITE			
Inorganics									
Acidity	mg/L	31	5.0	<5.0	5.0	8874040			
Total Ammonia-N	mg/L	0.16	0.050	0.19	0.050	8859975			
Conductivity	mS/cm	0.882	0.001	0.313	0.001	8860835			
Free Cyanide (CN)	ug/L	2.8 (1)	2.0	3.7 (1)	2.0	8870435			
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050 (2)	0.00050	<0.00050 (2)	0.00050	8870434	<0.00050	0.00050	8870434
Total Dissolved Solids	mg/L	485	10	165	10	8861171	165	10	8861171
Fluoride (F-)	mg/L	0.13	0.10	0.59	0.10	8860828			
Total Kjeldahl Nitrogen (TKN)	mg/L	0.38	0.10	0.28	0.10	8860117			
pH	pH	7.56		8.07		8860816			
Total Phosphorus (P)	mg/L	0.033	0.0010	0.041	0.0010	8872240			
Total Suspended Solids	mg/L	68	1	52	3	8859313			
Dissolved Sulphate (SO4)	mg/L	7.0	1.0	<1.0	1.0	8860875			
Turbidity	NTU	1.8	0.1	440	0.1	8860492			
Alkalinity (Total as CaCO3)	mg/L	430	1.0	170	1.0	8860827			
Dissolved Chloride (Cl-)	mg/L	33	1.0	2.9	1.0	8860863			
Nitrite (N)	mg/L	0.013	0.010	<0.010	0.010	8860514			
Nitrate (N)	mg/L	0.39	0.10	<0.10	0.10	8860514			
Nitrate + Nitrite (N)	mg/L	0.41	0.10	<0.10	0.10	8860514			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com
Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O7544
Report Date: 2023/08/28

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: JL

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WRX368			WRX368		
Sampling Date		2023/08/10 13:53			2023/08/10 13:53		
COC Number		748672			748672		
	UNITS	MWS-14-03-OB2	RDL	QC Batch	MWS-14-03-OB2 Lab-Dup	RDL	QC Batch
Calculated Parameters							
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	260	1.0	8859121			
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.9	1.0	8859121			
Hardness (CaCO3)	mg/L	230	1.0	8859021			
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8859121			
Field Measurements							
Field Temperature	Celsius	8.92	N/A	ONSITE			
Field Measured pH	pH	7.51		ONSITE			
Inorganics							
Acidity	mg/L	6.4	5.0	8874040			
Total Ammonia-N	mg/L	0.23	0.050	8859975			
Conductivity	mS/cm	0.480	0.001	8860835			
Free Cyanide (CN)	ug/L	3.3 (1)	2.0	8870435			
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050 (2)	0.00050	8870434			
Total Dissolved Solids	mg/L	275	10	8861171			
Fluoride (F-)	mg/L	0.47	0.10	8860828			
Total Kjeldahl Nitrogen (TKN)	mg/L	0.25	0.10	8860117			
pH	pH	7.88		8860816			
Total Phosphorus (P)	mg/L	0.20	0.0010	8872240			
Total Suspended Solids	mg/L	260	5	8859313			
Dissolved Sulphate (SO4)	mg/L	<1.0	1.0	8860875			
Turbidity	NTU	110	0.1	8860492			
Alkalinity (Total as CaCO3)	mg/L	270	1.0	8860827			
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	8860863			
Nitrite (N)	mg/L	<0.010	0.010	8860514	<0.010	0.010	8860514
Nitrate (N)	mg/L	<0.10	0.10	8860514	<0.10	0.10	8860514

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O7544
Report Date: 2023/08/28

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: JL

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WRX368			WRX368		
Sampling Date		2023/08/10 13:53			2023/08/10 13:53		
COC Number		748672			748672		
	UNITS	**MWS-14-03-OB2**	**RDL**	**QC Batch**	**MWS-14-03-OB2 Lab-Dup**	**RDL**	**QC Batch**
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8860514	<0.10	0.10	8860514

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O7544
Report Date: 2023/08/28

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: JL

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WRX369			WRX370			WRX371		
Sampling Date		2023/08/10 13:46			2023/08/10 14:21			2023/08/10 14:50		
COC Number		748672			748672			748672		
	UNITS	MWS14-06	RDL	QC Batch	MW23-OB-21	RDL	QC Batch	MW22-OB-21	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	290	1.0	8859121	260	1.0	8859121	280	1.0	8859121
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8859121	1.5	1.0	8859121	2.3	1.0	8859121
Hardness (CaCO3)	mg/L	510	1.0	8859021	260	1.0	8859021	290	1.0	8859021
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8859121	<1.0	1.0	8859121	<1.0	1.0	8859121
Field Measurements										
Field Temperature	Celsius	11.7	N/A	ONSITE	14.5	N/A	ONSITE	13.5	N/A	ONSITE
Field Measured pH	pH	7.05		ONSITE	7.41		ONSITE	7.52		ONSITE
Inorganics										
Acidity	mg/L	20	5.0	8874040	8.2	5.0	8874040	6.4	5.0	8874040
Total Ammonia-N	mg/L	0.057	0.050	8859975	0.14	0.050	8859975	0.23	0.050	8859975
Conductivity	mS/cm	1.06	0.001	8860835	0.490	0.001	8860835	0.518	0.001	8860835
Free Cyanide (CN)	ug/L	2.3 (1)	2.0	8870435	2.3 (1)	2.0	8870435	2.8 (1)	2.0	8870435
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050 (2)	0.00050	8870434	<0.00050 (2)	0.00050	8870434	<0.00050 (2)	0.00050	8870434
Total Dissolved Solids	mg/L	685	10	8861171	285	10	8861171	305	10	8861171
Fluoride (F-)	mg/L	0.11	0.10	8860828	0.12	0.10	8860828	0.54	0.10	8860828
Total Kjeldahl Nitrogen (TKN)	mg/L	0.27	0.10	8860117	0.32	0.10	8860117	0.38	0.10	8860117
pH	pH	7.53		8860816	7.78		8860816	7.94		8860816
Total Phosphorus (P)	mg/L	0.053	0.0010	8872240	0.068	0.0010	8872240	0.41	0.0050	8872240
Total Suspended Solids	mg/L	620	5	8859313	55	1	8859313	4100	5	8859313
Dissolved Sulphate (SO4)	mg/L	150	1.0	8860875	5.8	1.0	8860875	<1.0	1.0	8860875
Turbidity	NTU	180	0.1	8860492	130	0.1	8860492	8.4	0.1	8857999
Alkalinity (Total as CaCO3)	mg/L	290	1.0	8860827	260	1.0	8860827	290	1.0	8860827
Dissolved Chloride (Cl-)	mg/L	87	1.0	8860863	1.2	1.0	8860863	<1.0	1.0	8860863
Nitrite (N)	mg/L	<0.010	0.010	8860529	<0.010	0.010	8860514	<0.010	0.010	8860514
Nitrate (N)	mg/L	<0.10	0.10	8860529	<0.10	0.10	8860514	<0.10	0.10	8860514
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8860529	<0.10	0.10	8860514	<0.10	0.10	8860514

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O7544
Report Date: 2023/08/28

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: JL

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WRX372			WRX373		
Sampling Date		2023/08/10 12:20			2023/08/10 13:53		
COC Number		748672			748672		
	UNITS	MW01-OB2-18	RDL	QC Batch	MW01-OB1-18	RDL	QC Batch
Calculated Parameters							
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	450	1.0	8859121	540	1.0	8859121
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.6	1.0	8859121	2.6	1.0	8859121
Hardness (CaCO3)	mg/L	1500	1.0	8859021	1600	1.0	8859021
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8859121	<1.0	1.0	8859121
Field Measurements							
Field Temperature	Celsius	14.7	N/A	ONSITE	12.8	N/A	ONSITE
Field Measured pH	pH	7.12		ONSITE	6.93		ONSITE
Inorganics							
Acidity	mg/L	35	5.0	8874040	50	5.0	8874040
Total Ammonia-N	mg/L	0.29	0.050	8859975	1.2	0.050	8859975
Conductivity	mS/cm	2.78	0.001	8860835	1.95	0.001	8860835
Free Cyanide (CN)	ug/L	3.0 (1)	2.0	8870435	<2.0 (1)	2.0	8870435
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.00241 (2)	0.00050	8870434	0.00172	0.00050	8870434
Total Dissolved Solids	mg/L	2470	10	8862207	1590	10	8861171
Fluoride (F-)	mg/L	0.26	0.10	8860828	<0.10	0.10	8860828
Total Kjeldahl Nitrogen (TKN)	mg/L	0.95	0.10	8860117	1.2	0.10	8860117
pH	pH	7.58		8860816	7.70		8860816
Total Phosphorus (P)	mg/L	0.83	0.010	8872240	4.1	0.020	8872240
Total Suspended Solids	mg/L	61000	100	8859290	18000	100	8859290
Dissolved Sulphate (SO4)	mg/L	1300	5.0	8860875	710	5.0	8860875
Turbidity	NTU	3300	0.5	8860492	2100	0.1	8860492
Alkalinity (Total as CaCO3)	mg/L	460	1.0	8860827	540	1.0	8860827
Dissolved Chloride (Cl-)	mg/L	2.7	1.0	8860863	1.6	1.0	8860863
Nitrite (N)	mg/L	<0.010	0.010	8860514	0.016	0.010	8860529
Nitrate (N)	mg/L	1.12	0.10	8860514	0.35	0.10	8860529
Nitrate + Nitrite (N)	mg/L	1.12	0.10	8860514	0.37	0.10	8860529

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRX366			WRX366			WRX367		
Sampling Date		2023/08/10 09:56			2023/08/10 09:56			2023/08/10 12:18		
COC Number		748672			748672			748672		
	UNITS	Pond M1	RDL	QC Batch	Pond M1 Lab-Dup	RDL	QC Batch	MWS-14-03-OB1	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0045	0.0005	8867209				0.0045	0.0005	8867209
. Aluminum (Al)	mg/L	0.0676	0.0005	8867325				0.273	0.0005	8867325
Dissolved Antimony (Sb)	mg/L	0.0002	0.0001	8867209				0.0001	0.0001	8867209
. Antimony (Sb)	mg/L	0.0001	0.0001	8867325				<0.0001	0.0001	8867325
Dissolved Arsenic (As)	mg/L	0.0067	0.0001	8867209				0.0004	0.0001	8867209
. Arsenic (As)	mg/L	0.0137	0.0001	8867325				0.0004	0.0001	8867325
Dissolved Barium (Ba)	mg/L	0.0425	0.0002	8867209				0.0245	0.0002	8867209
. Barium (Ba)	mg/L	0.0413	0.0002	8867325				0.0278	0.0002	8867325
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8867209				<0.00005	0.00005	8867209
. Beryllium (Be)	mg/L	<0.00005	0.00005	8867325				<0.00005	0.00005	8867325
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8867209				<0.0001	0.0001	8867209
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8867325				<0.0001	0.0001	8867325
Dissolved Boron (B)	mg/L	0.012	0.001	8867209				0.027	0.001	8867209
. Boron (B)	mg/L	0.011	0.001	8867325				0.027	0.001	8867325
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8867209				<0.00001	0.00001	8867209
. Cadmium (Cd)	mg/L	0.000010	0.000005	8867325				0.000005	0.000005	8867325
Dissolved Calcium (Ca)	mg/L	151	0.1	8867209				23.6	0.02	8867209
. Calcium (Ca)	mg/L	142	0.1	8867325				28.7	0.02	8867325
Dissolved Cesium (Cs)	mg/L	0.00012	0.00002	8867209				<0.00002	0.00002	8867209
. Cesium (Cs)	mg/L	0.00011	0.00002	8867325				0.00004	0.00002	8867325
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8867209				<0.0005	0.0005	8867209
. Chromium (Cr)	mg/L	<0.0005	0.0005	8867325				0.0009	0.0005	8867325
Dissolved Cobalt (Co)	mg/L	0.00336	0.00005	8867209				0.00016	0.00005	8867209
. Cobalt (Co)	mg/L	0.00377	0.00005	8867325				0.00039	0.00005	8867325
Dissolved Copper (Cu)	mg/L	0.0007	0.0001	8867209				0.0004	0.0001	8867209
. Copper (Cu)	mg/L	0.0018	0.0001	8867325				0.0012	0.0001	8867325
Dissolved Iron (Fe)	mg/L	0.491	0.005	8867209				0.312	0.005	8867209
. Iron (Fe)	mg/L	1.54	0.005	8867325				1.18	0.005	8867325
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8867209				<0.00005	0.00005	8867209

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRX366			WRX366			WRX367		
Sampling Date		2023/08/10 09:56			2023/08/10 09:56			2023/08/10 12:18		
COC Number		748672			748672			748672		
	UNITS	Pond M1	RDL	QC Batch	Pond M1 Lab-Dup	RDL	QC Batch	MWS-14-03-OB1	RDL	QC Batch
. Lead (Pb)	mg/L	0.00011	0.00005	8867325				0.00048	0.00005	8867325
Dissolved Lithium (Li)	mg/L	0.0016	0.0005	8867209				0.0044	0.0005	8867209
. Lithium (Li)	mg/L	0.0017	0.0005	8867325				0.0049	0.0005	8867325
Dissolved Magnesium (Mg)	mg/L	26.8	0.005	8867209				13.5	0.005	8867209
. Magnesium (Mg)	mg/L	26.6	0.005	8867325				14.9	0.005	8867325
Dissolved Manganese (Mn)	mg/L	0.585	0.0002	8867209				0.0533	0.0002	8867209
. Manganese (Mn)	mg/L	0.857	0.0002	8867325				0.0539	0.0002	8867325
Mercury (Hg)	mg/L							<0.00010	0.00010	8877136
Mercury (Hg)	ug/L	<0.01	0.01	8861627						
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8860593				<0.10	0.10	8861459
Dissolved Molybdenum (Mo)	mg/L	0.00113	0.00005	8867209				0.0294	0.00005	8867209
. Molybdenum (Mo)	mg/L	0.00092	0.00005	8867325				0.0164	0.00005	8867325
Dissolved Nickel (Ni)	mg/L	0.0045	0.0001	8867209				0.0004	0.0001	8867209
. Nickel (Ni)	mg/L	0.0043	0.0001	8867325				0.0009	0.0001	8867325
Dissolved Phosphorus (P)	mg/L	<0.005	0.005	8867209				<0.005	0.005	8867209
. Phosphorus (P)	mg/L	0.027	0.005	8867325				0.041	0.005	8867325
Dissolved Potassium (K)	mg/L	4.63	0.02	8867209				2.13	0.02	8867209
. Potassium (K)	mg/L	4.02	0.02	8867325				2.06	0.02	8867325
Dissolved Rubidium (Rb)	mg/L	0.00354	0.00002	8867209				0.00120	0.00002	8867209
. Rubidium (Rb)	mg/L	0.00358	0.00002	8867325				0.00134	0.00002	8867325
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8867209				<0.0002	0.0002	8867209
. Selenium (Se)	mg/L	0.00007	0.00005	8867325				<0.00005	0.00005	8867325
Dissolved Silicon (Si)	mg/L	7.40	0.025	8867209				2.29	0.005	8867209
. Silicon (Si)	mg/L	7.24	0.025	8867325				2.91	0.005	8867325
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8867209				<0.00001	0.00001	8867209
. Silver (Ag)	mg/L	<0.00001	0.00001	8867325				<0.00001	0.00001	8867325
Dissolved Sodium (Na)	mg/L	15.5	0.01	8867209				30.6	0.01	8867209
. Sodium (Na)	mg/L	14.1	0.01	8867325				29.5	0.01	8867325
Dissolved Strontium (Sr)	mg/L	0.241	0.0001	8867209				0.155	0.0001	8867209
. Strontium (Sr)	mg/L	0.233	0.0001	8867325				0.163	0.0001	8867325

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRX366			WRX366			WRX367		
Sampling Date		2023/08/10 09:56			2023/08/10 09:56			2023/08/10 12:18		
COC Number		748672			748672			748672		
	UNITS	Pond M1	RDL	QC Batch	Pond M1 Lab-Dup	RDL	QC Batch	MWS-14-03-OB1	RDL	QC Batch
Dissolved Sulphur (S)	mg/L	2.3	0.5	8861649				<0.5	0.5	8861649
Total Sulphur (S)	mg/L	3.0	0.5	8858697	2.9	0.5	8858697	<0.5	0.5	8858697
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8867209				<0.0001	0.0001	8867209
. Tellurium (Te)	mg/L	<0.0001	0.0001	8867325				<0.0001	0.0001	8867325
Dissolved Thallium (Tl)	mg/L	0.000033	0.000005	8867209				<0.000005	0.000005	8867209
. Thallium (Tl)	mg/L	0.000054	0.000005	8867325				<0.000005	0.000005	8867325
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8867209				<0.0002	0.0002	8867209
. Thorium (Th)	mg/L	<0.0002	0.0002	8867325				0.0002	0.0002	8867325
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8867209				0.0001	0.0001	8867209
. Tin (Sn)	mg/L	<0.0001	0.0001	8867325				0.0001	0.0001	8867325
Dissolved Titanium (Ti)	mg/L	0.0007	0.0005	8867209				<0.0005	0.0005	8867209
. Titanium (Ti)	mg/L	0.0047	0.0005	8867325				0.0169	0.0005	8867325
Dissolved Tungsten (W)	mg/L	<0.0001	0.0001	8867209				0.0063	0.0001	8867209
. Tungsten (W)	mg/L	<0.0001	0.0001	8867325				0.0013	0.0001	8867325
Dissolved Uranium (U)	mg/L	0.00156	0.00001	8867209				0.00007	0.00001	8867209
. Uranium (U)	mg/L	0.00144	0.00001	8867325				0.00017	0.00001	8867325
Dissolved Vanadium (V)	mg/L	0.00036	0.00005	8867209				<0.00005	0.00005	8867209
. Vanadium (V)	mg/L	0.00076	0.00005	8867325				0.00059	0.00005	8867325
Dissolved Zinc (Zn)	mg/L	0.0012	0.0005	8867209				0.0010	0.0005	8867209
. Zinc (Zn)	mg/L	0.0044	0.0005	8867325				0.0029	0.0005	8867325
Dissolved Zirconium (Zr)	mg/L	0.0007	0.0001	8867209				<0.0001	0.0001	8867209
. Zirconium (Zr)	mg/L	0.0009	0.0001	8867325				0.0004	0.0001	8867325

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRX367			WRX368		
Sampling Date		2023/08/10 12:18			2023/08/10 13:53		
COC Number		748672			748672		
	UNITS	MWS-14-03-OB1 Lab-Dup	RDL	QC Batch	MWS-14-03-OB2	RDL	QC Batch
Metals							
Dissolved Aluminum (Al)	mg/L				0.0158	0.0005	8867209
. Aluminum (Al)	mg/L	0.313	0.0005	8867325	0.889	0.0005	8867325
Dissolved Antimony (Sb)	mg/L				<0.0001	0.0001	8867209
. Antimony (Sb)	mg/L	<0.0001	0.0001	8867325	<0.0001	0.0001	8867325
Dissolved Arsenic (As)	mg/L				0.0056	0.0001	8867209
. Arsenic (As)	mg/L	0.0004	0.0001	8867325	0.0075	0.0001	8867325
Dissolved Barium (Ba)	mg/L				0.0265	0.0002	8867209
. Barium (Ba)	mg/L	0.0280	0.0002	8867325	0.0341	0.0002	8867325
Dissolved Beryllium (Be)	mg/L				<0.00005	0.00005	8867209
. Beryllium (Be)	mg/L	<0.00005	0.00005	8867325	0.00009	0.00005	8867325
Dissolved Bismuth (Bi)	mg/L				<0.0001	0.0001	8867209
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8867325	<0.0001	0.0001	8867325
Dissolved Boron (B)	mg/L				0.018	0.001	8867209
. Boron (B)	mg/L	0.027	0.001	8867325	0.021	0.001	8867325
Dissolved Cadmium (Cd)	mg/L				<0.00001	0.00001	8867209
. Cadmium (Cd)	mg/L	0.000006	0.000005	8867325	0.000031	0.000005	8867325
Dissolved Calcium (Ca)	mg/L				58.7	0.1	8867209
. Calcium (Ca)	mg/L	28.8	0.02	8867325	91.4	0.1	8867325
Dissolved Cesium (Cs)	mg/L				<0.00002	0.00002	8867209
. Cesium (Cs)	mg/L	0.00004	0.00002	8867325	0.00014	0.00002	8867325
Dissolved Chromium (Cr)	mg/L				<0.0005	0.0005	8867209
. Chromium (Cr)	mg/L	0.0009	0.0005	8867325	0.0029	0.0005	8867325
Dissolved Cobalt (Co)	mg/L				0.00010	0.00005	8867209
. Cobalt (Co)	mg/L	0.00041	0.00005	8867325	0.00110	0.00005	8867325
Dissolved Copper (Cu)	mg/L				0.0042	0.0001	8867209
. Copper (Cu)	mg/L	0.0013	0.0001	8867325	0.0027	0.0001	8867325
Dissolved Iron (Fe)	mg/L				0.709	0.005	8867209
. Iron (Fe)	mg/L	1.23	0.005	8867325	2.20	0.005	8867325
Dissolved Lead (Pb)	mg/L				<0.00005	0.00005	8867209

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRX367			WRX368		
Sampling Date		2023/08/10 12:18			2023/08/10 13:53		
COC Number		748672			748672		
	UNITS	MWS-14-03-OB1 Lab-Dup	RDL	QC Batch	MWS-14-03-OB2	RDL	QC Batch
. Lead (Pb)	mg/L	0.00048	0.00005	8867325	0.00185	0.00005	8867325
Dissolved Lithium (Li)	mg/L				0.0074	0.0005	8867209
. Lithium (Li)	mg/L	0.0047	0.0005	8867325	0.0100	0.0005	8867325
Dissolved Magnesium (Mg)	mg/L				19.6	0.005	8867209
. Magnesium (Mg)	mg/L	15.1	0.005	8867325	27.1	0.005	8867325
Dissolved Manganese (Mn)	mg/L				0.0689	0.0002	8867209
. Manganese (Mn)	mg/L	0.0542	0.0002	8867325	0.150	0.0002	8867325
Mercury (Hg)	mg/L				<0.00010	0.00010	8876873
Dissolved Mercury (Hg)	ug/L	<0.10	0.10	8861459	<0.10	0.10	8861459
Dissolved Molybdenum (Mo)	mg/L				0.00269	0.00005	8867209
. Molybdenum (Mo)	mg/L	0.0171	0.00005	8867325	0.00254	0.00005	8867325
Dissolved Nickel (Ni)	mg/L				0.0005	0.0001	8867209
. Nickel (Ni)	mg/L	0.0009	0.0001	8867325	0.0034	0.0001	8867325
Dissolved Phosphorus (P)	mg/L				0.045	0.005	8867209
. Phosphorus (P)	mg/L	0.041	0.005	8867325	0.226	0.005	8867325
Dissolved Potassium (K)	mg/L				1.45	0.02	8867209
. Potassium (K)	mg/L	2.08	0.02	8867325	1.71	0.02	8867325
Dissolved Rubidium (Rb)	mg/L				0.00102	0.00002	8867209
. Rubidium (Rb)	mg/L	0.00134	0.00002	8867325	0.00305	0.00002	8867325
Dissolved Selenium (Se)	mg/L				<0.0002	0.0002	8867209
. Selenium (Se)	mg/L	<0.00005	0.00005	8867325	<0.00005	0.00005	8867325
Dissolved Silicon (Si)	mg/L				8.49	0.025	8867209
. Silicon (Si)	mg/L	3.08	0.005	8867325	9.53	0.025	8867325
Dissolved Silver (Ag)	mg/L				<0.00001	0.00001	8867209
. Silver (Ag)	mg/L	<0.00001	0.00001	8867325	<0.00001	0.00001	8867325
Dissolved Sodium (Na)	mg/L				24.2	0.01	8867209
. Sodium (Na)	mg/L	29.8	0.01	8867325	41.9	0.01	8867325
Dissolved Strontium (Sr)	mg/L				0.205	0.0001	8867209
. Strontium (Sr)	mg/L	0.164	0.0001	8867325	0.203	0.0001	8867325
Dissolved Sulphur (S)	mg/L				0.6	0.5	8861649

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRX367			WRX368		
Sampling Date		2023/08/10 12:18			2023/08/10 13:53		
COC Number		748672			748672		
	UNITS	MWS-14-03-OB1 Lab-Dup	RDL	QC Batch	MWS-14-03-OB2	RDL	QC Batch
Total Sulphur (S)	mg/L				0.8	0.5	8858697
Dissolved Tellurium (Te)	mg/L				<0.0001	0.0001	8867209
. Tellurium (Te)	mg/L	<0.0001	0.0001	8867325	<0.0001	0.0001	8867325
Dissolved Thallium (Tl)	mg/L				<0.000005	0.000005	8867209
. Thallium (Tl)	mg/L	<0.000005	0.000005	8867325	0.000025	0.000005	8867325
Dissolved Thorium (Th)	mg/L				<0.0002	0.0002	8867209
. Thorium (Th)	mg/L	0.0003	0.0002	8867325	0.0012	0.0002	8867325
Dissolved Tin (Sn)	mg/L				<0.0001	0.0001	8867209
. Tin (Sn)	mg/L	0.0001	0.0001	8867325	<0.0001	0.0001	8867325
Dissolved Titanium (Ti)	mg/L				0.0015	0.0005	8867209
. Titanium (Ti)	mg/L	0.0176	0.0005	8867325	0.0600	0.0005	8867325
Dissolved Tungsten (W)	mg/L				0.0002	0.0001	8867209
. Tungsten (W)	mg/L	0.0015	0.0001	8867325	<0.0001	0.0001	8867325
Dissolved Uranium (U)	mg/L				0.00027	0.00001	8867209
. Uranium (U)	mg/L	0.00018	0.00001	8867325	0.00110	0.00001	8867325
Dissolved Vanadium (V)	mg/L				0.00009	0.00005	8867209
. Vanadium (V)	mg/L	0.00062	0.00005	8867325	0.00267	0.00005	8867325
Dissolved Zinc (Zn)	mg/L				0.0018	0.0005	8867209
. Zinc (Zn)	mg/L	0.0029	0.0005	8867325	0.0069	0.0005	8867325
Dissolved Zirconium (Zr)	mg/L				<0.0001	0.0001	8867209
. Zirconium (Zr)	mg/L	0.0005	0.0001	8867325	0.0005	0.0001	8867325

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRX369			WRX370		WRX371		
Sampling Date		2023/08/10 13:46			2023/08/10 14:21		2023/08/10 14:50		
COC Number		748672			748672		748672		
	UNITS	MWS14-06	RDL	QC Batch	MW23-OB-21	RDL	MW22-OB-21	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	mg/L	0.0023	0.0005	8867209	0.0035	0.0005	0.0045	0.0005	8867209
. Aluminum (Al)	mg/L	0.684	0.0025	8867325	0.813	0.0005	2.18	0.0025	8867325
Dissolved Antimony (Sb)	mg/L	0.0003	0.0001	8867209	<0.0001	0.0001	<0.0001	0.0001	8867209
. Antimony (Sb)	mg/L	<0.0005	0.0005	8867325	<0.0001	0.0001	<0.0005	0.0005	8867325
Dissolved Arsenic (As)	mg/L	0.0211	0.0001	8867209	0.0022	0.0001	0.0014	0.0001	8867209
. Arsenic (As)	mg/L	0.0203	0.0005	8867325	0.0033	0.0001	0.0026	0.0005	8867325
Dissolved Barium (Ba)	mg/L	0.0780	0.0002	8867209	0.0317	0.0002	0.0492	0.0002	8867209
. Barium (Ba)	mg/L	0.091	0.001	8867325	0.0408	0.0002	0.071	0.001	8867325
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8867209	<0.00005	0.00005	<0.00005	0.00005	8867209
. Beryllium (Be)	mg/L	<0.00025	0.00025	8867325	0.00007	0.00005	<0.00025	0.00025	8867325
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8867209	<0.0001	0.0001	<0.0001	0.0001	8867209
. Bismuth (Bi)	mg/L	<0.0005	0.0005	8867325	<0.0001	0.0001	<0.0005	0.0005	8867325
Dissolved Boron (B)	mg/L	0.047	0.001	8867209	0.010	0.001	0.025	0.001	8867209
. Boron (B)	mg/L	0.047	0.005	8867325	0.009	0.001	0.032	0.005	8867325
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8867209	<0.00001	0.00001	<0.00001	0.00001	8867209
. Cadmium (Cd)	mg/L	0.000053	0.000025	8867325	0.000020	0.000005	0.000053	0.000025	8867325
Dissolved Calcium (Ca)	mg/L	156	0.1	8867209	78.3	0.1	68.2	0.1	8867209
. Calcium (Ca)	mg/L	154	0.1	8867325	82.0	0.1	193	0.1	8867325
Dissolved Cesium (Cs)	mg/L	0.00019	0.00002	8867209	0.00004	0.00002	<0.00002	0.00002	8867209
. Cesium (Cs)	mg/L	0.0004	0.0001	8867325	0.00011	0.00002	0.0003	0.0001	8867325
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8867209	<0.0005	0.0005	<0.0005	0.0005	8867209
. Chromium (Cr)	mg/L	<0.0025	0.0025	8867325	0.0033	0.0005	0.0091	0.0025	8867325
Dissolved Cobalt (Co)	mg/L	0.00733	0.00005	8867209	0.00056	0.00005	0.00017	0.00005	8867209
. Cobalt (Co)	mg/L	0.00941	0.00025	8867325	0.00139	0.00005	0.00286	0.00025	8867325
Dissolved Copper (Cu)	mg/L	0.0012	0.0001	8867209	0.0006	0.0001	0.0004	0.0001	8867209
. Copper (Cu)	mg/L	0.0127	0.0005	8867325	0.0030	0.0001	0.0049	0.0005	8867325
Dissolved Iron (Fe)	mg/L	1.16	0.005	8867209	0.946	0.005	2.37	0.005	8867209
. Iron (Fe)	mg/L	3.56	0.025	8867325	3.47	0.005	6.85	0.025	8867325
Dissolved Lead (Pb)	mg/L	0.00014	0.00005	8867209	<0.00005	0.00005	<0.00005	0.00005	8867209
. Lead (Pb)	mg/L	0.00454	0.00025	8867325	0.00126	0.00005	0.00266	0.00025	8867325

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRX369			WRX370		WRX371		
Sampling Date		2023/08/10 13:46			2023/08/10 14:21		2023/08/10 14:50		
COC Number		748672			748672		748672		
	UNITS	MWS14-06	RDL	QC Batch	MW23-OB-21	RDL	MW22-OB-21	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0035	0.0005	8867209	0.0023	0.0005	0.0131	0.0005	8867209
. Lithium (Li)	mg/L	0.0042	0.0025	8867325	0.0028	0.0005	0.0171	0.0025	8867325
Dissolved Magnesium (Mg)	mg/L	28.8	0.005	8867209	16.3	0.005	28.6	0.005	8867209
. Magnesium (Mg)	mg/L	28.7	0.025	8867325	18.3	0.005	63.4	0.025	8867325
Dissolved Manganese (Mn)	mg/L	1.44	0.001	8867209	0.427	0.0002	0.0597	0.0002	8867209
. Manganese (Mn)	mg/L	1.47	0.001	8867325	0.479	0.0002	0.293	0.001	8867325
Mercury (Hg)	mg/L	<0.00010	0.00010	8877136					
Mercury (Hg)	ug/L				<0.01	0.01	<0.01	0.01	8861627
Dissolved Mercury (Hg)	ug/L	<0.10	0.10	8861459	<0.01	0.01	<0.01	0.01	8860593
Dissolved Molybdenum (Mo)	mg/L	0.00237	0.00005	8867209	0.00154	0.00005	0.0107	0.00005	8867209
. Molybdenum (Mo)	mg/L	0.00114	0.00025	8867325	0.00072	0.00005	0.00620	0.00025	8867325
Dissolved Nickel (Ni)	mg/L	0.0032	0.0001	8867209	0.0011	0.0001	0.0011	0.0001	8867209
. Nickel (Ni)	mg/L	0.0076	0.0005	8867325	0.0039	0.0001	0.0068	0.0005	8867325
Dissolved Phosphorus (P)	mg/L	<0.005	0.005	8867209	<0.005	0.005	0.013	0.005	8867209
. Phosphorus (P)	mg/L	0.108	0.025	8867325	0.069	0.005	0.492	0.025	8867325
Dissolved Potassium (K)	mg/L	3.36	0.02	8867209	0.86	0.02	5.09	0.02	8867209
. Potassium (K)	mg/L	3.4	0.1	8867325	0.93	0.02	5.5	0.1	8867325
Dissolved Rubidium (Rb)	mg/L	0.00360	0.00002	8867209	0.00131	0.00002	0.00152	0.00002	8867209
. Rubidium (Rb)	mg/L	0.0050	0.0001	8867325	0.00183	0.00002	0.0059	0.0001	8867325
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8867209	<0.0002	0.0002	<0.0002	0.0002	8867209
. Selenium (Se)	mg/L	<0.00025	0.00025	8867325	0.00019	0.00005	<0.00025	0.00025	8867325
Dissolved Silicon (Si)	mg/L	6.25	0.025	8867209	6.10	0.025	8.73	0.025	8867209
. Silicon (Si)	mg/L	7.24	0.025	8867325	6.72	0.025	11.6	0.025	8867325
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8867209	<0.00001	0.00001	<0.00001	0.00001	8867209
. Silver (Ag)	mg/L	<0.00005	0.00005	8867325	<0.00001	0.00001	<0.00005	0.00005	8867325
Dissolved Sodium (Na)	mg/L	36.2	0.01	8867209	10.1	0.01	7.52	0.01	8867209
. Sodium (Na)	mg/L	35.0	0.05	8867325	6.56	0.01	7.49	0.05	8867325
Dissolved Strontium (Sr)	mg/L	0.410	0.0001	8867209	0.171	0.0001	0.326	0.0001	8867209
. Strontium (Sr)	mg/L	0.400	0.0005	8867325	0.175	0.0001	0.376	0.0005	8867325
Dissolved Sulphur (S)	mg/L	51	0.5	8861649	2.5	0.5	<0.5	0.5	8861649
Total Sulphur (S)	mg/L	50	0.5	8858697	2.0	0.5	<0.5	0.5	8858697

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRX369			WRX370		WRX371		
Sampling Date		2023/08/10 13:46			2023/08/10 14:21		2023/08/10 14:50		
COC Number		748672			748672		748672		
	UNITS	MWS14-06	RDL	QC Batch	MW23-OB-21	RDL	MW22-OB-21	RDL	QC Batch
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8867209	<0.0001	0.0001	<0.0001	0.0001	8867209
. Tellurium (Te)	mg/L	<0.0005	0.0005	8867325	<0.0001	0.0001	<0.0005	0.0005	8867325
Dissolved Thallium (Tl)	mg/L	0.000012	0.000005	8867209	<0.000005	0.000005	<0.000005	0.000005	8867209
. Thallium (Tl)	mg/L	0.000025	0.000025	8867325	0.000029	0.000005	0.000064	0.000025	8867325
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8867209	<0.0002	0.0002	<0.0002	0.0002	8867209
. Thorium (Th)	mg/L	<0.001	0.001	8867325	<0.0002	0.0002	0.001	0.001	8867325
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8867209	<0.0001	0.0001	<0.0001	0.0001	8867209
. Tin (Sn)	mg/L	<0.0005	0.0005	8867325	0.0003	0.0001	<0.0005	0.0005	8867325
Dissolved Titanium (Ti)	mg/L	0.0005	0.0005	8867209	<0.0005	0.0005	0.0008	0.0005	8867209
. Titanium (Ti)	mg/L	0.0310	0.0025	8867325	0.0202	0.0005	0.119	0.0025	8867325
Dissolved Tungsten (W)	mg/L	0.0003	0.0001	8867209	0.0016	0.0001	0.0003	0.0001	8867209
. Tungsten (W)	mg/L	<0.0005	0.0005	8867325	0.0015	0.0001	<0.0005	0.0005	8867325
Dissolved Uranium (U)	mg/L	0.00525	0.00001	8867209	0.00064	0.00001	0.00020	0.00001	8867209
. Uranium (U)	mg/L	0.00579	0.00005	8867325	0.00074	0.00001	0.00063	0.00005	8867325
Dissolved Vanadium (V)	mg/L	0.00018	0.00005	8867209	0.00020	0.00005	0.00007	0.00005	8867209
. Vanadium (V)	mg/L	0.00176	0.00025	8867325	0.00233	0.00005	0.00700	0.00025	8867325
Dissolved Zinc (Zn)	mg/L	0.630	0.0005	8867209	0.0089	0.0005	0.0024	0.0005	8867209
. Zinc (Zn)	mg/L	1.48	0.0025	8867325	0.452	0.0005	0.158	0.0025	8867325
Dissolved Zirconium (Zr)	mg/L	0.0009	0.0001	8867209	0.0007	0.0001	0.0001	0.0001	8867209
. Zirconium (Zr)	mg/L	0.0026	0.0005	8867325	0.0016	0.0001	0.0013	0.0005	8867325

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRX371			WRX372		WRX373		
Sampling Date		2023/08/10 14:50			2023/08/10 12:20		2023/08/10 13:53		
COC Number		748672			748672		748672		
	UNITS	MW22-OB-21 Lab-Dup	RDL	QC Batch	MW01-OB2-18	RDL	MW01-OB1-18	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	mg/L				0.0009	0.0005	0.0023	0.0005	8867209
. Aluminum (Al)	mg/L				0.031	0.005	4.38	0.005	8867325
Dissolved Antimony (Sb)	mg/L				0.0003	0.0001	0.0112	0.0001	8867209
. Antimony (Sb)	mg/L				<0.001	0.001	0.001	0.001	8867325
Dissolved Arsenic (As)	mg/L				0.0630	0.0005	0.998	0.001	8867209
. Arsenic (As)	mg/L				8.87	0.01	1.88	0.005	8867325
Dissolved Barium (Ba)	mg/L				0.0175	0.0002	0.0287	0.0002	8867209
. Barium (Ba)	mg/L				0.065	0.002	0.068	0.002	8867325
Dissolved Beryllium (Be)	mg/L				<0.00005	0.00005	<0.00005	0.00005	8867209
. Beryllium (Be)	mg/L				<0.0005	0.0005	<0.0005	0.0005	8867325
Dissolved Bismuth (Bi)	mg/L				<0.0001	0.0001	<0.0001	0.0001	8867209
. Bismuth (Bi)	mg/L				<0.001	0.001	<0.001	0.001	8867325
Dissolved Boron (B)	mg/L				0.026	0.001	0.029	0.001	8867209
. Boron (B)	mg/L				0.03	0.01	0.03	0.01	8867325
Dissolved Cadmium (Cd)	mg/L				0.00003	0.00001	<0.00001	0.00001	8867209
. Cadmium (Cd)	mg/L				<0.00005	0.00005	0.00018	0.00005	8867325
Dissolved Calcium (Ca)	mg/L				282	0.2	290	0.2	8867209
. Calcium (Ca)	mg/L				290	0.2	278	0.2	8867325
Dissolved Cesium (Cs)	mg/L				0.00018	0.00002	0.00033	0.00002	8867209
. Cesium (Cs)	mg/L				0.0002	0.0002	0.0012	0.0002	8867325
Dissolved Chromium (Cr)	mg/L				<0.0005	0.0005	<0.0005	0.0005	8867209
. Chromium (Cr)	mg/L				<0.005	0.005	0.031	0.005	8867325
Dissolved Cobalt (Co)	mg/L				0.00015	0.00005	0.00014	0.00005	8867209
. Cobalt (Co)	mg/L				<0.0005	0.0005	0.0039	0.0005	8867325
Dissolved Copper (Cu)	mg/L				0.0016	0.0001	0.0005	0.0001	8867209
. Copper (Cu)	mg/L				0.001	0.001	0.074	0.001	8867325
Dissolved Iron (Fe)	mg/L				0.018	0.005	6.73	0.005	8867209
. Iron (Fe)	mg/L				162	0.25	74.3	0.05	8867325
Dissolved Lead (Pb)	mg/L				<0.00005	0.00005	0.00012	0.00005	8867209

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRX371			WRX372		WRX373		
Sampling Date		2023/08/10 14:50			2023/08/10 12:20		2023/08/10 13:53		
COC Number		748672			748672		748672		
	UNITS	MW22-OB-21 Lab-Dup	RDL	QC Batch	MW01-OB2-18	RDL	MW01-OB1-18	RDL	QC Batch
. Lead (Pb)	mg/L				<0.0005	0.0005	0.0107	0.0005	8867325
Dissolved Lithium (Li)	mg/L				0.115	0.0025	0.0125	0.0005	8867209
. Lithium (Li)	mg/L				0.116	0.005	0.015	0.005	8867325
Dissolved Magnesium (Mg)	mg/L				187	0.025	205	0.05	8867209
. Magnesium (Mg)	mg/L				181	0.05	185	0.05	8867325
Dissolved Manganese (Mn)	mg/L				0.264	0.0002	0.0769	0.0002	8867209
. Manganese (Mn)	mg/L				0.311	0.002	0.856	0.002	8867325
Mercury (Hg)	mg/L				<0.00010	0.00010	<0.0015	0.0015	8876873
Dissolved Mercury (Hg)	ug/L				<0.10	0.10	<0.10	0.10	8861459
Dissolved Molybdenum (Mo)	mg/L				0.00411	0.00005	0.00315	0.00005	8867209
. Molybdenum (Mo)	mg/L				0.0051	0.0005	0.0025	0.0005	8867325
Dissolved Nickel (Ni)	mg/L				0.0006	0.0001	0.0010	0.0001	8867209
. Nickel (Ni)	mg/L				<0.001	0.001	0.013	0.001	8867325
Dissolved Phosphorus (P)	mg/L				<0.005	0.005	<0.005	0.005	8867209
. Phosphorus (P)	mg/L				0.07	0.05	1.05	0.05	8867325
Dissolved Potassium (K)	mg/L				15.4	0.02	13.8	0.02	8867209
. Potassium (K)	mg/L				13.1	0.2	10.6	0.2	8867325
Dissolved Rubidium (Rb)	mg/L				0.0168	0.00002	0.0152	0.00002	8867209
. Rubidium (Rb)	mg/L				0.0157	0.0002	0.0157	0.0002	8867325
Dissolved Selenium (Se)	mg/L				<0.0002	0.0002	<0.0002	0.0002	8867209
. Selenium (Se)	mg/L				<0.0005	0.0005	<0.0005	0.0005	8867325
Dissolved Silicon (Si)	mg/L				9.23	0.025	11.9	0.05	8867209
. Silicon (Si)	mg/L				17.2	0.05	16.2	0.05	8867325
Dissolved Silver (Ag)	mg/L				<0.00001	0.00001	<0.00001	0.00001	8867209
. Silver (Ag)	mg/L				<0.0001	0.0001	<0.0001	0.0001	8867325
Dissolved Sodium (Na)	mg/L				191	0.05	4.65	0.01	8867209
. Sodium (Na)	mg/L				183	0.1	3.2	0.1	8867325
Dissolved Strontium (Sr)	mg/L				1.32	0.0001	1.07	0.0001	8867209
. Strontium (Sr)	mg/L				1.41	0.001	0.920	0.001	8867325
Dissolved Sulphur (S)	mg/L	<0.5	0.5	8861649	460	0.5	340	0.5	8861649

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRX371			WRX372		WRX373		
Sampling Date		2023/08/10 14:50			2023/08/10 12:20		2023/08/10 13:53		
COC Number		748672			748672		748672		
	UNITS	MW22-OB-21 Lab-Dup	RDL	QC Batch	MW01-OB2-18	RDL	MW01-OB1-18	RDL	QC Batch
Total Sulphur (S)	mg/L				440	0.5	250	0.5	8858697
Dissolved Tellurium (Te)	mg/L				<0.0001	0.0001	<0.0001	0.0001	8867209
. Tellurium (Te)	mg/L				<0.001	0.001	<0.001	0.001	8867325
Dissolved Thallium (Tl)	mg/L				<0.000005	0.000005	<0.000005	0.000005	8867209
. Thallium (Tl)	mg/L				<0.00005	0.00005	<0.00005	0.00005	8867325
Dissolved Thorium (Th)	mg/L				<0.0002	0.0002	<0.0002	0.0002	8867209
. Thorium (Th)	mg/L				<0.002	0.002	<0.002	0.002	8867325
Dissolved Tin (Sn)	mg/L				0.0004	0.0001	<0.0001	0.0001	8867209
. Tin (Sn)	mg/L				<0.001	0.001	<0.001	0.001	8867325
Dissolved Titanium (Ti)	mg/L				0.0007	0.0005	0.0009	0.0005	8867209
. Titanium (Ti)	mg/L				0.005	0.005	0.107	0.005	8867325
Dissolved Tungsten (W)	mg/L				0.0005	0.0001	0.0096	0.0001	8867209
. Tungsten (W)	mg/L				0.005	0.001	0.014	0.001	8867325
Dissolved Uranium (U)	mg/L				0.00889	0.00001	0.00225	0.00001	8867209
. Uranium (U)	mg/L				0.0103	0.0001	0.0024	0.0001	8867325
Dissolved Vanadium (V)	mg/L				<0.00005	0.00005	0.00113	0.00005	8867209
. Vanadium (V)	mg/L				0.0007	0.0005	0.0121	0.0005	8867325
Dissolved Zinc (Zn)	mg/L				0.0133	0.0005	0.0023	0.0005	8867209
. Zinc (Zn)	mg/L				0.017	0.005	0.034	0.005	8867325
Dissolved Zirconium (Zr)	mg/L				0.0003	0.0001	0.0007	0.0001	8867209
. Zirconium (Zr)	mg/L				0.004	0.001	0.002	0.001	8867325

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VOLATILE ORGANICS BY GC/MS (WATER)

Bureau Veritas ID		WRX370	WRX370		
Sampling Date		2023/08/10 14:21	2023/08/10 14:21		
COC Number		748672	748672		
	UNITS	MW23-OB-21	MW23-OB-21 Lab-Dup	RDL	QC Batch
Volatile Organics					
Benzene	ug/L	<0.17	<0.17	0.17	8861581
Chloroform	ug/L	<0.20	<0.20	0.20	8861581
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	8861581
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	8861581
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	8861581
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	0.40	8861581
Ethylbenzene	ug/L	<0.20	<0.20	0.20	8861581
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	2.0	8861581
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	8861581
Tetrachloroethylene	ug/L	<0.20	<0.20	0.20	8861581
Toluene	ug/L	<0.20	<0.20	0.20	8861581
Trichloroethylene	ug/L	<0.20	<0.20	0.20	8861581
p+m-Xylene	ug/L	<0.20	<0.20	0.20	8861581
o-Xylene	ug/L	<0.20	<0.20	0.20	8861581
Total Xylenes	ug/L	<0.20	<0.20	0.20	8861581
F1 (C6-C10)	ug/L	<25	<25	25	8861581
F1 (C6-C10) - BTEX	ug/L	<25	<25	25	8861581
Surrogate Recovery (%)					
4-Bromofluorobenzene	%	97	97		8861581
D4-1,2-Dichloroethane	%	101	100		8861581
D8-Toluene	%	93	94		8861581

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		WRX366			WRX370		
Sampling Date		2023/08/10 09:56			2023/08/10 14:21		
COC Number		748672			748672		
	UNITS	Pond M1	RDL	QC Batch	MW23-OB-21	RDL	QC Batch
BTEX & F1 Hydrocarbons							
Benzene	ug/L	<0.20	0.20	8860284			
Toluene	ug/L	0.30	0.20	8860284			
Ethylbenzene	ug/L	<0.20	0.20	8860284			
o-Xylene	ug/L	<0.20	0.20	8860284			
p+m-Xylene	ug/L	<0.40	0.40	8860284			
Total Xylenes	ug/L	<0.40	0.40	8860284			
F1 (C6-C10)	ug/L	<25	25	8860284			
F1 (C6-C10) - BTEX	ug/L	<25	25	8860284			
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	8864154	<100	100	8864154
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	8864154	<200	200	8864154
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	8864154	<200	200	8864154
Reached Baseline at C50	ug/L	Yes		8864154	Yes		8864154
Surrogate Recovery (%)							
1,4-Difluorobenzene	%	100		8860284			
4-Bromofluorobenzene	%	101		8860284			
D10-o-Xylene	%	81		8860284			
D4-1,2-Dichloroethane	%	98		8860284			
o-Terphenyl	%	97		8864154	99		8864154

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WRX366
Sample ID: Pond M1
Matrix: Water

Collected: 2023/08/10
Shipped:
Received: 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8874040	N/A	2023/08/24	Brent Boudreau
Alkalinity	AT	8860827	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/18	Automated Statchk
Chloride by Automated Colourimetry	KONE	8860863	N/A	2023/08/18	Alina Dobreanu
Conductivity	AT	8860835	N/A	2023/08/18	Nachiketa Gohil
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	8860284	N/A	2023/08/17	Abdikarim Ali
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8864154	2023/08/19	2023/08/19	Ksenia Trofimova
Fluoride	ISE	8860828	2023/08/17	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8859021	N/A	2023/08/22	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8860593	2023/08/17	2023/08/21	Gagandeep Rai
Mercury (low level)	CV/AA	8861627	2023/08/17	2023/08/21	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8861649	2023/08/18	2023/08/21	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8867209	N/A	2023/08/22	Thuy Linh Nguyen
Metals in Water by ICPMS (low level)	ICP1/MS	8867325	N/A	2023/08/22	Thuy Linh Nguyen
Total Metals Analysis by ICP	ICP	8858697	2023/08/18	2023/08/21	Suban Kanapathippllai
Cyanide (Free)	SPEC	8870435	N/A	2023/08/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8870434	2023/08/21	2023/08/21	Ming Dong
Total Phosphorus Low Level Total	KONE	8872240	2023/08/20	2023/08/22	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8859975	N/A	2023/08/21	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8860514	N/A	2023/08/18	Chandra Nandlal
pH	AT	8860816	2023/08/17	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Sattyajita Bastola
Sulphate by Automated Turbidimetry	KONE	8860875	N/A	2023/08/18	Alina Dobreanu
Total Dissolved Solids	BAL	8861171	2023/08/18	2023/08/21	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Sattyajita Bastola
Total Kjeldahl Nitrogen in Water	SKAL	8860117	2023/08/17	2023/08/18	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8859313	2023/08/17	2023/08/18	Shaneil Hall
Turbidity	AT	8860492	N/A	2023/08/17	Vidhi Khatri

Bureau Veritas ID: WRX366 Dup
Sample ID: Pond M1
Matrix: Water

Collected: 2023/08/10
Shipped:
Received: 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals Analysis by ICP	ICP	8858697	2023/08/18	2023/08/21	Suban Kanapathippllai

Bureau Veritas ID: WRX367
Sample ID: MWS-14-03-OB1
Matrix: Water

Collected: 2023/08/10
Shipped:
Received: 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8874040	N/A	2023/08/24	Brent Boudreau
Alkalinity	AT	8860827	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/18	Automated Statchk

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WRX367
Sample ID: MWS-14-03-OB1
Matrix: Water

Collected: 2023/08/10
Shipped:
Received: 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	8860863	N/A	2023/08/18	Alina Dobreanu
Conductivity	AT	8860835	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8860828	2023/08/17	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8859021	N/A	2023/08/22	Automated Statchk
Dissolved Mercury in Water by CVAA	CV/AA	8861459	2023/08/18	2023/08/21	Gagandeep Rai
Mercury in Water by CVAA	CV/AA	8877136	2023/08/25	2023/08/25	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8861649	2023/08/18	2023/08/21	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8867209	N/A	2023/08/21	Thuy Linh Nguyen
Metals in Water by ICPMS (low level)	ICP1/MS	8867325	N/A	2023/08/22	Thuy Linh Nguyen
Total Metals Analysis by ICP	ICP	8858697	2023/08/18	2023/08/21	Suban Kanapathippllai
Cyanide (Free)	SPEC	8870435	N/A	2023/08/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8870434	2023/08/21	2023/08/21	Ming Dong
Total Phosphorus Low Level Total	KONE	8872240	2023/08/20	2023/08/22	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8859975	N/A	2023/08/21	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8860514	N/A	2023/08/18	Chandra Nandlal
pH	AT	8860816	2023/08/17	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Sattyajita Bastola
Sulphate by Automated Turbidimetry	KONE	8860875	N/A	2023/08/18	Alina Dobreanu
Total Dissolved Solids	BAL	8861171	2023/08/18	2023/08/21	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Sattyajita Bastola
Total Kjeldahl Nitrogen in Water	SKAL	8860117	2023/08/17	2023/08/18	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8859313	2023/08/17	2023/08/18	Shaneil Hall
Turbidity	AT	8860492	N/A	2023/08/17	Vidhi Khatri

Bureau Veritas ID: WRX367 Dup
Sample ID: MWS-14-03-OB1
Matrix: Water

Collected: 2023/08/10
Shipped:
Received: 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Mercury in Water by CVAA	CV/AA	8861459	2023/08/18	2023/08/21	Gagandeep Rai
Metals in Water by ICPMS (low level)	ICP1/MS	8867325	N/A	2023/08/22	Thuy Linh Nguyen
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8870434	2023/08/21	2023/08/21	Ming Dong
Total Dissolved Solids	BAL	8861171	2023/08/18	2023/08/21	Shaneil Hall

Bureau Veritas ID: WRX368
Sample ID: MWS-14-03-OB2
Matrix: Water

Collected: 2023/08/10
Shipped:
Received: 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8874040	N/A	2023/08/24	Brent Boudreau
Alkalinity	AT	8860827	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/18	Automated Statchk
Chloride by Automated Colourimetry	KONE	8860863	N/A	2023/08/18	Alina Dobreanu
Conductivity	AT	8860835	N/A	2023/08/18	Nachiketa Gohil

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WRX368 **Collected:** 2023/08/10
Sample ID: MWS-14-03-OB2 **Shipped:**
Matrix: Water **Received:** 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Fluoride	ISE	8860828	2023/08/17	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8859021	N/A	2023/08/22	Automated Statchk
Dissolved Mercury in Water by CVAA	CV/AA	8861459	2023/08/18	2023/08/21	Gagandeep Rai
Mercury in Water by CVAA	CV/AA	8876873	2023/08/25	2023/08/25	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8861649	2023/08/18	2023/08/21	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8867209	N/A	2023/08/22	Thuy Linh Nguyen
Metals in Water by ICPMS (low level)	ICP1/MS	8867325	N/A	2023/08/22	Thuy Linh Nguyen
Total Metals Analysis by ICP	ICP	8858697	2023/08/18	2023/08/21	Suban Kanapathippllai
Cyanide (Free)	SPEC	8870435	N/A	2023/08/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8870434	2023/08/21	2023/08/21	Ming Dong
Total Phosphorus Low Level Total	KONE	8872240	2023/08/20	2023/08/22	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8859975	N/A	2023/08/21	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8860514	N/A	2023/08/18	Chandra Nandlal
pH	AT	8860816	2023/08/17	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Sattyajita Bastola
Sulphate by Automated Turbidimetry	KONE	8860875	N/A	2023/08/18	Alina Dobreanu
Total Dissolved Solids	BAL	8861171	2023/08/18	2023/08/21	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Sattyajita Bastola
Total Kjeldahl Nitrogen in Water	SKAL	8860117	2023/08/17	2023/08/18	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8859313	2023/08/17	2023/08/18	Shaneil Hall
Turbidity	AT	8860492	N/A	2023/08/17	Vidhi Khatri

Bureau Veritas ID: WRX368 Dup **Collected:** 2023/08/10
Sample ID: MWS-14-03-OB2 **Shipped:**
Matrix: Water **Received:** 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrate & Nitrite as Nitrogen in Water	LACH	8860514	N/A	2023/08/18	Chandra Nandlal

Bureau Veritas ID: WRX369 **Collected:** 2023/08/10
Sample ID: MWS14-06 **Shipped:**
Matrix: Water **Received:** 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8874040	N/A	2023/08/24	Brent Boudreau
Alkalinity	AT	8860827	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/18	Automated Statchk
Chloride by Automated Colourimetry	KONE	8860863	N/A	2023/08/18	Alina Dobreanu
Conductivity	AT	8860835	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8860828	2023/08/17	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8859021	N/A	2023/08/22	Automated Statchk
Dissolved Mercury in Water by CVAA	CV/AA	8861459	2023/08/18	2023/08/21	Gagandeep Rai
Mercury in Water by CVAA	CV/AA	8877136	2023/08/25	2023/08/25	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8861649	2023/08/18	2023/08/21	Suban Kanapathippllai

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O7544
Report Date: 2023/08/28

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: JL

TEST SUMMARY

Bureau Veritas ID: WRX369
Sample ID: MWS14-06
Matrix: Water

Collected: 2023/08/10
Shipped:
Received: 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals by ICPMS (low level)	ICP1/MS	8867209	N/A	2023/08/22	Thuy Linh Nguyen
Metals in Water by ICPMS (low level)	ICP1/MS	8867325	N/A	2023/08/22	Thuy Linh Nguyen
Total Metals Analysis by ICP	ICP	8858697	2023/08/18	2023/08/21	Suban Kanapathippllai
Cyanide (Free)	SPEC	8870435	N/A	2023/08/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8870434	2023/08/21	2023/08/21	Ming Dong
Total Phosphorus Low Level Total	KONE	8872240	2023/08/20	2023/08/22	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8859975	N/A	2023/08/21	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8860529	N/A	2023/08/18	Chandra Nandlal
pH	AT	8860816	2023/08/17	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Sattyajita Bastola
Sulphate by Automated Turbidimetry	KONE	8860875	N/A	2023/08/18	Alina Dobreanu
Total Dissolved Solids	BAL	8861171	2023/08/18	2023/08/21	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Sattyajita Bastola
Total Kjeldahl Nitrogen in Water	SKAL	8860117	2023/08/17	2023/08/18	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8859313	2023/08/17	2023/08/18	Shaneil Hall
Turbidity	AT	8860492	N/A	2023/08/17	Vidhi Khatri

Bureau Veritas ID: WRX370
Sample ID: MW23-OB-21
Matrix: Water

Collected: 2023/08/10
Shipped:
Received: 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8874040	N/A	2023/08/24	Brent Boudreau
Alkalinity	AT	8860827	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/18	Automated Statchk
Chloride by Automated Colourimetry	KONE	8860863	N/A	2023/08/18	Alina Dobreanu
Conductivity	AT	8860835	N/A	2023/08/18	Nachiketa Gohil
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8864154	2023/08/19	2023/08/19	Ksenia Trofimova
Fluoride	ISE	8860828	2023/08/17	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8859021	N/A	2023/08/22	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8860593	2023/08/17	2023/08/21	Gagandeep Rai
Mercury (low level)	CV/AA	8861627	2023/08/17	2023/08/21	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8861649	2023/08/18	2023/08/21	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8867209	N/A	2023/08/22	Thuy Linh Nguyen
Metals in Water by ICPMS (low level)	ICP1/MS	8867325	N/A	2023/08/22	Thuy Linh Nguyen
Total Metals Analysis by ICP	ICP	8858697	2023/08/18	2023/08/21	Suban Kanapathippllai
Cyanide (Free)	SPEC	8870435	N/A	2023/08/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8870434	2023/08/21	2023/08/21	Ming Dong
Total Phosphorus Low Level Total	KONE	8872240	2023/08/20	2023/08/22	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8859975	N/A	2023/08/21	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8860514	N/A	2023/08/18	Chandra Nandlal
pH	AT	8860816	2023/08/17	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Sattyajita Bastola
Sulphate by Automated Turbidimetry	KONE	8860875	N/A	2023/08/18	Alina Dobreanu

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WRX370
Sample ID: MW23-OB-21
Matrix: Water

Collected: 2023/08/10
Shipped:
Received: 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Dissolved Solids	BAL	8861171	2023/08/18	2023/08/21	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Sattyajita Bastola
Total Kjeldahl Nitrogen in Water	SKAL	8860117	2023/08/17	2023/08/18	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8859313	2023/08/17	2023/08/18	Shaneil Hall
Turbidity	AT	8860492	N/A	2023/08/17	Vidhi Khatri
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8861581	N/A	2023/08/21	Juan Pangilinan

Bureau Veritas ID: WRX370 Dup
Sample ID: MW23-OB-21
Matrix: Water

Collected: 2023/08/10
Shipped:
Received: 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8861581	N/A	2023/08/21	Juan Pangilinan

Bureau Veritas ID: WRX371
Sample ID: MW22-OB-21
Matrix: Water

Collected: 2023/08/10
Shipped:
Received: 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8874040	N/A	2023/08/24	Brent Boudreau
Alkalinity	AT	8860827	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/18	Automated Statchk
Chloride by Automated Colourimetry	KONE	8860863	N/A	2023/08/18	Alina Dobreanu
Conductivity	AT	8860835	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8860828	2023/08/17	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8859021	N/A	2023/08/22	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8860593	2023/08/17	2023/08/21	Gagandeep Rai
Mercury (low level)	CV/AA	8861627	2023/08/17	2023/08/21	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8861649	2023/08/18	2023/08/21	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8867209	N/A	2023/08/22	Thuy Linh Nguyen
Metals in Water by ICPMS (low level)	ICP1/MS	8867325	N/A	2023/08/22	Thuy Linh Nguyen
Total Metals Analysis by ICP	ICP	8858697	2023/08/18	2023/08/21	Suban Kanapathippllai
Cyanide (Free)	SPEC	8870435	N/A	2023/08/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8870434	2023/08/21	2023/08/21	Ming Dong
Total Phosphorus Low Level Total	KONE	8872240	2023/08/20	2023/08/22	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8859975	N/A	2023/08/21	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8860514	N/A	2023/08/18	Chandra Nandlal
pH	AT	8860816	2023/08/17	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Sattyajita Bastola
Sulphate by Automated Turbidimetry	KONE	8860875	N/A	2023/08/18	Alina Dobreanu
Total Dissolved Solids	BAL	8861171	2023/08/18	2023/08/21	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Sattyajita Bastola
Total Kjeldahl Nitrogen in Water	SKAL	8860117	2023/08/17	2023/08/18	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8859313	2023/08/17	2023/08/18	Shaneil Hall

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WRX371 **Collected:** 2023/08/10
Sample ID: MW22-OB-21 **Shipped:**
Matrix: Water **Received:** 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Turbidity	AT	8857999	N/A	2023/08/18	Gurparteek KAUR

Bureau Veritas ID: WRX371 Dup **Collected:** 2023/08/10
Sample ID: MW22-OB-21 **Shipped:**
Matrix: Water **Received:** 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals Analysis by ICP	ICP	8861649	2023/08/18	2023/08/21	Suban Kanapathippllai

Bureau Veritas ID: WRX372 **Collected:** 2023/08/10
Sample ID: MW01-OB2-18 **Shipped:**
Matrix: Water **Received:** 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8874040	N/A	2023/08/24	Brent Boudreau
Alkalinity	AT	8860827	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/18	Automated Statchk
Chloride by Automated Colourimetry	KONE	8860863	N/A	2023/08/18	Alina Dobreanu
Conductivity	AT	8860835	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8860828	2023/08/17	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8859021	N/A	2023/08/22	Automated Statchk
Dissolved Mercury in Water by CVAA	CV/AA	8861459	2023/08/18	2023/08/21	Gagandeep Rai
Mercury in Water by CVAA	CV/AA	8876873	2023/08/25	2023/08/25	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8861649	2023/08/18	2023/08/21	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8867209	N/A	2023/08/22	Thuy Linh Nguyen
Metals in Water by ICPMS (low level)	ICP1/MS	8867325	N/A	2023/08/22	Thuy Linh Nguyen
Total Metals Analysis by ICP	ICP	8858697	2023/08/18	2023/08/21	Suban Kanapathippllai
Cyanide (Free)	SPEC	8870435	N/A	2023/08/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8870434	2023/08/21	2023/08/21	Ming Dong
Total Phosphorus Low Level Total	KONE	8872240	2023/08/20	2023/08/22	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8859975	N/A	2023/08/21	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8860514	N/A	2023/08/18	Chandra Nandlal
pH	AT	8860816	2023/08/17	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Sattyajita Bastola
Sulphate by Automated Turbidimetry	KONE	8860875	N/A	2023/08/18	Alina Dobreanu
Total Dissolved Solids	BAL	8862207	2023/08/18	2023/08/21	Razieh Tabesh
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Sattyajita Bastola
Total Kjeldahl Nitrogen in Water	SKAL	8860117	2023/08/17	2023/08/18	Rajni Tyagi
Total Suspended Solids	BAL	8859290	2023/08/18	2023/08/18	Shaneil Hall
Turbidity	AT	8860492	N/A	2023/08/17	Vidhi Khatri

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O7544
Report Date: 2023/08/28

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: JL

TEST SUMMARY

Bureau Veritas ID: WRX373
Sample ID: MW01-OB1-18
Matrix: Water

Collected: 2023/08/10
Shipped:
Received: 2023/08/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8874040	N/A	2023/08/24	Brent Boudreau
Alkalinity	AT	8860827	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/18	Automated Statchk
Chloride by Automated Colourimetry	KONE	8860863	N/A	2023/08/18	Alina Dobreanu
Conductivity	AT	8860835	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8860828	2023/08/17	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8859021	N/A	2023/08/22	Automated Statchk
Dissolved Mercury in Water by CVAA	CV/AA	8861459	2023/08/18	2023/08/21	Gagandeep Rai
Mercury in Water by CVAA	CV/AA	8876873	2023/08/24	2023/08/25	Jaswinder Kaur
Dissolved Metals Analysis by ICP	ICP	8861649	2023/08/18	2023/08/21	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8867209	N/A	2023/08/22	Thuy Linh Nguyen
Metals in Water by ICPMS (low level)	ICP1/MS	8867325	N/A	2023/08/22	Thuy Linh Nguyen
Total Metals Analysis by ICP	ICP	8858697	2023/08/18	2023/08/21	Suban Kanapathippllai
Cyanide (Free)	SPEC	8870435	N/A	2023/08/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8870434	2023/08/21	2023/08/21	Ming Dong
Total Phosphorus Low Level Total	KONE	8872240	2023/08/20	2023/08/22	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8859975	N/A	2023/08/21	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8860529	N/A	2023/08/18	Chandra Nandlal
pH	AT	8860816	2023/08/17	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Sattyajita Bastola
Sulphate by Automated Turbidimetry	KONE	8860875	N/A	2023/08/18	Alina Dobreanu
Total Dissolved Solids	BAL	8861171	2023/08/18	2023/08/21	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Sattyajita Bastola
Total Kjeldahl Nitrogen in Water	SKAL	8860117	2023/08/17	2023/08/18	Rajni Tyagi
Total Suspended Solids	BAL	8859290	2023/08/18	2023/08/18	Shaneil Hall
Turbidity	AT	8860492	N/A	2023/08/17	Vidhi Khatri

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	6.7°C
Package 2	4.3°C
Package 3	6.7°C

Sample received past hold time for Turbidity analysis, proceeded with client consent.
Acidity sample in batch contained headspace.

Sample WRX366 [Pond M1] : TDS Analysis: Analysis was performed past sample holding time. This may increase the variability associated with these results.

Sample WRX367 [MWS-14-03-OB1] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
TDS Analysis: Analysis was performed past sample holding time. This may increase the variability associated with these results.

Sample WRX368 [MWS-14-03-OB2] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
TDS Analysis: Analysis was performed past sample holding time. This may increase the variability associated with these results.

Sample WRX369 [MWS14-06] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
TDS Analysis: Analysis was performed past sample holding time. This may increase the variability associated with these results.

Metal Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample WRX371 [MW22-OB-21] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
TDS Analysis: Analysis was performed past sample holding time. This may increase the variability associated with these results.
Metal Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample WRX372 [MW01-OB2-18] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
TSS/TDS Analysis: Analysis was performed past sample holding time. This may increase the variability associated with these results.

Sample WRX373 [MW01-OB1-18] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
TSS/TDS Analysis: Analysis was performed past sample holding time. This may increase the variability associated with these results.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8860284	1,4-Difluorobenzene	2023/08/17	103	70 - 130	101	70 - 130	102	%				
8860284	4-Bromofluorobenzene	2023/08/17	98	70 - 130	99	70 - 130	98	%				
8860284	D10-o-Xylene	2023/08/17	85	70 - 130	89	70 - 130	86	%				
8860284	D4-1,2-Dichloroethane	2023/08/17	99	70 - 130	100	70 - 130	100	%				
8861581	4-Bromofluorobenzene	2023/08/21	99	70 - 130	99	70 - 130	97	%				
8861581	D4-1,2-Dichloroethane	2023/08/21	109	70 - 130	105	70 - 130	96	%				
8861581	D8-Toluene	2023/08/21	100	70 - 130	101	70 - 130	94	%				
8864154	o-Terphenyl	2023/08/19	101	60 - 130	101	60 - 130	101	%				
8857999	Turbidity	2023/08/18			99	80 - 120	<0.1	NTU	5.6	20		
8858697	Total Sulphur (S)	2023/08/21	98	80 - 120	95	80 - 120	<0.5	mg/L	2.2	25		
8859290	Total Suspended Solids	2023/08/18			96	85 - 115	<10	mg/L	NC	20		
8859313	Total Suspended Solids	2023/08/18			95	85 - 115	<1	mg/L	15	20		
8859975	Total Ammonia-N	2023/08/21	101	75 - 125	101	80 - 120	<0.050	mg/L	NC	20		
8860117	Total Kjeldahl Nitrogen (TKN)	2023/08/18	98	80 - 120	98	80 - 120	<0.10	mg/L	NC (1)	20	96	80 - 120
8860284	Benzene	2023/08/17	91	50 - 140	93	50 - 140	<0.20	ug/L	NC	30		
8860284	Ethylbenzene	2023/08/17	101	50 - 140	103	50 - 140	<0.20	ug/L	NC	30		
8860284	F1 (C6-C10) - BTEX	2023/08/17					<25	ug/L	NC	30		
8860284	F1 (C6-C10)	2023/08/17	98	60 - 140	101	60 - 140	<25	ug/L	NC	30		
8860284	o-Xylene	2023/08/17	96	50 - 140	100	50 - 140	<0.20	ug/L	NC	30		
8860284	p+m-Xylene	2023/08/17	96	50 - 140	98	50 - 140	<0.40	ug/L	NC	30		
8860284	Toluene	2023/08/17	87	50 - 140	89	50 - 140	<0.20	ug/L	2.0	30		
8860284	Total Xylenes	2023/08/17					<0.40	ug/L	NC	30		
8860492	Turbidity	2023/08/17			99	80 - 120	<0.1	NTU	2.1	20		
8860514	Nitrate (N)	2023/08/18	91	80 - 120	94	80 - 120	<0.10	mg/L	NC	20		
8860514	Nitrite (N)	2023/08/18	103	80 - 120	105	80 - 120	<0.010	mg/L	NC	20		
8860529	Nitrate (N)	2023/08/18	92	80 - 120	94	80 - 120	<0.10	mg/L	NC	20		
8860529	Nitrite (N)	2023/08/18	105	80 - 120	106	80 - 120	<0.010	mg/L	NC	20		
8860593	Dissolved Mercury (Hg)	2023/08/21	99	75 - 125	100	80 - 120	<0.01	ug/L				
8860816	pH	2023/08/18			102	98 - 103			0.39	N/A		
8860827	Alkalinity (Total as CaCO3)	2023/08/18			95	85 - 115	<1.0	mg/L	0.25	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8860828	Fluoride (F-)	2023/08/18	97	80 - 120	97	80 - 120	<0.10	mg/L	1.4	20		
8860835	Conductivity	2023/08/18			101	85 - 115	<0.001	mS/cm	0.31	10		
8860863	Dissolved Chloride (Cl-)	2023/08/18	89	80 - 120	99	80 - 120	<1.0	mg/L	2.3	20		
8860875	Dissolved Sulphate (SO4)	2023/08/18	91	75 - 125	102	80 - 120	<1.0	mg/L	NC	20		
8861171	Total Dissolved Solids	2023/08/21			95	90 - 110	<10	mg/L	0	20		
8861459	Dissolved Mercury (Hg)	2023/08/21	101	75 - 125	99	80 - 120	<0.10	ug/L	NC	20		
8861581	1,1,2,2-Tetrachloroethane	2023/08/21	107	70 - 130	105	70 - 130	<0.50	ug/L	NC	30		
8861581	1,2-Dichlorobenzene	2023/08/21	98	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
8861581	1,4-Dichlorobenzene	2023/08/21	94	70 - 130	95	70 - 130	<0.50	ug/L	NC	30		
8861581	Benzene	2023/08/21	105	70 - 130	105	70 - 130	<0.17	ug/L	NC	30		
8861581	Chloroform	2023/08/21	111	70 - 130	109	70 - 130	<0.20	ug/L	NC	30		
8861581	cis-1,2-Dichloroethylene	2023/08/21	109	70 - 130	108	70 - 130	<0.50	ug/L	NC	30		
8861581	Ethylbenzene	2023/08/21	97	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
8861581	F1 (C6-C10) - BTEX	2023/08/21					<25	ug/L	NC	30		
8861581	F1 (C6-C10)	2023/08/21	94	60 - 140	98	60 - 140	<25	ug/L	NC	30		
8861581	Methylene Chloride(Dichloromethane)	2023/08/21	107	70 - 130	104	70 - 130	<2.0	ug/L	NC	30		
8861581	o-Xylene	2023/08/21	93	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
8861581	p+m-Xylene	2023/08/21	87	70 - 130	90	70 - 130	<0.20	ug/L	NC	30		
8861581	Tetrachloroethylene	2023/08/21	101	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		
8861581	Toluene	2023/08/21	95	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
8861581	Total Xylenes	2023/08/21					<0.20	ug/L	NC	30		
8861581	trans-1,3-Dichloropropene	2023/08/21	101	70 - 130	100	70 - 130	<0.40	ug/L	NC	30		
8861581	Trichloroethylene	2023/08/21	104	70 - 130	105	70 - 130	<0.20	ug/L	NC	30		
8861627	Mercury (Hg)	2023/08/21	98	75 - 125	97	80 - 120	<0.01	ug/L	NC	20		
8861649	Dissolved Sulphur (S)	2023/08/21	100	80 - 120	101	80 - 120	<0.5	mg/L	NC	25		
8862207	Total Dissolved Solids	2023/08/21			97	90 - 110	<10	mg/L	8.0	20		
8864154	F2 (C10-C16 Hydrocarbons)	2023/08/19	111	60 - 130	111	60 - 130	<100	ug/L	0.96	30		
8864154	F3 (C16-C34 Hydrocarbons)	2023/08/19	111	60 - 130	110	60 - 130	<200	ug/L	NC	30		
8864154	F4 (C34-C50 Hydrocarbons)	2023/08/19	112	60 - 130	111	60 - 130	<200	ug/L	NC	30		
8867209	Dissolved Aluminum (Al)	2023/08/21	111	80 - 120	101	80 - 120	<0.0005	mg/L	8.5	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8867209	Dissolved Antimony (Sb)	2023/08/21	113	80 - 120	105	80 - 120	<0.0001	mg/L	NC	20		
8867209	Dissolved Arsenic (As)	2023/08/21	NC	80 - 120	100	80 - 120	<0.0001	mg/L	2.0	20		
8867209	Dissolved Barium (Ba)	2023/08/21	105	80 - 120	99	80 - 120	<0.0002	mg/L	2.5	20		
8867209	Dissolved Beryllium (Be)	2023/08/21	104	80 - 120	95	80 - 120	<0.00005	mg/L	NC	20		
8867209	Dissolved Bismuth (Bi)	2023/08/21	88	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8867209	Dissolved Boron (B)	2023/08/21	103	80 - 120	94	80 - 120	<0.001	mg/L	2.0	20		
8867209	Dissolved Cadmium (Cd)	2023/08/21	109	80 - 120	99	80 - 120	<0.00001	mg/L	NC	20		
8867209	Dissolved Calcium (Ca)	2023/08/21	NC	80 - 120	102	80 - 120	<0.02	mg/L	0.82	20		
8867209	Dissolved Cesium (Cs)	2023/08/21	106	80 - 120	103	80 - 120	<0.00002	mg/L	NC	N/A		
8867209	Dissolved Chromium (Cr)	2023/08/21	107	80 - 120	98	80 - 120	<0.0005	mg/L	NC	20		
8867209	Dissolved Cobalt (Co)	2023/08/21	106	80 - 120	99	80 - 120	<0.00005	mg/L	NC	20		
8867209	Dissolved Copper (Cu)	2023/08/21	111	80 - 120	102	80 - 120	<0.0001	mg/L	2.9	20		
8867209	Dissolved Iron (Fe)	2023/08/21	110	80 - 120	103	80 - 120	<0.005	mg/L	0.51	20		
8867209	Dissolved Lead (Pb)	2023/08/21	102	80 - 120	99	80 - 120	<0.00005	mg/L	NC	20		
8867209	Dissolved Lithium (Li)	2023/08/21	112	80 - 120	103	80 - 120	<0.0005	mg/L	0.93	20		
8867209	Dissolved Magnesium (Mg)	2023/08/21	NC	80 - 120	101	80 - 120	<0.005	mg/L	1.7	20		
8867209	Dissolved Manganese (Mn)	2023/08/21	106	80 - 120	98	80 - 120	<0.0002	mg/L	3.1	20		
8867209	Dissolved Molybdenum (Mo)	2023/08/21	119	80 - 120	105	80 - 120	<0.00005	mg/L	8.7	20		
8867209	Dissolved Nickel (Ni)	2023/08/21	103	80 - 120	97	80 - 120	<0.0001	mg/L	2.0	20		
8867209	Dissolved Phosphorus (P)	2023/08/21	112	80 - 120	96	80 - 120	<0.005	mg/L	15	20		
8867209	Dissolved Potassium (K)	2023/08/21	114	80 - 120	102	80 - 120	<0.02	mg/L	0.59	20		
8867209	Dissolved Rubidium (Rb)	2023/08/21	109	80 - 120	101	80 - 120	<0.00002	mg/L	NC	N/A		
8867209	Dissolved Selenium (Se)	2023/08/21	111	80 - 120	103	80 - 120	<0.0002	mg/L	NC	20		
8867209	Dissolved Silicon (Si)	2023/08/21	102	80 - 120	100	80 - 120	<0.005	mg/L	8.2	20		
8867209	Dissolved Silver (Ag)	2023/08/21	108	80 - 120	103	80 - 120	<0.00001	mg/L	NC	20		
8867209	Dissolved Sodium (Na)	2023/08/21	NC	80 - 120	102	80 - 120	<0.01	mg/L	1.5	20		
8867209	Dissolved Strontium (Sr)	2023/08/21	NC	80 - 120	99	80 - 120	<0.0001	mg/L	0.62	20		
8867209	Dissolved Tellurium (Te)	2023/08/21	109	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8867209	Dissolved Thallium (Tl)	2023/08/21	104	80 - 120	102	80 - 120	<0.000005	mg/L	NC	20		
8867209	Dissolved Thorium (Th)	2023/08/21	95	80 - 120	97	80 - 120	<0.0002	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8867209	Dissolved Tin (Sn)	2023/08/21	114	80 - 120	102	80 - 120	<0.0001	mg/L	NC	20		
8867209	Dissolved Titanium (Ti)	2023/08/21	107	80 - 120	99	80 - 120	<0.0005	mg/L	NC	20		
8867209	Dissolved Tungsten (W)	2023/08/21	111	80 - 120	102	80 - 120	<0.0001	mg/L	NC	20		
8867209	Dissolved Uranium (U)	2023/08/21	107	80 - 120	100	80 - 120	<0.00001	mg/L	5.9	20		
8867209	Dissolved Vanadium (V)	2023/08/21	111	80 - 120	100	80 - 120	<0.00005	mg/L	5.3	20		
8867209	Dissolved Zinc (Zn)	2023/08/21	105	80 - 120	98	80 - 120	<0.0005	mg/L	0	20		
8867209	Dissolved Zirconium (Zr)	2023/08/21	122 (2)	80 - 120	107	80 - 120	<0.0001	mg/L	NC	20		
8867325	. Aluminum (Al)	2023/08/22	NC	80 - 120	102	80 - 120	<0.0005	mg/L	14	20		
8867325	. Antimony (Sb)	2023/08/22	110	80 - 120	105	80 - 120	<0.0001	mg/L	NC	20		
8867325	. Arsenic (As)	2023/08/22	105	80 - 120	99	80 - 120	<0.0001	mg/L	4.2	20		
8867325	. Barium (Ba)	2023/08/22	103	80 - 120	96	80 - 120	<0.0002	mg/L	0.86	20		
8867325	. Beryllium (Be)	2023/08/22	104	80 - 120	98	80 - 120	<0.00005	mg/L	NC	20		
8867325	. Bismuth (Bi)	2023/08/22	79 (2)	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8867325	. Boron (B)	2023/08/22	99	80 - 120	94	80 - 120	<0.001	mg/L	1.9	20		
8867325	. Cadmium (Cd)	2023/08/22	106	80 - 120	99	80 - 120	<0.000005	mg/L	18	20		
8867325	. Calcium (Ca)	2023/08/22	NC	80 - 120	104	80 - 120	<0.02	mg/L	0.31	20		
8867325	. Cesium (Cs)	2023/08/22	103	80 - 120	101	80 - 120	<0.00002	mg/L	NC	N/A		
8867325	. Chromium (Cr)	2023/08/22	104	80 - 120	96	80 - 120	<0.0005	mg/L	5.2	20		
8867325	. Cobalt (Co)	2023/08/22	101	80 - 120	96	80 - 120	<0.00005	mg/L	4.5	20		
8867325	. Copper (Cu)	2023/08/22	107	80 - 120	100	80 - 120	<0.0001	mg/L	2.3	20		
8867325	. Iron (Fe)	2023/08/22	108	80 - 120	101	80 - 120	<0.005	mg/L	4.0	20		
8867325	. Lead (Pb)	2023/08/22	100	80 - 120	99	80 - 120	<0.00005	mg/L	0.63	20		
8867325	. Lithium (Li)	2023/08/22	107	80 - 120	103	80 - 120	<0.0005	mg/L	2.6	20		
8867325	. Magnesium (Mg)	2023/08/22	NC	80 - 120	101	80 - 120	<0.005	mg/L	1.0	20		
8867325	. Manganese (Mn)	2023/08/22	NC	80 - 120	97	80 - 120	<0.0002	mg/L	0.51	20		
8867325	. Molybdenum (Mo)	2023/08/22	115	80 - 120	102	80 - 120	<0.00005	mg/L	3.9	20		
8867325	. Nickel (Ni)	2023/08/22	98	80 - 120	96	80 - 120	<0.0001	mg/L	1.9	20		
8867325	. Phosphorus (P)	2023/08/22	113	80 - 120	104	80 - 120	<0.005	mg/L	1.6	20		
8867325	. Potassium (K)	2023/08/22	112	80 - 120	101	80 - 120	<0.02	mg/L	0.96	20		
8867325	. Rubidium (Rb)	2023/08/22	107	80 - 120	100	80 - 120	<0.00002	mg/L	NC	N/A		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8867325	. Selenium (Se)	2023/08/22	103	80 - 120	99	80 - 120	<0.00005	mg/L	NC	20		
8867325	. Silicon (Si)	2023/08/22	NC	80 - 120	102	80 - 120	<0.005	mg/L	5.8	20		
8867325	. Silver (Ag)	2023/08/22	94	80 - 120	102	80 - 120	<0.00001	mg/L	NC	20		
8867325	. Sodium (Na)	2023/08/22	NC	80 - 120	102	80 - 120	<0.01	mg/L	1.1	20		
8867325	. Strontium (Sr)	2023/08/22	NC	80 - 120	98	80 - 120	<0.0001	mg/L	0.097	20		
8867325	. Tellurium (Te)	2023/08/22	106	80 - 120	97	80 - 120	<0.0001	mg/L	NC	20		
8867325	. Thallium (Tl)	2023/08/22	104	80 - 120	102	80 - 120	<0.000005	mg/L	NC	20		
8867325	. Thorium (Th)	2023/08/22	96	80 - 120	99	80 - 120	<0.0002	mg/L	20	20		
8867325	. Tin (Sn)	2023/08/22	111	80 - 120	101	80 - 120	<0.0001	mg/L	6.0	20		
8867325	. Titanium (Ti)	2023/08/22	115	80 - 120	103	80 - 120	<0.0005	mg/L	3.7	20		
8867325	. Tungsten (W)	2023/08/22	107	80 - 120	103	80 - 120	<0.0001	mg/L	16	20		
8867325	. Uranium (U)	2023/08/22	103	80 - 120	101	80 - 120	<0.00001	mg/L	5.1	20		
8867325	. Vanadium (V)	2023/08/22	108	80 - 120	98	80 - 120	<0.00005	mg/L	3.6	20		
8867325	. Zinc (Zn)	2023/08/22	103	80 - 120	97	80 - 120	<0.0005	mg/L	0.21	20		
8867325	. Zirconium (Zr)	2023/08/22	121 (2)	80 - 120	105	80 - 120	<0.0001	mg/L	NC	20		
8870434	Strong Acid Dissoc. Cyanide (CN)	2023/08/21	96	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
8870435	Free Cyanide (CN)	2023/08/22	93	80 - 120	89	80 - 120	<2.0	ug/L				
8872240	Total Phosphorus (P)	2023/08/22	121 (2)	80 - 120	106	80 - 120	<0.0010	mg/L			84	80 - 120
8874040	Acidity	2023/08/24	93	80 - 120	103	80 - 120	<5.0	mg/L	NC	25		
8876873	Mercury (Hg)	2023/08/25	105	75 - 125	109	80 - 120	<0.00010	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8877136	Mercury (Hg)	2023/08/25	107	75 - 125	107	80 - 120	<0.00010	mg/L	NC	20		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Due to a high concentration of NOx, the sample required dilution. The detection limit was adjusted accordingly.

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

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Brad Newman, B.Sc., C.Chem., Scientific Service Specialist

<original signed by>

Cristina Carriere, Senior Scientific Specialist

<original signed by>

Janah Rhyno, Scientific Specialist

<original signed by>

Sandy Yuan, M.Sc., QP, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 749677

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/26
Report #: R7783495
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3O7765
Received: 2023/08/15, 12:18

Sample Matrix: Water
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	5	N/A	2023/08/24	ATL SOP-00205	SM 24 2310B m
Acidity (CaCO3) in water (1)	1	N/A	2023/08/25	ATL SOP-00205	SM 24 2310B m
Alkalinity	6	N/A	2023/08/18	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	6	N/A	2023/08/18	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	6	N/A	2023/08/18	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	6	N/A	2023/08/18	CAM SOP-00414	SM 23 2510 m
Fluoride	6	2023/08/17	2023/08/18	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	6	N/A	2023/08/23	CAM SOP 00102/00408/00447	SM 2340 B
Mercury in Water by CVAA	2	2023/08/19	2023/08/21	CAM SOP-00453	EPA 7470A m
Dissolved Mercury (low level)	1	2023/08/17	2023/08/21	CAM SOP-00453	EPA 7470 m
Dissolved Mercury (low level)	5	2023/08/19	2023/08/21	CAM SOP-00453	EPA 7470 m
Mercury (low level)	2	2023/08/18	2023/08/21	CAM SOP-00453	EPA 7470 m
Mercury (low level)	2	2023/08/19	2023/08/22	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	6	2023/08/17	2023/08/17	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	6	N/A	2023/08/22	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	6	N/A	2023/08/25	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	6	2023/08/21	2023/08/21	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	6	N/A	2023/08/24	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	5	2023/08/22	2023/08/22	CAL SOP-00270	SM 23 4500-CN m
Cyanide, Strong Acid Dissociable (SAD) (2)	1	2023/08/23	2023/08/23	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	5	2023/08/20	2023/08/22	AB SOP-00024	SM 24 4500-P A,B,F m
Total Phosphorus Low Level Total (2)	1	2023/08/20	2023/08/23	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	6	N/A	2023/08/22	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (3)	6	N/A	2023/08/18	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	6	2023/08/17	2023/08/18	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (4)	5	N/A	2023/08/16		Field pH Meter
Sulphate by Automated Turbidimetry	6	N/A	2023/08/18	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	6	2023/08/17	2023/08/18	CAM SOP-00428	SM 23 2540C m
Field Temperature (4)	5	N/A	2023/08/16		Field Thermometer
Total Kjeldahl Nitrogen in Water	5	2023/08/17	2023/08/21	CAM SOP-00938	OMOE E3516 m

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 749677

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/26
Report #: R7783495
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3O7765
Received: 2023/08/15, 12:18

Sample Matrix: Water
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Kjeldahl Nitrogen in Water	1	2023/08/17	2023/08/22	CAM SOP-00938	OMOE E3516 m
Low Level Total Suspended Solids	6	2023/08/17	2023/08/18	CAM SOP-00428	SM 23 2540D m
Turbidity	6	N/A	2023/08/18	CAM SOP-00417	SM 23 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(4) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C3O7765
Report Date: 2023/08/26

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WRY344			WRY344			WRY345		
Sampling Date		2023/08/13 08:53			2023/08/13 08:53			2023/08/13 09:27		
COC Number		749677			749677			749677		
	UNITS	MW3-BR-13	RDL	QC Batch	MW3-BR-13 Lab-Dup	RDL	QC Batch	MW3-OB-13	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	380	1.0	8856683				400	1.0	8856683
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.8	1.0	8856683				2.2	1.0	8856683
Hardness (CaCO3)	mg/L	370	1.0	8858774				410	1.0	8855623
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8856683				<1.0	1.0	8856683
Field Measurements										
Field Temperature	Celsius	9.1	N/A	ONSITE				9.2	N/A	ONSITE
Field Measured pH	pH	7.15		ONSITE				7.33		ONSITE
Inorganics										
Acidity	mg/L	54	5.0	8877027				16	5.0	8874040
Total Ammonia-N	mg/L	0.68	0.050	8859848				0.43	0.050	8859848
Conductivity	mS/cm	0.718	0.001	8860835				0.759	0.001	8860835
Free Cyanide (CN)	ug/L	2.3 (1)	2.0	8875715				<2.0 (1)	2.0	8875715
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050 (2)	0.00050	8875714				<0.00050	0.00050	8875714
Total Dissolved Solids	mg/L	405	10	8859298				435	10	8859298
Fluoride (F-)	mg/L	0.29	0.10	8860828				0.37	0.10	8860828
Total Kjeldahl Nitrogen (TKN)	mg/L	0.91	0.10	8859855				0.81	0.10	8859855
pH	pH	7.70		8860816				7.77		8860816
Total Phosphorus (P)	mg/L	0.21	0.0010	8872240				1.2	0.010	8872240
Total Suspended Solids	mg/L	110	2	8859313				2900	5	8859313
Dissolved Sulphate (SO4)	mg/L	19	1.0	8860875				24	1.0	8860875
Turbidity	NTU	24	0.1	8857999				10	0.1	8857999
Alkalinity (Total as CaCO3)	mg/L	380	1.0	8860827				400	1.0	8860827
Dissolved Chloride (Cl-)	mg/L	5.8	1.0	8860863				3.3	1.0	8860863
Nitrite (N)	mg/L	<0.010	0.010	8860529	<0.010	0.010	8860529	<0.010	0.010	8860529
Nitrate (N)	mg/L	<0.10	0.10	8860529	<0.10	0.10	8860529	0.18	0.10	8860529
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8860529	<0.10	0.10	8860529	0.18	0.10	8860529

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O7765
Report Date: 2023/08/26

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WRY346			WRY346			WRY347		
Sampling Date		2023/08/13 10:15			2023/08/13 10:15			2023/08/13 10:39		
COC Number		749677			749677			749677		
	UNITS	MW03-BR-18	RDL	QC Batch	MW03-BR-18 Lab-Dup	RDL	QC Batch	MW03-OB-18	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	330	1.0	8856683				350	1.0	8856683
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.7	1.0	8856683				1.3	1.0	8856683
Hardness (CaCO3)	mg/L	300	1.0	8855623				390	1.0	8855623
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8856683				<1.0	1.0	8856683
Field Measurements										
Field Temperature	Celsius	11.2	N/A	ONSITE				10.7	N/A	ONSITE
Field Measured pH	pH	7.71		ONSITE				7.1		ONSITE
Inorganics										
Acidity	mg/L	<5.0	5.0	8874040				11	5.0	8874040
Total Ammonia-N	mg/L	0.63	0.050	8859848				<0.050	0.050	8859848
Conductivity	mS/cm	0.588	0.001	8860835				0.687	0.001	8860835
Free Cyanide (CN)	ug/L	2.8 (1)	2.0	8875715				2.6 (1)	2.0	8875715
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050 (2)	0.00050	8875714				<0.00050 (2)	0.00050	8875714
Total Dissolved Solids	mg/L	320	10	8859298				380	10	8859298
Fluoride (F-)	mg/L	0.26	0.10	8860828				0.39	0.10	8860828
Total Kjeldahl Nitrogen (TKN)	mg/L	0.63	0.10	8859855				0.11	0.10	8859855
pH	pH	7.94		8860816				7.61		8860816
Total Phosphorus (P)	mg/L	0.057 (3)	0.0010	8872240				0.43	0.0050	8872240
Total Suspended Solids	mg/L	38	1	8859313				1300	3	8859313
Dissolved Sulphate (SO4)	mg/L	<1.0	1.0	8860875	<1.0	1.0	8860875	21	1.0	8860875
Turbidity	NTU	5.8	0.1	8857999				4.5	0.1	8857999
Alkalinity (Total as CaCO3)	mg/L	330	1.0	8860827				350	1.0	8860827
Dissolved Chloride (Cl-)	mg/L	1.1	1.0	8860863	1.1	1.0	8860863	<1.0	1.0	8860863
Nitrite (N)	mg/L	<0.010	0.010	8860529				<0.010	0.010	8860529
Nitrate (N)	mg/L	<0.10	0.10	8860529				<0.10	0.10	8860529

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.
(3) Matrix Spike exceeds acceptance limits due to matrix interference. Reanalysis yields similar results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O7765
Report Date: 2023/08/26

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WRY346			WRY346			WRY347		
Sampling Date		2023/08/13 10:15			2023/08/13 10:15			2023/08/13 10:39		
COC Number		749677			749677			749677		
	UNITS	**MW03-BR-18**	**RDL**	**QC Batch**	**MW03-BR-18 Lab-Dup**	**RDL**	**QC Batch**	**MW03-OB-18**	**RDL**	**QC Batch**
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8860529				<0.10	0.10	8860529

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O7765
Report Date: 2023/08/26

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WRY347			WRY348			WRY349		
Sampling Date		2023/08/13 10:39			2023/08/13 13:31			2023/08/13 08:00		
COC Number		749677			749677			749677		
	UNITS	MW03-OB-18 Lab-Dup	RDL	QC Batch	Seep 10	RDL	QC Batch	Duplicate 6	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L				310	1.0	8856683	360	1.0	8856683
Carb. Alkalinity (calc. as CaCO3)	mg/L				1.3	1.0	8856683	1.6	1.0	8856683
Hardness (CaCO3)	mg/L				1700	1.0	8858774	390	1.0	8858774
Hydrox. Alkalinity (calc. as CaCO3)	mg/L				<1.0	1.0	8856683	<1.0	1.0	8856683
Field Measurements										
Field Temperature	Celsius				15.6	N/A	ONSITE			
Field Measured pH	pH				7.11		ONSITE			
Inorganics										
Acidity	mg/L				29	5.0	8874040	26	5.0	8874040
Total Ammonia-N	mg/L				0.074	0.050	8859848	<0.050	0.050	8859848
Conductivity	mS/cm	0.689	0.001	8860835	4.35	0.001	8860835	0.683	0.001	8860835
Free Cyanide (CN)	ug/L				5.8 (1)	2.0	8875715	<2.0 (1)	2.0	8875715
Strong Acid Dissoc. Cyanide (CN)	mg/L				0.0299	0.00050	8875714	0.00073	0.00050	8875716
Total Dissolved Solids	mg/L				3030	10	8859298	370	10	8859298
Fluoride (F-)	mg/L	0.38	0.10	8860828	0.17	0.10	8860828	0.39	0.10	8860828
Total Kjeldahl Nitrogen (TKN)	mg/L				1.6	0.20	8859855	0.12	0.10	8859855
pH	pH	7.64		8860816	7.64		8860816	7.67		8860816
Total Phosphorus (P)	mg/L				1.4 (2)	0.010	8872240	0.30	0.0050	8872240
Total Suspended Solids	mg/L				440	5	8859313	570	1	8859313
Dissolved Sulphate (SO4)	mg/L				1400	5.0	8860875	21	1.0	8860875
Turbidity	NTU				21	0.1	8857999	7.3	0.1	8857999
Alkalinity (Total as CaCO3)	mg/L	360	1.0	8860827	310	1.0	8860827	360	1.0	8860827
Dissolved Chloride (Cl-)	mg/L				600	10	8860863	<1.0	1.0	8860863
Nitrite (N)	mg/L				<0.010	0.010	8860529	<0.010	0.010	8860529
Nitrate (N)	mg/L				<0.10	0.10	8860529	<0.10	0.10	8860529
Nitrate + Nitrite (N)	mg/L				<0.10	0.10	8860529	<0.10	0.10	8860529

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRY344			WRY344			WRY345		
Sampling Date		2023/08/13 08:53			2023/08/13 08:53			2023/08/13 09:27		
COC Number		749677			749677			749677		
	UNITS	MW3-BR-13	RDL	QC Batch	MW3-BR-13 Lab-Dup	RDL	QC Batch	MW3-OB-13	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0034	0.0005	8867911	0.0034	0.0005	8867911	0.0029	0.0005	8867911
. Aluminum (Al)	mg/L	0.549	0.0005	8874547				5.83	0.0025	8874547
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8867911	<0.0001	0.0001	8867911	0.0003	0.0001	8867911
. Antimony (Sb)	mg/L	0.0002	0.0001	8874547				<0.0005	0.0005	8874547
Dissolved Arsenic (As)	mg/L	0.0465	0.0001	8867911	0.0466	0.0001	8867911	0.0030	0.0001	8867911
. Arsenic (As)	mg/L	0.0475	0.0001	8874547				0.0057	0.0005	8874547
Dissolved Barium (Ba)	mg/L	0.269	0.0002	8867911	0.273	0.0002	8867911	0.0808	0.0002	8867911
. Barium (Ba)	mg/L	0.279	0.0002	8874547				0.160	0.001	8874547
Dissolved Beryllium (Be)	mg/L	0.00005	0.00005	8867911	0.00005	0.00005	8867911	<0.00005	0.00005	8867911
. Beryllium (Be)	mg/L	0.00010	0.00005	8874547				0.00038	0.00025	8874547
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8867911	<0.0001	0.0001	8867911	<0.0001	0.0001	8867911
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8874547				<0.0005	0.0005	8874547
Dissolved Boron (B)	mg/L	0.015	0.001	8867911	0.015	0.001	8867911	0.035	0.001	8867911
. Boron (B)	mg/L	0.017	0.001	8874547				0.066	0.005	8874547
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8867911	<0.00001	0.00001	8867911	<0.00001	0.00001	8867911
. Cadmium (Cd)	mg/L	0.000014	0.000005	8874547				0.000232	0.000025	8874547
Dissolved Calcium (Ca)	mg/L	118	0.1	8867911	115	0.1	8867911	92.2	0.1	8867911
. Calcium (Ca)	mg/L	121	0.1	8874547				577	1	8874547
Dissolved Cesium (Cs)	mg/L	0.00097	0.00002	8867911	0.00099	0.00002	8867911	<0.00002	0.00002	8867911
. Cesium (Cs)	mg/L	0.00150	0.00002	8874547				0.0005	0.0001	8874547
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8867911	0.0005	0.0005	8867911	<0.0005	0.0005	8867911
. Chromium (Cr)	mg/L	0.0025	0.0005	8874547				0.0226	0.0025	8874547
Dissolved Cobalt (Co)	mg/L	0.00042	0.00005	8867911	0.00042	0.00005	8867911	0.00048	0.00005	8867911
. Cobalt (Co)	mg/L	0.00151	0.00005	8874547				0.00735	0.00025	8874547
Dissolved Copper (Cu)	mg/L	<0.0001	0.0001	8867911	<0.0001	0.0001	8867911	0.0002	0.0001	8867911
. Copper (Cu)	mg/L	0.0019	0.0001	8874547				0.0207	0.0005	8874547
Dissolved Iron (Fe)	mg/L	11.3	0.025	8867911	11.3	0.025	8867911	0.502	0.005	8867911
. Iron (Fe)	mg/L	12.2	0.025	8874547				12.8	0.025	8874547
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	8867911	<0.00005	0.00005	8867911	<0.00005	0.00005	8867911
. Lead (Pb)	mg/L	0.00263	0.00005	8874547				0.00992	0.00025	8874547

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O7765
Report Date: 2023/08/26

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRY344			WRY344			WRY345		
Sampling Date		2023/08/13 08:53			2023/08/13 08:53			2023/08/13 09:27		
COC Number		749677			749677			749677		
	UNITS	MW3-BR-13	RDL	QC Batch	MW3-BR-13 Lab-Dup	RDL	QC Batch	MW3-OB-13	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0073	0.0005	8867911	0.0075	0.0005	8867911	0.0094	0.0005	8867911
. Lithium (Li)	mg/L	0.0085	0.0005	8874547				0.0222	0.0025	8874547
Dissolved Magnesium (Mg)	mg/L	19.4	0.005	8867911	19.3	0.005	8867911	43.2	0.025	8867911
. Magnesium (Mg)	mg/L	21.1	0.005	8874547				157	0.025	8874547
Dissolved Manganese (Mn)	mg/L	0.386	0.0002	8867911	0.389	0.0002	8867911	0.0818	0.0002	8867911
. Manganese (Mn)	mg/L	0.431	0.0002	8874547				0.807	0.001	8874547
Mercury (Hg)	mg/L							<0.0015	0.0015	8864218
Mercury (Hg)	ug/L	<0.01	0.01	8861627						
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8864534				<0.01	0.01	8864534
Dissolved Molybdenum (Mo)	mg/L	0.00073	0.00005	8867911	0.00075	0.00005	8867911	0.00232	0.00005	8867911
. Molybdenum (Mo)	mg/L	0.00077	0.00005	8874547				0.00052	0.00025	8874547
Dissolved Nickel (Ni)	mg/L	0.0003	0.0001	8867911	0.0003	0.0001	8867911	0.0016	0.0001	8867911
. Nickel (Ni)	mg/L	0.0032	0.0001	8874547				0.0162	0.0005	8874547
Dissolved Phosphorus (P)	mg/L	0.060	0.005	8867911	0.061	0.005	8867911	0.011	0.005	8867911
. Phosphorus (P)	mg/L	0.133	0.005	8874547				1.52	0.025	8874547
Dissolved Potassium (K)	mg/L	2.49	0.02	8867911	2.48	0.02	8867911	4.94	0.02	8867911
. Potassium (K)	mg/L	2.54	0.02	8874547				5.8	0.1	8874547
Dissolved Rubidium (Rb)	mg/L	0.00164	0.00002	8867911	0.00173	0.00002	8867911	0.00210	0.00002	8867911
. Rubidium (Rb)	mg/L	0.00245	0.00002	8874547				0.0132	0.0001	8874547
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8867911	<0.0002	0.0002	8867911	<0.0002	0.0002	8867911
. Selenium (Se)	mg/L	0.00006	0.00005	8874547				<0.00025	0.00025	8874547
Dissolved Silicon (Si)	mg/L	10.7	0.025	8867911	10.3	0.025	8867911	9.00	0.025	8867911
. Silicon (Si)	mg/L	11.3	0.025	8874547				17.1	0.025	8874547
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8867911	<0.00001	0.00001	8867911	<0.00001	0.00001	8867911
. Silver (Ag)	mg/L	<0.00001	0.00001	8874547				<0.00005	0.00005	8874547
Dissolved Sodium (Na)	mg/L	9.74	0.01	8867911	9.60	0.01	8867911	16.8	0.01	8867911
. Sodium (Na)	mg/L	9.87	0.01	8874547				16.6	0.05	8874547
Dissolved Strontium (Sr)	mg/L	0.369	0.0001	8867911	0.372	0.0001	8867911	0.572	0.0001	8867911
. Strontium (Sr)	mg/L	0.377	0.0001	8874547				0.813	0.0005	8874547
Dissolved Sulphur (S)	mg/L	2.6	0.5	8859071				8.7	0.5	8859071
Total Sulphur (S)	mg/L	2.7	0.5	8865666	2.8	0.5	8865666	8.3	0.5	8865666

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRY344			WRY344			WRY345		
Sampling Date		2023/08/13 08:53			2023/08/13 08:53			2023/08/13 09:27		
COC Number		749677			749677			749677		
	UNITS	MW3-BR-13	RDL	QC Batch	MW3-BR-13 Lab-Dup	RDL	QC Batch	MW3-OB-13	RDL	QC Batch
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8867911	<0.0001	0.0001	8867911	<0.0001	0.0001	8867911
. Tellurium (Te)	mg/L	<0.0001	0.0001	8874547				<0.0005	0.0005	8874547
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8867911	<0.000005	0.000005	8867911	<0.000005	0.000005	8867911
. Thallium (Tl)	mg/L	0.000005	0.000005	8874547				0.000157	0.000025	8874547
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8867911	<0.0002	0.0002	8867911	<0.0002	0.0002	8867911
. Thorium (Th)	mg/L	0.0004	0.0002	8874547				0.002	0.001	8874547
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8867911	<0.0001	0.0001	8867911	0.0001	0.0001	8867911
. Tin (Sn)	mg/L	0.0001	0.0001	8874547				<0.0005	0.0005	8874547
Dissolved Titanium (Ti)	mg/L	0.0012	0.0005	8867911	0.0011	0.0005	8867911	0.0007	0.0005	8867911
. Titanium (Ti)	mg/L	0.0228	0.0005	8874547				0.155	0.0025	8874547
Dissolved Tungsten (W)	mg/L	0.0028	0.0001	8867911	0.0027	0.0001	8867911	0.0001	0.0001	8867911
. Tungsten (W)	mg/L	0.0042	0.0001	8874547				<0.0005	0.0005	8874547
Dissolved Uranium (U)	mg/L	0.00034	0.00001	8867911	0.00034	0.00001	8867911	0.00042	0.00001	8867911
. Uranium (U)	mg/L	0.00053	0.00001	8874547				0.00179	0.00005	8874547
Dissolved Vanadium (V)	mg/L	0.00071	0.00005	8867911	0.00070	0.00005	8867911	0.00009	0.00005	8867911
. Vanadium (V)	mg/L	0.00188	0.00005	8874547				0.0208	0.00025	8874547
Dissolved Zinc (Zn)	mg/L	0.0007	0.0005	8867911	0.0007	0.0005	8867911	0.0011	0.0005	8867911
. Zinc (Zn)	mg/L	0.0060	0.0005	8874547				0.0389	0.0025	8874547
Dissolved Zirconium (Zr)	mg/L	0.0072	0.0001	8867911	0.0072	0.0001	8867911	0.0002	0.0001	8867911
. Zirconium (Zr)	mg/L	0.0093	0.0001	8874547				0.0019	0.0005	8874547

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRY346			WRY346			WRY347		
Sampling Date		2023/08/13 10:15			2023/08/13 10:15			2023/08/13 10:39		
COC Number		749677			749677			749677		
	UNITS	MW03-BR-18	RDL	QC Batch	MW03-BR-18 Lab-Dup	RDL	QC Batch	MW03-OB-18	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	mg/L	0.0803	0.0005	8867911				0.0051	0.0005	8867911
. Aluminum (Al)	mg/L	0.179	0.0005	8874547				1.39	0.0005	8874547
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	8867911				<0.0001	0.0001	8867911
. Antimony (Sb)	mg/L	0.0002	0.0001	8874547				<0.0001	0.0001	8874547
Dissolved Arsenic (As)	mg/L	0.0499	0.0001	8867911				0.0005	0.0001	8867911
. Arsenic (As)	mg/L	0.0508	0.0005	8874547				0.0012	0.0001	8874547
Dissolved Barium (Ba)	mg/L	0.0823	0.0002	8867911				0.0343	0.0002	8867911
. Barium (Ba)	mg/L	0.0866	0.0002	8874547				0.0519	0.0002	8874547
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8867911				<0.00005	0.00005	8867911
. Beryllium (Be)	mg/L	0.00006	0.00005	8874547				0.00009	0.00005	8874547
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8867911				<0.0001	0.0001	8867911
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8874547				<0.0001	0.0001	8874547
Dissolved Boron (B)	mg/L	0.038	0.001	8867911				0.009	0.001	8867911
. Boron (B)	mg/L	0.041	0.001	8874547				0.017	0.001	8874547
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8867911				<0.00001	0.00001	8867911
. Cadmium (Cd)	mg/L	<0.000005	0.000005	8874547				0.000042	0.000005	8874547
Dissolved Calcium (Ca)	mg/L	73.3	0.1	8867911				118	0.1	8867911
. Calcium (Ca)	mg/L	74.9	0.1	8874547				213	0.1	8874547
Dissolved Cesium (Cs)	mg/L	0.00019	0.00002	8867911				<0.00002	0.00002	8867911
. Cesium (Cs)	mg/L	0.00025	0.00002	8874547				0.00015	0.00002	8874547
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8867911				<0.0005	0.0005	8867911
. Chromium (Cr)	mg/L	0.0008	0.0005	8874547				0.0040	0.0005	8874547
Dissolved Cobalt (Co)	mg/L	0.00028	0.00005	8867911				<0.00005	0.00005	8867911
. Cobalt (Co)	mg/L	0.00063	0.00005	8874547				0.00123	0.00005	8874547
Dissolved Copper (Cu)	mg/L	0.0020	0.0001	8867911				0.0001	0.0001	8867911
. Copper (Cu)	mg/L	0.0021	0.0001	8874547				0.0035	0.0001	8874547
Dissolved Iron (Fe)	mg/L	3.31	0.005	8867911				1.14	0.005	8867911
. Iron (Fe)	mg/L	4.42	0.005	8874547				5.31	0.005	8874547
Dissolved Lead (Pb)	mg/L	0.00016	0.00005	8867911				<0.00005	0.00005	8867911
. Lead (Pb)	mg/L	0.00043	0.00005	8874547				0.00197	0.00005	8874547

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRY346			WRY346			WRY347		
Sampling Date		2023/08/13 10:15			2023/08/13 10:15			2023/08/13 10:39		
COC Number		749677			749677			749677		
	UNITS	MW03-BR-18	RDL	QC Batch	MW03-BR-18 Lab-Dup	RDL	QC Batch	MW03-OB-18	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0094	0.0005	8867911				0.0068	0.0005	8867911
. Lithium (Li)	mg/L	0.0098	0.0005	8874547				0.0096	0.0005	8874547
Dissolved Magnesium (Mg)	mg/L	29.2	0.005	8867911				23.8	0.005	8867911
. Magnesium (Mg)	mg/L	29.7	0.005	8874547				51.0	0.025	8874547
Dissolved Manganese (Mn)	mg/L	0.0674	0.0002	8867911				0.0546	0.0002	8867911
. Manganese (Mn)	mg/L	0.0766	0.0002	8874547				0.182	0.0002	8874547
Mercury (Hg)	ug/L	<0.01	0.01	8864392	<0.01	0.01	8864392	<0.01	0.01	8861627
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8864534				<0.01	0.01	8864534
Dissolved Molybdenum (Mo)	mg/L	0.00141	0.00005	8867911				0.00071	0.00005	8867911
. Molybdenum (Mo)	mg/L	0.00147	0.00005	8874547				0.00036	0.00005	8874547
Dissolved Nickel (Ni)	mg/L	0.0008	0.0001	8867911				<0.0001	0.0001	8867911
. Nickel (Ni)	mg/L	0.0017	0.0001	8874547				0.0028	0.0001	8874547
Dissolved Phosphorus (P)	mg/L	0.054	0.005	8867911				0.023	0.005	8867911
. Phosphorus (P)	mg/L	0.065	0.005	8874547				0.473	0.005	8874547
Dissolved Potassium (K)	mg/L	4.20	0.02	8867911				1.88	0.02	8867911
. Potassium (K)	mg/L	4.24	0.02	8874547				2.16	0.02	8874547
Dissolved Rubidium (Rb)	mg/L	0.00122	0.00002	8867911				0.00149	0.00002	8867911
. Rubidium (Rb)	mg/L	0.00134	0.00002	8874547				0.00408	0.00002	8874547
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8867911				<0.0002	0.0002	8867911
. Selenium (Se)	mg/L	<0.00005	0.00005	8874547				<0.00005	0.00005	8874547
Dissolved Silicon (Si)	mg/L	7.91	0.025	8867911				7.16	0.025	8867911
. Silicon (Si)	mg/L	8.29	0.025	8874547				9.49	0.025	8874547
Dissolved Silver (Ag)	mg/L	<0.00005	0.00005	8867911				<0.00001	0.00001	8867911
. Silver (Ag)	mg/L	<0.00001	0.00001	8874547				<0.00001	0.00001	8874547
Dissolved Sodium (Na)	mg/L	13.6	0.01	8867911				3.99	0.01	8867911
. Sodium (Na)	mg/L	13.7	0.01	8874547				4.10	0.01	8874547
Dissolved Strontium (Sr)	mg/L	0.561	0.0001	8867911				0.119	0.0001	8867911
. Strontium (Sr)	mg/L	0.558	0.0001	8874547				0.171	0.0001	8874547
Dissolved Sulphur (S)	mg/L	<0.5	0.5	8859071				7.1	0.5	8859071
Total Sulphur (S)	mg/L	<0.5	0.5	8865666				7.3	0.5	8865666
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8867911				<0.0001	0.0001	8867911

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRY346			WRY346			WRY347		
Sampling Date		2023/08/13 10:15			2023/08/13 10:15			2023/08/13 10:39		
COC Number		749677			749677			749677		
	UNITS	MW03-BR-18	RDL	QC Batch	MW03-BR-18 Lab-Dup	RDL	QC Batch	MW03-OB-18	RDL	QC Batch
. Tellurium (Te)	mg/L	<0.0001	0.0001	8874547				<0.0001	0.0001	8874547
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8867911				<0.000005	0.000005	8867911
. Thallium (Tl)	mg/L	<0.000005	0.000005	8874547				0.000036	0.000005	8874547
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8867911				<0.0002	0.0002	8867911
. Thorium (Th)	mg/L	<0.0002	0.0002	8874547				0.0015	0.0002	8874547
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	8867911				<0.0001	0.0001	8867911
. Tin (Sn)	mg/L	<0.0001	0.0001	8874547				<0.0001	0.0001	8874547
Dissolved Titanium (Ti)	mg/L	0.0031	0.0005	8867911				0.0010	0.0005	8867911
. Titanium (Ti)	mg/L	0.0053	0.0005	8874547				0.0794	0.0025	8874547
Dissolved Tungsten (W)	mg/L	0.0005	0.0001	8867911				<0.0001	0.0001	8867911
. Tungsten (W)	mg/L	0.0004	0.0001	8874547				<0.0001	0.0001	8874547
Dissolved Uranium (U)	mg/L	0.00017	0.00001	8867911				0.00001	0.00001	8867911
. Uranium (U)	mg/L	0.00025	0.00001	8874547				0.00026	0.00001	8874547
Dissolved Vanadium (V)	mg/L	0.00044	0.00005	8867911				<0.00005	0.00005	8867911
. Vanadium (V)	mg/L	0.00097	0.00005	8874547				0.00381	0.00005	8874547
Dissolved Zinc (Zn)	mg/L	0.0021	0.0005	8867911				<0.0005	0.0005	8867911
. Zinc (Zn)	mg/L	0.0049	0.0005	8874547				0.0067	0.0005	8874547
Dissolved Zirconium (Zr)	mg/L	0.0005	0.0001	8867911				0.0002	0.0001	8867911
. Zirconium (Zr)	mg/L	0.0005	0.0001	8874547				0.0013	0.0001	8874547

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRY348			WRY349		
Sampling Date		2023/08/13 13:31			2023/08/13 08:00		
COC Number		749677			749677		
	UNITS	Seep 10	RDL	QC Batch	Duplicate 6	RDL	QC Batch
Metals							
Dissolved Aluminum (Al)	mg/L	0.0048	0.0025	8867911	0.0080	0.0005	8867911
. Aluminum (Al)	mg/L	0.779	0.005	8874547	1.91	0.0025	8874547
Dissolved Antimony (Sb)	mg/L	<0.0005	0.0005	8867911	<0.0001	0.0001	8867911
. Antimony (Sb)	mg/L	<0.001	0.001	8874547	<0.0001	0.0001	8874547
Dissolved Arsenic (As)	mg/L	0.984	0.0001	8867911	0.0005	0.0001	8867911
. Arsenic (As)	mg/L	14.6	0.05	8874547	0.0018	0.0001	8874547
Dissolved Barium (Ba)	mg/L	0.090	0.001	8867911	0.0345	0.0002	8867911
. Barium (Ba)	mg/L	0.166	0.002	8874547	0.0564	0.0002	8874547
Dissolved Beryllium (Be)	mg/L	<0.00025	0.00025	8867911	<0.00005	0.00005	8867911
. Beryllium (Be)	mg/L	<0.0005	0.0005	8874547	0.00013	0.00005	8874547
Dissolved Bismuth (Bi)	mg/L	<0.0005	0.0005	8867911	<0.0001	0.0001	8867911
. Bismuth (Bi)	mg/L	<0.001	0.001	8874547	<0.0001	0.0001	8874547
Dissolved Boron (B)	mg/L	0.077	0.005	8867911	0.009	0.001	8867911
. Boron (B)	mg/L	0.09	0.01	8874547	0.019	0.001	8874547
Dissolved Cadmium (Cd)	mg/L	<0.00005	0.00005	8867911	<0.00001	0.00001	8867911
. Cadmium (Cd)	mg/L	0.00008	0.00005	8874547	0.000059	0.000005	8874547
Dissolved Calcium (Ca)	mg/L	403	0.2	8867911	118	0.1	8867911
. Calcium (Ca)	mg/L	398	0.2	8874547	257	0.2	8874547
Dissolved Cesium (Cs)	mg/L	<0.0001	0.0001	8867911	<0.00002	0.00002	8867911
. Cesium (Cs)	mg/L	<0.0002	0.0002	8874547	0.00022	0.00002	8874547
Dissolved Chromium (Cr)	mg/L	<0.0025	0.0025	8867911	<0.0005	0.0005	8867911
. Chromium (Cr)	mg/L	<0.005	0.005	8874547	0.0062	0.0005	8874547
Dissolved Cobalt (Co)	mg/L	0.00174	0.00025	8867911	<0.00005	0.00005	8867911
. Cobalt (Co)	mg/L	0.0036	0.0005	8874547	0.00189	0.00005	8874547
Dissolved Copper (Cu)	mg/L	0.0008	0.0005	8867911	<0.0001	0.0001	8867911
. Copper (Cu)	mg/L	0.011	0.001	8874547	0.0059	0.0001	8874547
Dissolved Iron (Fe)	mg/L	0.669	0.025	8867911	1.14	0.005	8867911
. Iron (Fe)	mg/L	52.0	0.05	8874547	6.60	0.005	8874547
Dissolved Lead (Pb)	mg/L	<0.00025	0.00025	8867911	<0.00005	0.00005	8867911
. Lead (Pb)	mg/L	0.0034	0.0005	8874547	0.00280	0.00005	8874547
Dissolved Lithium (Li)	mg/L	0.0109	0.0025	8867911	0.0069	0.0005	8867911

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRY348			WRY349		
Sampling Date		2023/08/13 13:31			2023/08/13 08:00		
COC Number		749677			749677		
	UNITS	Seep 10	RDL	QC Batch	Duplicate 6	RDL	QC Batch
. Lithium (Li)	mg/L	0.012	0.005	8874547	0.0111	0.0005	8874547
Dissolved Magnesium (Mg)	mg/L	163	0.025	8867911	23.7	0.005	8867911
. Magnesium (Mg)	mg/L	144	0.05	8874547	61.3	0.025	8874547
Dissolved Manganese (Mn)	mg/L	1.06	0.001	8867911	0.0541	0.0002	8867911
. Manganese (Mn)	mg/L	1.67	0.002	8874547	0.260	0.0002	8874547
Mercury (Hg)	mg/L	<0.00010	0.00010	8864218			
Mercury (Hg)	ug/L				<0.01	0.01	8864392
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8864534	<0.01	0.01	8864534
Dissolved Molybdenum (Mo)	mg/L	<0.00025	0.00025	8867911	0.00069	0.00005	8867911
. Molybdenum (Mo)	mg/L	<0.0005	0.0005	8874547	0.00041	0.00005	8874547
Dissolved Nickel (Ni)	mg/L	0.0014	0.0005	8867911	<0.0001	0.0001	8867911
. Nickel (Ni)	mg/L	0.005	0.001	8874547	0.0040	0.0001	8874547
Dissolved Phosphorus (P)	mg/L	0.073	0.025	8867911	0.023	0.005	8867911
. Phosphorus (P)	mg/L	0.73	0.05	8874547	0.637	0.005	8874547
Dissolved Potassium (K)	mg/L	24.1	0.1	8867911	1.87	0.02	8867911
. Potassium (K)	mg/L	21.9	0.2	8874547	2.39	0.02	8874547
Dissolved Rubidium (Rb)	mg/L	0.0064	0.0001	8867911	0.00141	0.00002	8867911
. Rubidium (Rb)	mg/L	0.0072	0.0002	8874547	0.00569	0.00002	8874547
Dissolved Selenium (Se)	mg/L	<0.001	0.001	8867911	<0.0002	0.0002	8867911
. Selenium (Se)	mg/L	<0.0005	0.0005	8874547	<0.00005	0.00005	8874547
Dissolved Silicon (Si)	mg/L	7.23	0.025	8867911	7.15	0.025	8867911
. Silicon (Si)	mg/L	9.21	0.05	8874547	10.3	0.025	8874547
Dissolved Silver (Ag)	mg/L	<0.00005	0.00005	8867911	<0.00001	0.00001	8867911
. Silver (Ag)	mg/L	<0.0001	0.0001	8874547	<0.00001	0.00001	8874547
Dissolved Sodium (Na)	mg/L	438	0.1	8867911	3.94	0.01	8867911
. Sodium (Na)	mg/L	487	0.1	8874547	4.25	0.01	8874547
Dissolved Strontium (Sr)	mg/L	2.45	0.0005	8867911	0.118	0.0001	8867911
. Strontium (Sr)	mg/L	2.42	0.001	8874547	0.196	0.0001	8874547
Dissolved Sulphur (S)	mg/L	460	0.5	8859071	7.3	0.5	8859071
Total Sulphur (S)	mg/L	420	0.5	8865666	7.9	0.5	8865666
Dissolved Tellurium (Te)	mg/L	<0.0005	0.0005	8867911	<0.0001	0.0001	8867911
. Tellurium (Te)	mg/L	<0.001	0.001	8874547	<0.0001	0.0001	8874547

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WRY348			WRY349		
Sampling Date		2023/08/13 13:31			2023/08/13 08:00		
COC Number		749677			749677		
	UNITS	Seep 10	RDL	QC Batch	Duplicate 6	RDL	QC Batch
Dissolved Thallium (Tl)	mg/L	<0.000025	0.000025	8867911	<0.000005	0.000005	8867911
. Thallium (Tl)	mg/L	<0.00005	0.00005	8874547	0.000050	0.000005	8874547
Dissolved Thorium (Th)	mg/L	<0.001	0.001	8867911	<0.0002	0.0002	8867911
. Thorium (Th)	mg/L	<0.002	0.002	8874547	0.0023	0.0002	8874547
Dissolved Tin (Sn)	mg/L	<0.0005	0.0005	8867911	<0.0001	0.0001	8867911
. Tin (Sn)	mg/L	<0.001	0.001	8874547	<0.0001	0.0001	8874547
Dissolved Titanium (Ti)	mg/L	<0.0025	0.0025	8867911	0.0013	0.0005	8867911
. Titanium (Ti)	mg/L	0.026	0.005	8874547	0.118	0.0025	8874547
Dissolved Tungsten (W)	mg/L	0.0012	0.0005	8867911	<0.0001	0.0001	8867911
. Tungsten (W)	mg/L	0.003	0.001	8874547	<0.0001	0.0001	8874547
Dissolved Uranium (U)	mg/L	0.00036	0.00005	8867911	0.00002	0.00001	8867911
. Uranium (U)	mg/L	0.0008	0.0001	8874547	0.00047	0.00001	8874547
Dissolved Vanadium (V)	mg/L	<0.00025	0.00025	8867911	0.00005	0.00005	8867911
. Vanadium (V)	mg/L	0.0041	0.0005	8874547	0.00645	0.00005	8874547
Dissolved Zinc (Zn)	mg/L	0.0029	0.0025	8867911	<0.0005	0.0005	8867911
. Zinc (Zn)	mg/L	0.042	0.005	8874547	0.0087	0.0005	8874547
Dissolved Zirconium (Zr)	mg/L	<0.0005	0.0005	8867911	0.0002	0.0001	8867911
. Zirconium (Zr)	mg/L	0.002	0.001	8874547	0.0013	0.0001	8874547

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O7765
Report Date: 2023/08/26

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

TEST SUMMARY

Bureau Veritas ID: WRY344
Sample ID: MW3-BR-13
Matrix: Water

Collected: 2023/08/13
Shipped:
Received: 2023/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8877027	N/A	2023/08/25	Brent Boudreau
Alkalinity	AT	8860827	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8856683	N/A	2023/08/18	Automated Statchk
Chloride by Automated Colourimetry	KONE	8860863	N/A	2023/08/18	Alina Dobreanu
Conductivity	AT	8860835	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8860828	2023/08/17	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8858774	N/A	2023/08/23	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8864534	2023/08/17	2023/08/21	Gagandeep Rai
Mercury (low level)	CV/AA	8861627	2023/08/18	2023/08/21	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8859071	2023/08/17	2023/08/17	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8867911	N/A	2023/08/22	Thuy Linh Nguyen
Metals in Water by ICPMS (low level)	ICP1/MS	8874547	N/A	2023/08/25	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8865666	2023/08/21	2023/08/21	Suban Kanapathippllai
Cyanide (Free)	SPEC	8875715	N/A	2023/08/24	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8875714	2023/08/22	2023/08/22	Ming Dong
Total Phosphorus Low Level Total	KONE	8872240	2023/08/20	2023/08/22	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8859848	N/A	2023/08/22	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8860529	N/A	2023/08/18	Chandra Nandlal
pH	AT	8860816	2023/08/17	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Harmanpreet Kaur
Sulphate by Automated Turbidimetry	KONE	8860875	N/A	2023/08/18	Alina Dobreanu
Total Dissolved Solids	BAL	8859298	2023/08/17	2023/08/18	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Harmanpreet Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8859855	2023/08/17	2023/08/21	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8859313	2023/08/17	2023/08/18	Shaneil Hall
Turbidity	AT	8857999	N/A	2023/08/18	Gurparteek KAUR

Bureau Veritas ID: WRY344 Dup
Sample ID: MW3-BR-13
Matrix: Water

Collected: 2023/08/13
Shipped:
Received: 2023/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals by ICPMS (low level)	ICP1/MS	8867911	N/A	2023/08/22	Thuy Linh Nguyen
Total Metals Analysis by ICP	ICP	8865666	2023/08/21	2023/08/21	Suban Kanapathippllai
Nitrate & Nitrite as Nitrogen in Water	LACH	8860529	N/A	2023/08/18	Chandra Nandlal

Bureau Veritas ID: WRY345
Sample ID: MW3-OB-13
Matrix: Water

Collected: 2023/08/13
Shipped:
Received: 2023/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8874040	N/A	2023/08/24	Brent Boudreau
Alkalinity	AT	8860827	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8856683	N/A	2023/08/18	Automated Statchk

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O7765
Report Date: 2023/08/26

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

TEST SUMMARY

Bureau Veritas ID: WRY345
Sample ID: MW3-OB-13
Matrix: Water

Collected: 2023/08/13
Shipped:
Received: 2023/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	8860863	N/A	2023/08/18	Alina Dobreanu
Conductivity	AT	8860835	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8860828	2023/08/17	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8855623	N/A	2023/08/23	Automated Statchk
Mercury in Water by CVAA	CV/AA	8864218	2023/08/19	2023/08/21	Gagandeep Rai
Dissolved Mercury (low level)	CV/AA	8864534	2023/08/19	2023/08/21	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8859071	2023/08/17	2023/08/17	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8867911	N/A	2023/08/22	Thuy Linh Nguyen
Metals in Water by ICPMS (low level)	ICP1/MS	8874547	N/A	2023/08/25	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8865666	2023/08/21	2023/08/21	Suban Kanapathippllai
Cyanide (Free)	SPEC	8875715	N/A	2023/08/24	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8875714	2023/08/22	2023/08/22	Ming Dong
Total Phosphorus Low Level Total	KONE	8872240	2023/08/20	2023/08/22	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8859848	N/A	2023/08/22	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8860529	N/A	2023/08/18	Chandra Nandlal
pH	AT	8860816	2023/08/17	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Harmanpreet Kaur
Sulphate by Automated Turbidimetry	KONE	8860875	N/A	2023/08/18	Alina Dobreanu
Total Dissolved Solids	BAL	8859298	2023/08/17	2023/08/18	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Harmanpreet Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8859855	2023/08/17	2023/08/21	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8859313	2023/08/17	2023/08/18	Shaneil Hall
Turbidity	AT	8857999	N/A	2023/08/18	Gurparteek KAUR

Bureau Veritas ID: WRY346
Sample ID: MW03-BR-18
Matrix: Water

Collected: 2023/08/13
Shipped:
Received: 2023/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8874040	N/A	2023/08/24	Brent Boudreau
Alkalinity	AT	8860827	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8856683	N/A	2023/08/18	Automated Statchk
Chloride by Automated Colourimetry	KONE	8860863	N/A	2023/08/18	Alina Dobreanu
Conductivity	AT	8860835	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8860828	2023/08/17	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8855623	N/A	2023/08/23	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8864534	2023/08/19	2023/08/21	Gagandeep Rai
Mercury (low level)	CV/AA	8864392	2023/08/19	2023/08/22	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8859071	2023/08/17	2023/08/17	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8867911	N/A	2023/08/22	Thuy Linh Nguyen
Metals in Water by ICPMS (low level)	ICP1/MS	8874547	N/A	2023/08/25	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8865666	2023/08/21	2023/08/21	Suban Kanapathippllai
Cyanide (Free)	SPEC	8875715	N/A	2023/08/24	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8875714	2023/08/22	2023/08/22	Ming Dong

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WRY346
Sample ID: MW03-BR-18
Matrix: Water

Collected: 2023/08/13
Shipped:
Received: 2023/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Phosphorus Low Level Total	KONE	8872240	2023/08/20	2023/08/23	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8859848	N/A	2023/08/22	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8860529	N/A	2023/08/18	Chandra Nandlal
pH	AT	8860816	2023/08/17	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Harmanpreet Kaur
Sulphate by Automated Turbidimetry	KONE	8860875	N/A	2023/08/18	Alina Dobreanu
Total Dissolved Solids	BAL	8859298	2023/08/17	2023/08/18	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Harmanpreet Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8859855	2023/08/17	2023/08/21	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8859313	2023/08/17	2023/08/18	Shaneil Hall
Turbidity	AT	8857999	N/A	2023/08/18	Gurparteek KAUR

Bureau Veritas ID: WRY346 Dup
Sample ID: MW03-BR-18
Matrix: Water

Collected: 2023/08/13
Shipped:
Received: 2023/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	8860863	N/A	2023/08/18	Alina Dobreanu
Mercury (low level)	CV/AA	8864392	2023/08/19	2023/08/22	Japneet Gill
Sulphate by Automated Turbidimetry	KONE	8860875	N/A	2023/08/18	Alina Dobreanu

Bureau Veritas ID: WRY347
Sample ID: MW03-OB-18
Matrix: Water

Collected: 2023/08/13
Shipped:
Received: 2023/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8874040	N/A	2023/08/24	Brent Boudreau
Alkalinity	AT	8860827	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8856683	N/A	2023/08/18	Automated Statchk
Chloride by Automated Colourimetry	KONE	8860863	N/A	2023/08/18	Alina Dobreanu
Conductivity	AT	8860835	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8860828	2023/08/17	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8855623	N/A	2023/08/23	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8864534	2023/08/19	2023/08/21	Gagandeep Rai
Mercury (low level)	CV/AA	8861627	2023/08/18	2023/08/21	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8859071	2023/08/17	2023/08/17	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8867911	N/A	2023/08/22	Thuy Linh Nguyen
Metals in Water by ICPMS (low level)	ICP1/MS	8874547	N/A	2023/08/25	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8865666	2023/08/21	2023/08/21	Suban Kanapathippllai
Cyanide (Free)	SPEC	8875715	N/A	2023/08/24	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8875714	2023/08/22	2023/08/22	Ming Dong
Total Phosphorus Low Level Total	KONE	8872240	2023/08/20	2023/08/22	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8859848	N/A	2023/08/22	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8860529	N/A	2023/08/18	Chandra Nandlal

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WRY347
Sample ID: MW03-OB-18
Matrix: Water

Collected: 2023/08/13
Shipped:
Received: 2023/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH	AT	8860816	2023/08/17	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Harmanpreet Kaur
Sulphate by Automated Turbidimetry	KONE	8860875	N/A	2023/08/18	Alina Dobreanu
Total Dissolved Solids	BAL	8859298	2023/08/17	2023/08/18	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Harmanpreet Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8859855	2023/08/17	2023/08/21	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8859313	2023/08/17	2023/08/18	Shaneil Hall
Turbidity	AT	8857999	N/A	2023/08/18	Gurparteek KAUR

Bureau Veritas ID: WRY347 Dup
Sample ID: MW03-OB-18
Matrix: Water

Collected: 2023/08/13
Shipped:
Received: 2023/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8860827	N/A	2023/08/18	Nachiketa Gohil
Conductivity	AT	8860835	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8860828	2023/08/17	2023/08/18	Nachiketa Gohil
pH	AT	8860816	2023/08/17	2023/08/18	Nachiketa Gohil

Bureau Veritas ID: WRY348
Sample ID: Seep 10
Matrix: Water

Collected: 2023/08/13
Shipped:
Received: 2023/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8874040	N/A	2023/08/24	Brent Boudreau
Alkalinity	AT	8860827	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8856683	N/A	2023/08/18	Automated Statchk
Chloride by Automated Colourimetry	KONE	8860863	N/A	2023/08/18	Alina Dobreanu
Conductivity	AT	8860835	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8860828	2023/08/17	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8858774	N/A	2023/08/23	Automated Statchk
Mercury in Water by CVAA	CV/AA	8864218	2023/08/19	2023/08/21	Gagandeep Rai
Dissolved Mercury (low level)	CV/AA	8864534	2023/08/19	2023/08/21	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8859071	2023/08/17	2023/08/17	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8867911	N/A	2023/08/22	Thuy Linh Nguyen
Metals in Water by ICPMS (low level)	ICP1/MS	8874547	N/A	2023/08/25	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8865666	2023/08/21	2023/08/21	Suban Kanapathippllai
Cyanide (Free)	SPEC	8875715	N/A	2023/08/24	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8875714	2023/08/22	2023/08/22	Ming Dong
Total Phosphorus Low Level Total	KONE	8872240	2023/08/20	2023/08/22	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8859848	N/A	2023/08/22	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8860529	N/A	2023/08/18	Chandra Nandlal
pH	AT	8860816	2023/08/17	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Harmanpreet Kaur

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O7765
Report Date: 2023/08/26

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

TEST SUMMARY

Bureau Veritas ID: WRY348
Sample ID: Seep 10
Matrix: Water

Collected: 2023/08/13
Shipped:
Received: 2023/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Sulphate by Automated Turbidimetry	KONE	8860875	N/A	2023/08/18	Alina Dobreanu
Total Dissolved Solids	BAL	8859298	2023/08/17	2023/08/18	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/16	Harmanpreet Kaur
Total Kjeldahl Nitrogen in Water	SKAL	8859855	2023/08/17	2023/08/22	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8859313	2023/08/17	2023/08/18	Shaneil Hall
Turbidity	AT	8857999	N/A	2023/08/18	Gurparteek KAUR

Bureau Veritas ID: WRY349
Sample ID: Duplicate 6
Matrix: Water

Collected: 2023/08/13
Shipped:
Received: 2023/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8874040	N/A	2023/08/24	Brent Boudreau
Alkalinity	AT	8860827	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8856683	N/A	2023/08/18	Automated Statchk
Chloride by Automated Colourimetry	KONE	8860863	N/A	2023/08/18	Alina Dobreanu
Conductivity	AT	8860835	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8860828	2023/08/17	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8858774	N/A	2023/08/23	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8864534	2023/08/19	2023/08/21	Gagandeep Rai
Mercury (low level)	CV/AA	8864392	2023/08/19	2023/08/22	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8859071	2023/08/17	2023/08/17	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8867911	N/A	2023/08/22	Thuy Linh Nguyen
Metals in Water by ICPMS (low level)	ICP1/MS	8874547	N/A	2023/08/25	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8865666	2023/08/21	2023/08/21	Suban Kanapathippllai
Cyanide (Free)	SPEC	8875715	N/A	2023/08/24	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8875716	2023/08/23	2023/08/23	Ming Dong
Total Phosphorus Low Level Total	KONE	8872240	2023/08/20	2023/08/22	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8859848	N/A	2023/08/22	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8860529	N/A	2023/08/18	Chandra Nandlal
pH	AT	8860816	2023/08/17	2023/08/18	Nachiketa Gohil
Sulphate by Automated Turbidimetry	KONE	8860875	N/A	2023/08/18	Alina Dobreanu
Total Dissolved Solids	BAL	8859298	2023/08/17	2023/08/18	Shaneil Hall
Total Kjeldahl Nitrogen in Water	SKAL	8859855	2023/08/17	2023/08/21	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8859313	2023/08/17	2023/08/18	Shaneil Hall
Turbidity	AT	8857999	N/A	2023/08/18	Gurparteek KAUR

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	2.3°C
Package 2	1.3°C
Package 3	2.3°C

Sample WRY344 [MW3-BR-13] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
Acidity sample contained headspace.

Sample WRY345 [MW3-OB-13] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
Metals:Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Metal Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample WRY346 [MW03-BR-18] : TKN < Ammonia: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample WRY347 [MW03-OB-18] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.

Sample WRY348 [Seep 10] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
Metal Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample WRY349 [Duplicate 6] : acidity sample contained headspace.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8857999	Turbidity	2023/08/18			99	80 - 120	<0.1	NTU	5.6	20		
8859071	Dissolved Sulphur (S)	2023/08/17	NC	80 - 120	96	80 - 120	<0.5	mg/L	3.4	25		
8859298	Total Dissolved Solids	2023/08/18			98	90 - 110	<10	mg/L	1.5	20		
8859313	Total Suspended Solids	2023/08/18			95	85 - 115	<1	mg/L	15	20		
8859848	Total Ammonia-N	2023/08/22	101	75 - 125	101	80 - 120	<0.050	mg/L	NC	20		
8859855	Total Kjeldahl Nitrogen (TKN)	2023/08/21	NC	80 - 120	100	80 - 120	<0.10	mg/L	5.0	20	102	80 - 120
8860529	Nitrate (N)	2023/08/18	92	80 - 120	94	80 - 120	<0.10	mg/L	NC	20		
8860529	Nitrite (N)	2023/08/18	105	80 - 120	106	80 - 120	<0.010	mg/L	NC	20		
8860816	pH	2023/08/18			102	98 - 103			0.39	N/A		
8860827	Alkalinity (Total as CaCO3)	2023/08/18			95	85 - 115	<1.0	mg/L	0.25	20		
8860828	Fluoride (F-)	2023/08/18	97	80 - 120	97	80 - 120	<0.10	mg/L	1.4	20		
8860835	Conductivity	2023/08/18			101	85 - 115	<0.001	mS/cm	0.31	10		
8860863	Dissolved Chloride (Cl-)	2023/08/18	89	80 - 120	99	80 - 120	<1.0	mg/L	2.3	20		
8860875	Dissolved Sulphate (SO4)	2023/08/18	91	75 - 125	102	80 - 120	<1.0	mg/L	NC	20		
8861627	Mercury (Hg)	2023/08/21	98	75 - 125	97	80 - 120	<0.01	ug/L	NC	20		
8864218	Mercury (Hg)	2023/08/21	99	75 - 125	101	80 - 120	<0.00010	mg/L	NC	20		
8864392	Mercury (Hg)	2023/08/22	100	75 - 125	99	80 - 120	<0.01	ug/L	NC	20		
8864534	Dissolved Mercury (Hg)	2023/08/21	98	75 - 125	96	80 - 120	<0.01	ug/L	NC	20		
8865666	Total Sulphur (S)	2023/08/21	99	80 - 120	97	80 - 120	<0.5	mg/L	1.6	25		
8867911	Dissolved Aluminum (Al)	2023/08/22	105	80 - 120	104	80 - 120	<0.0005	mg/L	1.1	20		
8867911	Dissolved Antimony (Sb)	2023/08/22	115	80 - 120	105	80 - 120	<0.0001	mg/L	NC	20		
8867911	Dissolved Arsenic (As)	2023/08/22	NC	80 - 120	100	80 - 120	<0.0001	mg/L	0.23	20		
8867911	Dissolved Barium (Ba)	2023/08/22	NC	80 - 120	101	80 - 120	<0.0002	mg/L	1.4	20		
8867911	Dissolved Beryllium (Be)	2023/08/22	103	80 - 120	96	80 - 120	<0.00005	mg/L	5.7	20		
8867911	Dissolved Bismuth (Bi)	2023/08/22	87	80 - 120	98	80 - 120	<0.0001	mg/L	NC	20		
8867911	Dissolved Boron (B)	2023/08/22	101	80 - 120	96	80 - 120	<0.001	mg/L	3.1	20		
8867911	Dissolved Cadmium (Cd)	2023/08/22	109	80 - 120	98	80 - 120	<0.00001	mg/L	NC	20		
8867911	Dissolved Calcium (Ca)	2023/08/22	NC	80 - 120	103	80 - 120	<0.02	mg/L	2.2	20		
8867911	Dissolved Cesium (Cs)	2023/08/22	104	80 - 120	107	80 - 120	<0.00002	mg/L	NC	N/A		
8867911	Dissolved Chromium (Cr)	2023/08/22	104	80 - 120	99	80 - 120	<0.0005	mg/L	1.2	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8867911	Dissolved Cobalt (Co)	2023/08/22	102	80 - 120	98	80 - 120	<0.00005	mg/L	0.95	20		
8867911	Dissolved Copper (Cu)	2023/08/22	106	80 - 120	105	80 - 120	<0.0001	mg/L	NC	20		
8867911	Dissolved Iron (Fe)	2023/08/22	NC	80 - 120	105	80 - 120	<0.005	mg/L	0.064	20		
8867911	Dissolved Lead (Pb)	2023/08/22	102	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8867911	Dissolved Lithium (Li)	2023/08/22	109	80 - 120	102	80 - 120	<0.0005	mg/L	1.9	20		
8867911	Dissolved Magnesium (Mg)	2023/08/22	NC	80 - 120	107	80 - 120	<0.005	mg/L	0.49	20		
8867911	Dissolved Manganese (Mn)	2023/08/22	NC	80 - 120	101	80 - 120	<0.0002	mg/L	0.55	20		
8867911	Dissolved Molybdenum (Mo)	2023/08/22	117	80 - 120	105	80 - 120	<0.00005	mg/L	2.6	20		
8867911	Dissolved Nickel (Ni)	2023/08/22	98	80 - 120	97	80 - 120	<0.0001	mg/L	3.7	20		
8867911	Dissolved Phosphorus (P)	2023/08/22	NC	80 - 120	104	80 - 120	<0.005	mg/L	1.1	20		
8867911	Dissolved Potassium (K)	2023/08/22	111	80 - 120	110	80 - 120	<0.02	mg/L	0.021	20		
8867911	Dissolved Rubidium (Rb)	2023/08/22	109	80 - 120	102	80 - 120	<0.00002	mg/L	5.5	N/A		
8867911	Dissolved Selenium (Se)	2023/08/22	104	80 - 120	95	80 - 120	<0.0002	mg/L	NC	20		
8867911	Dissolved Silicon (Si)	2023/08/22	NC	80 - 120	105	80 - 120	<0.005	mg/L	3.4	20		
8867911	Dissolved Silver (Ag)	2023/08/22	93	80 - 120	101	80 - 120	<0.00001	mg/L	NC	20		
8867911	Dissolved Sodium (Na)	2023/08/22	NC	80 - 120	109	80 - 120	<0.01	mg/L	1.5	20		
8867911	Dissolved Strontium (Sr)	2023/08/22	NC	80 - 120	98	80 - 120	<0.0001	mg/L	0.73	20		
8867911	Dissolved Tellurium (Te)	2023/08/22	102	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8867911	Dissolved Thallium (Tl)	2023/08/22	105	80 - 120	100	80 - 120	<0.000005	mg/L	NC	20		
8867911	Dissolved Thorium (Th)	2023/08/22	94	80 - 120	96	80 - 120	<0.0002	mg/L	NC	20		
8867911	Dissolved Tin (Sn)	2023/08/22	115	80 - 120	102	80 - 120	<0.0001	mg/L	NC	20		
8867911	Dissolved Titanium (Ti)	2023/08/22	110	80 - 120	102	80 - 120	<0.0005	mg/L	10	20		
8867911	Dissolved Tungsten (W)	2023/08/22	110	80 - 120	99	80 - 120	<0.0001	mg/L	1.0	20		
8867911	Dissolved Uranium (U)	2023/08/22	107	80 - 120	97	80 - 120	<0.00001	mg/L	0	20		
8867911	Dissolved Vanadium (V)	2023/08/22	108	80 - 120	102	80 - 120	<0.00005	mg/L	1.6	20		
8867911	Dissolved Zinc (Zn)	2023/08/22	100	80 - 120	98	80 - 120	<0.0005	mg/L	2.5	20		
8867911	Dissolved Zirconium (Zr)	2023/08/22	123 (1)	80 - 120	109	80 - 120	<0.0001	mg/L	0.54	20		
8872240	Total Phosphorus (P)	2023/08/22	121 (2)	80 - 120	106	80 - 120	<0.0010	mg/L			84	80 - 120
8874040	Acidity	2023/08/24	93	80 - 120	103	80 - 120	<5.0	mg/L	NC	25		
8874547	. Aluminum (Al)	2023/08/25	NC	80 - 120	100	80 - 120	<0.0005	mg/L	1.2	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8874547	. Antimony (Sb)	2023/08/25	118	80 - 120	103	80 - 120	<0.0001	mg/L				
8874547	. Arsenic (As)	2023/08/25	114	80 - 120	100	80 - 120	<0.0001	mg/L				
8874547	. Barium (Ba)	2023/08/25	107	80 - 120	96	80 - 120	<0.0002	mg/L				
8874547	. Beryllium (Be)	2023/08/25	109	80 - 120	100	80 - 120	<0.00005	mg/L				
8874547	. Bismuth (Bi)	2023/08/25	105	80 - 120	103	80 - 120	<0.0001	mg/L				
8874547	. Boron (B)	2023/08/25	110	80 - 120	101	80 - 120	<0.001	mg/L				
8874547	. Cadmium (Cd)	2023/08/25	111	80 - 120	97	80 - 120	<0.000005	mg/L				
8874547	. Calcium (Ca)	2023/08/25	NC	80 - 120	100	80 - 120	<0.02	mg/L	1.0	20		
8874547	. Cesium (Cs)	2023/08/25	108	80 - 120	100	80 - 120	<0.00002	mg/L				
8874547	. Chromium (Cr)	2023/08/25	107	80 - 120	97	80 - 120	<0.0005	mg/L				
8874547	. Cobalt (Co)	2023/08/25	105	80 - 120	98	80 - 120	<0.00005	mg/L				
8874547	. Copper (Cu)	2023/08/25	109	80 - 120	99	80 - 120	<0.0001	mg/L	4.3	20		
8874547	. Iron (Fe)	2023/08/25	109	80 - 120	100	80 - 120	<0.005	mg/L	0.48	20		
8874547	. Lead (Pb)	2023/08/25	103	80 - 120	97	80 - 120	<0.00005	mg/L				
8874547	. Lithium (Li)	2023/08/25	113	80 - 120	103	80 - 120	<0.0005	mg/L				
8874547	. Magnesium (Mg)	2023/08/25	NC	80 - 120	99	80 - 120	<0.005	mg/L	0.12	20		
8874547	. Manganese (Mn)	2023/08/25	108	80 - 120	97	80 - 120	<0.0002	mg/L	2.9	20		
8874547	. Molybdenum (Mo)	2023/08/25	116	80 - 120	102	80 - 120	<0.00005	mg/L				
8874547	. Nickel (Ni)	2023/08/25	105	80 - 120	98	80 - 120	<0.0001	mg/L				
8874547	. Phosphorus (P)	2023/08/25	NC	80 - 120	99	80 - 120	<0.005	mg/L				
8874547	. Potassium (K)	2023/08/25	109	80 - 120	98	80 - 120	<0.02	mg/L				
8874547	. Rubidium (Rb)	2023/08/25	109	80 - 120	100	80 - 120	<0.00002	mg/L				
8874547	. Selenium (Se)	2023/08/25	114	80 - 120	100	80 - 120	<0.00005	mg/L				
8874547	. Silicon (Si)	2023/08/25	110	80 - 120	102	80 - 120	<0.005	mg/L				
8874547	. Silver (Ag)	2023/08/25	110	80 - 120	101	80 - 120	<0.00001	mg/L				
8874547	. Sodium (Na)	2023/08/25	NC	80 - 120	100	80 - 120	<0.01	mg/L				
8874547	. Strontium (Sr)	2023/08/25	NC	80 - 120	97	80 - 120	<0.0001	mg/L				
8874547	. Tellurium (Te)	2023/08/25	115	80 - 120	98	80 - 120	<0.0001	mg/L				
8874547	. Thallium (Tl)	2023/08/25	106	80 - 120	98	80 - 120	<0.000005	mg/L				
8874547	. Thorium (Th)	2023/08/25	96	80 - 120	100	80 - 120	<0.0002	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8874547	. Tin (Sn)	2023/08/25	113	80 - 120	100	80 - 120	<0.0001	mg/L				
8874547	. Titanium (Ti)	2023/08/25	110	80 - 120	99	80 - 120	<0.0005	mg/L				
8874547	. Tungsten (W)	2023/08/25	111	80 - 120	101	80 - 120	<0.0001	mg/L				
8874547	. Uranium (U)	2023/08/25	108	80 - 120	107	80 - 120	<0.00001	mg/L				
8874547	. Vanadium (V)	2023/08/25	111	80 - 120	98	80 - 120	<0.00005	mg/L				
8874547	. Zinc (Zn)	2023/08/25	110	80 - 120	98	80 - 120	<0.0005	mg/L	6.7	20		
8874547	. Zirconium (Zr)	2023/08/25	116	80 - 120	101	80 - 120	<0.0001	mg/L				
8875714	Strong Acid Dissoc. Cyanide (CN)	2023/08/22	101	80 - 120	101	80 - 120	<0.00050	mg/L				
8875715	Free Cyanide (CN)	2023/08/24	96	80 - 120	89	80 - 120	<2.0	ug/L				
8875716	Strong Acid Dissoc. Cyanide (CN)	2023/08/23	102	80 - 120	104	80 - 120	<0.00050	mg/L				
8877027	Acidity	2023/08/25	96	80 - 120	103	80 - 120	<5.0	mg/L	NC	25		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike exceeds acceptance limits, probable matrix interference

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

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O7765
Report Date: 2023/08/26

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: RD

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Cristina Carriere, Senior Scientific Specialist

<original signed by>

Janah Rhyno, Scientific Specialist

<original signed by>

Sandy Yuan, M.Sc., QP, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 750943

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/31
Report #: R7791014
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3O9982
Received: 2023/08/16, 17:19

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	3	N/A	2023/08/29	ATL SOP-00205	SM 24 2310B m
Alkalinity	4	N/A	2023/08/23	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	4	N/A	2023/08/24	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	4	N/A	2023/08/23	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	4	N/A	2023/08/23	CAM SOP-00414	SM 23 2510 m
Fluoride	4	2023/08/22	2023/08/23	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	3	N/A	2023/08/26	CAM SOP 00102/00408/00447	SM 2340 B
Dissolved Mercury (low level)	4	2023/08/23	2023/08/23	CAM SOP-00453	EPA 7470 m
Mercury (low level)	4	2023/08/23	2023/08/23	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	4	2023/08/23	2023/08/24	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	4	N/A	2023/08/25	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	4	N/A	2023/08/30	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	4	2023/08/23	2023/08/24	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	4	N/A	2023/08/28	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	4	2023/08/25	2023/08/25	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	4	2023/08/27	2023/08/28	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	4	N/A	2023/08/23	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (3)	4	N/A	2023/08/27	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	4	2023/08/22	2023/08/23	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (4)	4	N/A	2023/08/17		Field pH Meter
Sulphate by Automated Turbidimetry	4	N/A	2023/08/23	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	3	2023/08/22	2023/08/23	CAM SOP-00428	SM 23 2540C m
Field Temperature (4)	4	N/A	2023/08/17		Field Thermometer
Total Kjeldahl Nitrogen in Water	4	2023/08/23	2023/08/24	CAM SOP-00938	OMOE E3516 m
Low Level Total Suspended Solids	3	2023/08/23	2023/08/23	CAM SOP-00428	SM 23 2540D m
Turbidity	1	N/A	2023/08/22	CAM SOP-00417	SM 23 2130 B m
Turbidity	3	N/A	2023/08/23	CAM SOP-00417	SM 23 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 750943

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/31
Report #: R7791014
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3O9982
Received: 2023/08/16, 17:19

(3) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(4) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C3O9982
Report Date: 2023/08/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: WM

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WSK546		WSK547			WSK547		
Sampling Date		2023/08/15 08:00		2023/08/15 10:29			2023/08/15 10:29		
COC Number		750943		750943			750943		
	UNITS	Duplicate1	RDL	MWS-14-04	RDL	QC Batch	MWS-14-04 Lab-Dup	RDL	QC Batch
Calculated Parameters									
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	370	1.0	330	1.0	8862602			
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	2.2	1.0	8862602			
Hardness (CaCO3)	mg/L	370	1.0	330	1.0	8862961			
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	<1.0	1.0	8862602			
Field Measurements									
Field Temperature	Celsius	0	N/A	11.6	N/A	ONSITE			
Field Measured pH	pH	0		7.25		ONSITE			
Inorganics									
Acidity	mg/L	39	5.0	8.6	5.0	8883391			
Total Ammonia-N	mg/L	0.16	0.050	<0.050	0.050	8870994			
Conductivity	mS/cm	0.696	0.001	0.624	0.001	8870320	0.617	0.001	8870320
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	2.1 (1)	2.0	8882654			
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.00062	0.00050	<0.00050 (2)	0.00050	8882653			
Total Dissolved Solids	mg/L	400	10	340	10	8870145			
Fluoride (F-)	mg/L	0.18	0.10	0.16	0.10	8870325	0.15	0.10	8870325
Total Kjeldahl Nitrogen (TKN)	mg/L	0.58	0.10	0.17	0.10	8871271			
pH	pH	7.39		7.86		8870326	7.99		8870326
Total Phosphorus (P)	mg/L	0.84	0.010	0.0017	0.0010	8882652			
Total Suspended Solids	mg/L	2500	5	11	1	8870558	12	1	8870558
Dissolved Sulphate (SO4)	mg/L	31	1.0	20	1.0	8870295			
Turbidity	NTU	630	0.1	1.2	0.1	8870285	1.1	0.1	8870285
Alkalinity (Total as CaCO3)	mg/L	370	1.0	330	1.0	8870323	330	1.0	8870323
Dissolved Chloride (Cl-)	mg/L	5.4	1.0	<1.0	1.0	8870291			
Nitrite (N)	mg/L	<0.010	0.010	0.017	0.010	8870265			
Nitrate (N)	mg/L	<0.10	0.10	0.12	0.10	8870265			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O9982
Report Date: 2023/08/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: WM

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WSK546		WSK547			WSK547		
Sampling Date		2023/08/15 08:00		2023/08/15 10:29			2023/08/15 10:29		
COC Number		750943		750943			750943		
	UNITS	**Duplicate1**	**RDL**	**MWS-14-04**	**RDL**	**QC Batch**	**MWS-14-04 Lab-Dup**	**RDL**	**QC Batch**
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	0.13	0.10	8870265			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O9982
Report Date: 2023/08/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: WM

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WSK548			WSK548			WSK549		
Sampling Date		2023/08/15 12:54			2023/08/15 12:54			2023/08/15 08:00		
COC Number		750943			750943			750943		
	UNITS	BH14-15	RDL	QC Batch	BH14-15 Lab-Dup	RDL	QC Batch	Travel Blank	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	370	1.0	8862602				1.7	1.0	8862602
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8862602				<1.0	1.0	8862602
Hardness (CaCO3)	mg/L	370	1.0	8862961						
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8862602				<1.0	1.0	8862602
Field Measurements										
Field Temperature	Celsius	15.5	N/A	ONSITE				0	N/A	ONSITE
Field Measured pH	pH	6.70		ONSITE				0		ONSITE
Inorganics										
Acidity	mg/L	33	5.0	8883391						
Total Ammonia-N	mg/L	0.15	0.050	8870994				<0.050	0.050	8870994
Conductivity	mS/cm	0.688	0.001	8870320				0.001	0.001	8870320
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	8882654				<2.0 (1)	2.0	8882654
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.00051	0.00050	8882653				<0.00050	0.00050	8882653
Total Dissolved Solids	mg/L	425	10	8870145	430	10	8870145			
Fluoride (F-)	mg/L	0.17	0.10	8870325				<0.10	0.10	8870325
Total Kjeldahl Nitrogen (TKN)	mg/L	0.74	0.10	8871271				<0.10	0.10	8871271
pH	pH	7.38		8870326				6.58		8870326
Total Phosphorus (P)	mg/L	1.5	0.010	8882652				<0.0010	0.0010	8882652
Total Suspended Solids	mg/L	2100	5	8870558						
Dissolved Sulphate (SO4)	mg/L	31	1.0	8870295				<1.0	1.0	8870295
Turbidity	NTU	480	0.1	8870285				<0.1	0.1	8869856
Alkalinity (Total as CaCO3)	mg/L	370	1.0	8870323				1.7	1.0	8870323
Dissolved Chloride (Cl-)	mg/L	4.6	1.0	8870291				<1.0	1.0	8870291
Nitrite (N)	mg/L	0.010	0.010	8870265				<0.010	0.010	8870265
Nitrate (N)	mg/L	<0.10	0.10	8870265				<0.10	0.10	8870265
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8870265				<0.10	0.10	8870265

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WSK546		WSK547			WSK547		
Sampling Date		2023/08/15 08:00		2023/08/15 10:29			2023/08/15 10:29		
COC Number		750943		750943			750943		
	UNITS	Duplicate1	RDL	MWS-14-04	RDL	QC Batch	MWS-14-04 Lab-Dup	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	mg/L	0.0033	0.0005	0.0011	0.0005	8873711	0.0009	0.0005	8873711
. Aluminum (Al)	mg/L	5.41	0.0025	0.0439	0.0005	8886745			
Dissolved Antimony (Sb)	mg/L	0.0003	0.0001	0.0005	0.0001	8873711	0.0005	0.0001	8873711
. Antimony (Sb)	mg/L	<0.0005	0.0005	0.0003	0.0001	8886745			
Dissolved Arsenic (As)	mg/L	0.0056	0.0001	0.0013	0.0001	8873711	0.0013	0.0001	8873711
. Arsenic (As)	mg/L	0.0192	0.0005	0.0024	0.0001	8886745			
Dissolved Barium (Ba)	mg/L	0.0561	0.0002	0.138	0.0002	8873711	0.139	0.0002	8873711
. Barium (Ba)	mg/L	0.104	0.001	0.133	0.0002	8886745			
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	<0.00005	0.00005	8873711	<0.00005	0.00005	8873711
. Beryllium (Be)	mg/L	0.00034	0.00025	<0.00005	0.00005	8886745			
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8873711	<0.0001	0.0001	8873711
. Bismuth (Bi)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8886745			
Dissolved Boron (B)	mg/L	0.040	0.001	0.018	0.001	8873711	0.017	0.001	8873711
. Boron (B)	mg/L	0.051	0.005	0.016	0.001	8886745			
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	<0.00001	0.00001	8873711	<0.00001	0.00001	8873711
. Cadmium (Cd)	mg/L	0.000176	0.000025	<0.000005	0.000005	8886745			
Dissolved Calcium (Ca)	mg/L	109	0.1	93.7	0.1	8873711	93.6	0.1	8873711
. Calcium (Ca)	mg/L	364	0.2	91.1	0.1	8886745			
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	0.00029	0.00002	8873711	0.00029	0.00002	8873711
. Cesium (Cs)	mg/L	0.0005	0.0001	0.00027	0.00002	8886745			
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	<0.0005	0.0005	8873711	<0.0005	0.0005	8873711
. Chromium (Cr)	mg/L	0.0189	0.0025	<0.0005	0.0005	8886745			
Dissolved Cobalt (Co)	mg/L	0.00209	0.00005	0.00008	0.00005	8873711	0.00007	0.00005	8873711
. Cobalt (Co)	mg/L	0.00888	0.00025	0.00011	0.00005	8886745			
Dissolved Copper (Cu)	mg/L	0.0015	0.0001	0.0004	0.0001	8873711	0.0004	0.0001	8873711
. Copper (Cu)	mg/L	0.0249	0.0005	0.0005	0.0001	8886745			
Dissolved Iron (Fe)	mg/L	1.43	0.005	0.041	0.005	8873711	0.039	0.005	8873711
. Iron (Fe)	mg/L	14.0	0.025	0.260	0.005	8886745			
Dissolved Lead (Pb)	mg/L	0.00006	0.00005	<0.00005	0.00005	8873711	<0.00005	0.00005	8873711
. Lead (Pb)	mg/L	0.00800	0.00025	0.00017	0.00005	8886745			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WSK546		WSK547			WSK547		
Sampling Date		2023/08/15 08:00		2023/08/15 10:29			2023/08/15 10:29		
COC Number		750943		750943			750943		
	UNITS	Duplicate1	RDL	MWS-14-04	RDL	QC Batch	MWS-14-04 Lab-Dup	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0061	0.0005	0.0041	0.0005	8873711	0.0041	0.0005	8873711
. Lithium (Li)	mg/L	0.0155	0.0025	0.0035	0.0005	8886745			
Dissolved Magnesium (Mg)	mg/L	23.3	0.005	23.3	0.005	8873711	23.0	0.005	8873711
. Magnesium (Mg)	mg/L	87.5	0.025	22.7	0.005	8886745			
Dissolved Manganese (Mn)	mg/L	0.360	0.0002	0.0467	0.0002	8873711	0.0452	0.0002	8873711
. Manganese (Mn)	mg/L	0.805	0.001	0.0491	0.0002	8886745			
Mercury (Hg)	ug/L	0.01	0.01	<0.01	0.01	8871461			
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	<0.01	0.01	8871473			
Dissolved Molybdenum (Mo)	mg/L	0.00132	0.00005	0.00250	0.00005	8873711	0.00252	0.00005	8873711
. Molybdenum (Mo)	mg/L	0.00050	0.00025	0.00231	0.00005	8886745			
Dissolved Nickel (Ni)	mg/L	0.0029	0.0001	0.0007	0.0001	8873711	0.0007	0.0001	8873711
. Nickel (Ni)	mg/L	0.0176	0.0005	0.0008	0.0001	8886745			
Dissolved Phosphorus (P)	mg/L	0.009	0.005	<0.005	0.005	8873711	<0.005	0.005	8873711
. Phosphorus (P)	mg/L	0.981	0.025	<0.005	0.005	8886745			
Dissolved Potassium (K)	mg/L	2.07	0.02	0.90	0.02	8873711	0.87	0.02	8873711
. Potassium (K)	mg/L	3.0	0.1	0.88	0.02	8886745			
Dissolved Rubidium (Rb)	mg/L	0.00274	0.00002	0.00148	0.00002	8873711	0.00141	0.00002	8873711
. Rubidium (Rb)	mg/L	0.0138	0.0001	0.00145	0.00002	8886745			
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	<0.0002	0.0002	8873711	<0.0002	0.0002	8873711
. Selenium (Se)	mg/L	<0.00025	0.00025	0.00009	0.00005	8886745			
Dissolved Silicon (Si)	mg/L	6.23	0.025	7.11	0.025	8873711	7.02	0.025	8873711
. Silicon (Si)	mg/L	13.6	0.025	6.72	0.025	8886745			
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	<0.00001	0.00001	8873711	<0.00001	0.00001	8873711
. Silver (Ag)	mg/L	<0.00005	0.00005	0.00001	0.00001	8886745			
Dissolved Sodium (Na)	mg/L	13.9	0.01	6.14	0.01	8873711	5.88	0.01	8873711
. Sodium (Na)	mg/L	13.0	0.05	5.72	0.01	8886745			
Dissolved Strontium (Sr)	mg/L	0.257	0.0001	0.296	0.0001	8873711	0.286	0.0001	8873711
. Strontium (Sr)	mg/L	0.388	0.0005	0.274	0.0001	8886745			
Dissolved Sulphur (S)	mg/L	10	0.5	6.6	0.5	8869105			
Total Sulphur (S)	mg/L	11	0.5	6.6	0.5	8870624			
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8873711	<0.0001	0.0001	8873711

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WSK546		WSK547			WSK547		
Sampling Date		2023/08/15 08:00		2023/08/15 10:29			2023/08/15 10:29		
COC Number		750943		750943			750943		
	UNITS	Duplicate1	RDL	MWS-14-04	RDL	QC Batch	MWS-14-04 Lab-Dup	RDL	QC Batch
. Tellurium (Te)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8886745			
Dissolved Thallium (Tl)	mg/L	0.000009	0.000005	<0.000005	0.000005	8873711	<0.000005	0.000005	8873711
. Thallium (Tl)	mg/L	0.000152	0.000025	<0.000005	0.000005	8886745			
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	<0.0002	0.0002	8873711	<0.0002	0.0002	8873711
. Thorium (Th)	mg/L	0.001	0.001	<0.0002	0.0002	8886745			
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8873711	<0.0001	0.0001	8873711
. Tin (Sn)	mg/L	<0.0005	0.0005	0.0001	0.0001	8886745			
Dissolved Titanium (Ti)	mg/L	0.0006	0.0005	<0.0005	0.0005	8873711	<0.0005	0.0005	8873711
. Titanium (Ti)	mg/L	0.163	0.0025	0.0023	0.0005	8886745			
Dissolved Tungsten (W)	mg/L	0.0007	0.0001	0.0006	0.0001	8873711	0.0006	0.0001	8873711
. Tungsten (W)	mg/L	0.0008	0.0005	0.0005	0.0001	8886745			
Dissolved Uranium (U)	mg/L	0.00077	0.00001	0.00230	0.00001	8873711	0.00232	0.00001	8873711
. Uranium (U)	mg/L	0.00185	0.00005	0.00240	0.00001	8886745			
Dissolved Vanadium (V)	mg/L	0.00017	0.00005	<0.00005	0.00005	8873711	<0.00005	0.00005	8873711
. Vanadium (V)	mg/L	0.0188	0.00025	0.00012	0.00005	8886745			
Dissolved Zinc (Zn)	mg/L	0.0022	0.0005	0.0020	0.0005	8873711	0.0020	0.0005	8873711
. Zinc (Zn)	mg/L	0.0321	0.0025	0.0035	0.0005	8886745			
Dissolved Zirconium (Zr)	mg/L	0.0005	0.0001	0.0005	0.0001	8873711	0.0005	0.0001	8873711
. Zirconium (Zr)	mg/L	0.0045	0.0005	0.0010	0.0001	8886745			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WSK548		WSK549		
Sampling Date		2023/08/15 12:54		2023/08/15 08:00		
COC Number		750943		750943		
	UNITS	BH14-15	RDL	Travel Blank	RDL	QC Batch
Metals						
Dissolved Aluminum (Al)	mg/L	0.0033	0.0005	0.0023	0.0005	8873711
. Aluminum (Al)	mg/L	6.00	0.0025	<0.0005	0.0005	8886745
Dissolved Antimony (Sb)	mg/L	0.0003	0.0001	<0.0001	0.0001	8873711
. Antimony (Sb)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8886745
Dissolved Arsenic (As)	mg/L	0.0056	0.0001	<0.0001	0.0001	8873711
. Arsenic (As)	mg/L	0.0178	0.0005	<0.0001	0.0001	8886745
Dissolved Barium (Ba)	mg/L	0.0566	0.0002	<0.0002	0.0002	8873711
. Barium (Ba)	mg/L	0.109	0.001	<0.0002	0.0002	8886745
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	<0.00005	0.00005	8873711
. Beryllium (Be)	mg/L	0.00035	0.00025	<0.00005	0.00005	8886745
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8873711
. Bismuth (Bi)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8886745
Dissolved Boron (B)	mg/L	0.041	0.001	<0.001	0.001	8873711
. Boron (B)	mg/L	0.052	0.005	<0.001	0.001	8886745
Dissolved Cadmium (Cd)	mg/L	0.00001	0.00001	<0.00001	0.00001	8873711
. Cadmium (Cd)	mg/L	0.000194	0.000025	<0.000005	0.000005	8886745
Dissolved Calcium (Ca)	mg/L	110	0.1	<0.02	0.02	8873711
. Calcium (Ca)	mg/L	423	0.2	<0.02	0.02	8886745
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	<0.00002	0.00002	8873711
. Cesium (Cs)	mg/L	0.0005	0.0001	<0.00002	0.00002	8886745
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	<0.0005	0.0005	8873711
. Chromium (Cr)	mg/L	0.0211	0.0025	<0.0005	0.0005	8886745
Dissolved Cobalt (Co)	mg/L	0.00210	0.00005	<0.00005	0.00005	8873711
. Cobalt (Co)	mg/L	0.00969	0.00025	<0.00005	0.00005	8886745
Dissolved Copper (Cu)	mg/L	0.0008	0.0001	<0.0001	0.0001	8873711
. Copper (Cu)	mg/L	0.0283	0.0005	<0.0001	0.0001	8886745
Dissolved Iron (Fe)	mg/L	1.44	0.005	<0.005	0.005	8873711
. Iron (Fe)	mg/L	14.9	0.025	<0.005	0.005	8886745
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	<0.00005	0.00005	8873711
. Lead (Pb)	mg/L	0.00907	0.00025	<0.00005	0.00005	8886745
Dissolved Lithium (Li)	mg/L	0.0062	0.0005	<0.0005	0.0005	8873711

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WSK548		WSK549		
Sampling Date		2023/08/15 12:54		2023/08/15 08:00		
COC Number		750943		750943		
	UNITS	BH14-15	RDL	Travel Blank	RDL	QC Batch
. Lithium (Li)	mg/L	0.0170	0.0025	<0.0005	0.0005	8886745
Dissolved Magnesium (Mg)	mg/L	23.4	0.005	<0.005	0.005	8873711
. Magnesium (Mg)	mg/L	101	0.025	<0.005	0.005	8886745
Dissolved Manganese (Mn)	mg/L	0.360	0.0002	<0.0002	0.0002	8873711
. Manganese (Mn)	mg/L	0.898	0.001	<0.0002	0.0002	8886745
Mercury (Hg)	ug/L	0.02	0.01	<0.01	0.01	8871461
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	<0.01	0.01	8871473
Dissolved Molybdenum (Mo)	mg/L	0.00131	0.00005	<0.00005	0.00005	8873711
. Molybdenum (Mo)	mg/L	0.00047	0.00025	<0.00005	0.00005	8886745
Dissolved Nickel (Ni)	mg/L	0.0028	0.0001	<0.0001	0.0001	8873711
. Nickel (Ni)	mg/L	0.0189	0.0005	<0.0001	0.0001	8886745
Dissolved Phosphorus (P)	mg/L	0.008	0.005	<0.005	0.005	8873711
. Phosphorus (P)	mg/L	1.21	0.025	<0.005	0.005	8886745
Dissolved Potassium (K)	mg/L	2.04	0.02	<0.02	0.02	8873711
. Potassium (K)	mg/L	3.1	0.1	<0.02	0.02	8886745
Dissolved Rubidium (Rb)	mg/L	0.00273	0.00002	<0.00002	0.00002	8873711
. Rubidium (Rb)	mg/L	0.0149	0.0001	<0.00002	0.00002	8886745
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	<0.0002	0.0002	8873711
. Selenium (Se)	mg/L	<0.00025	0.00025	<0.00005	0.00005	8886745
Dissolved Silicon (Si)	mg/L	6.26	0.025	<0.005	0.005	8873711
. Silicon (Si)	mg/L	13.9	0.025	<0.005	0.005	8886745
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	<0.00001	0.00001	8873711
. Silver (Ag)	mg/L	<0.00005	0.00005	<0.00001	0.00001	8886745
Dissolved Sodium (Na)	mg/L	13.7	0.01	<0.01	0.01	8873711
. Sodium (Na)	mg/L	13.0	0.05	<0.01	0.01	8886745
Dissolved Strontium (Sr)	mg/L	0.258	0.0001	<0.0001	0.0001	8873711
. Strontium (Sr)	mg/L	0.420	0.0005	<0.0001	0.0001	8886745
Dissolved Sulphur (S)	mg/L	10	0.5	<0.5	0.5	8869105
Total Sulphur (S)	mg/L	11	0.5	<0.5	0.5	8870624
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8873711
. Tellurium (Te)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8886745
Dissolved Thallium (Tl)	mg/L	0.000008	0.000005	<0.000005	0.000005	8873711

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WSK548		WSK549		
Sampling Date		2023/08/15 12:54		2023/08/15 08:00		
COC Number		750943		750943		
	UNITS	BH14-15	RDL	Travel Blank	RDL	QC Batch
. Thallium (Tl)	mg/L	0.000176	0.000025	<0.000005	0.000005	8886745
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	<0.0002	0.0002	8873711
. Thorium (Th)	mg/L	0.001	0.001	<0.0002	0.0002	8886745
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8873711
. Tin (Sn)	mg/L	<0.0005	0.0005	<0.0001	0.0001	8886745
Dissolved Titanium (Ti)	mg/L	0.0006	0.0005	<0.0005	0.0005	8873711
. Titanium (Ti)	mg/L	0.165	0.0025	<0.0005	0.0005	8886745
Dissolved Tungsten (W)	mg/L	0.0007	0.0001	<0.0001	0.0001	8873711
. Tungsten (W)	mg/L	0.0008	0.0005	<0.0001	0.0001	8886745
Dissolved Uranium (U)	mg/L	0.00079	0.00001	<0.00001	0.00001	8873711
. Uranium (U)	mg/L	0.00198	0.00005	<0.00001	0.00001	8886745
Dissolved Vanadium (V)	mg/L	0.00018	0.00005	<0.00005	0.00005	8873711
. Vanadium (V)	mg/L	0.0209	0.00025	<0.00005	0.00005	8886745
Dissolved Zinc (Zn)	mg/L	0.0016	0.0005	<0.0005	0.0005	8873711
. Zinc (Zn)	mg/L	0.0358	0.0025	<0.0005	0.0005	8886745
Dissolved Zirconium (Zr)	mg/L	0.0005	0.0001	<0.0001	0.0001	8873711
. Zirconium (Zr)	mg/L	0.0045	0.0005	<0.0001	0.0001	8886745

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WSK546
Sample ID: Duplicate1
Matrix: Water

Collected: 2023/08/15
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8883391	N/A	2023/08/29	Brent Boudreau
Alkalinity	AT	8870323	N/A	2023/08/23	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8862602	N/A	2023/08/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	8870291	N/A	2023/08/23	Alina Dobreanu
Conductivity	AT	8870320	N/A	2023/08/23	Nachiketa Gohil
Fluoride	ISE	8870325	2023/08/22	2023/08/23	Nachiketa Gohil
Hardness (calculated as CaCO3)		8862961	N/A	2023/08/26	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8871473	2023/08/23	2023/08/23	Japneet Gill
Mercury (low level)	CV/AA	8871461	2023/08/23	2023/08/23	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8869105	2023/08/23	2023/08/24	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8873711	N/A	2023/08/25	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8886745	N/A	2023/08/30	Thuy Linh Nguyen
Total Metals Analysis by ICP	ICP	8870624	2023/08/23	2023/08/24	Suban Kanapathippllai
Cyanide (Free)	SPEC	8882654	N/A	2023/08/28	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8882653	2023/08/25	2023/08/25	Ming Dong
Total Phosphorus Low Level Total	KONE	8882652	2023/08/27	2023/08/28	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8870994	N/A	2023/08/23	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8870265	N/A	2023/08/27	Viorica Rotaru
pH	AT	8870326	2023/08/22	2023/08/23	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Raj Jagdish Masani
Sulphate by Automated Turbidimetry	KONE	8870295	N/A	2023/08/23	Alina Dobreanu
Total Dissolved Solids	BAL	8870145	2023/08/22	2023/08/23	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Raj Jagdish Masani
Total Kjeldahl Nitrogen in Water	SKAL	8871271	2023/08/23	2023/08/24	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8870558	2023/08/23	2023/08/23	Razieh Tabesh
Turbidity	AT	8870285	N/A	2023/08/23	Vidhi Khatri

Bureau Veritas ID: WSK547
Sample ID: MWS-14-04
Matrix: Water

Collected: 2023/08/15
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8883391	N/A	2023/08/29	Brent Boudreau
Alkalinity	AT	8870323	N/A	2023/08/23	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8862602	N/A	2023/08/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	8870291	N/A	2023/08/23	Alina Dobreanu
Conductivity	AT	8870320	N/A	2023/08/23	Nachiketa Gohil
Fluoride	ISE	8870325	2023/08/22	2023/08/23	Nachiketa Gohil
Hardness (calculated as CaCO3)		8862961	N/A	2023/08/26	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8871473	2023/08/23	2023/08/23	Japneet Gill
Mercury (low level)	CV/AA	8871461	2023/08/23	2023/08/23	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8869105	2023/08/23	2023/08/24	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8873711	N/A	2023/08/25	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8886745	N/A	2023/08/30	Thuy Linh Nguyen

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O9982
Report Date: 2023/08/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: WM

TEST SUMMARY

Bureau Veritas ID: WSK547
Sample ID: MWS-14-04
Matrix: Water

Collected: 2023/08/15
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals Analysis by ICP	ICP	8870624	2023/08/23	2023/08/24	Suban Kanapathippllai
Cyanide (Free)	SPEC	8882654	N/A	2023/08/28	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8882653	2023/08/25	2023/08/25	Ming Dong
Total Phosphorus Low Level Total	KONE	8882652	2023/08/27	2023/08/28	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8870994	N/A	2023/08/23	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8870265	N/A	2023/08/27	Viorica Rotaru
pH	AT	8870326	2023/08/22	2023/08/23	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Raj Jagdish Masani
Sulphate by Automated Turbidimetry	KONE	8870295	N/A	2023/08/23	Alina Dobreanu
Total Dissolved Solids	BAL	8870145	2023/08/22	2023/08/23	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Raj Jagdish Masani
Total Kjeldahl Nitrogen in Water	SKAL	8871271	2023/08/23	2023/08/24	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8870558	2023/08/23	2023/08/23	Razieh Tabesh
Turbidity	AT	8870285	N/A	2023/08/23	Vidhi Khatri

Bureau Veritas ID: WSK547 Dup
Sample ID: MWS-14-04
Matrix: Water

Collected: 2023/08/15
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8870323	N/A	2023/08/23	Nachiketa Gohil
Conductivity	AT	8870320	N/A	2023/08/23	Nachiketa Gohil
Fluoride	ISE	8870325	2023/08/22	2023/08/23	Nachiketa Gohil
Dissolved Metals by ICPMS (low level)	ICP1/MS	8873711	N/A	2023/08/25	Arefa Dabhad
pH	AT	8870326	2023/08/22	2023/08/24	Nachiketa Gohil
Low Level Total Suspended Solids	BAL	8870558	2023/08/23	2023/08/23	Razieh Tabesh
Turbidity	AT	8870285	N/A	2023/08/23	Vidhi Khatri

Bureau Veritas ID: WSK548
Sample ID: BH14-15
Matrix: Water

Collected: 2023/08/15
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8883391	N/A	2023/08/29	Brent Boudreau
Alkalinity	AT	8870323	N/A	2023/08/23	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8862602	N/A	2023/08/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	8870291	N/A	2023/08/23	Alina Dobreanu
Conductivity	AT	8870320	N/A	2023/08/23	Nachiketa Gohil
Fluoride	ISE	8870325	2023/08/22	2023/08/23	Nachiketa Gohil
Hardness (calculated as CaCO3)		8862961	N/A	2023/08/26	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8871473	2023/08/23	2023/08/23	Japneet Gill
Mercury (low level)	CV/AA	8871461	2023/08/23	2023/08/23	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8869105	2023/08/23	2023/08/24	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8873711	N/A	2023/08/25	Arefa Dabhad

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O9982
Report Date: 2023/08/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: WM

TEST SUMMARY

Bureau Veritas ID: WSK548
Sample ID: BH14-15
Matrix: Water

Collected: 2023/08/15
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Metals in Water by ICPMS (low level)	ICP1/MS	8886745	N/A	2023/08/30	Thuy Linh Nguyen
Total Metals Analysis by ICP	ICP	8870624	2023/08/23	2023/08/24	Suban Kanapathippllai
Cyanide (Free)	SPEC	8882654	N/A	2023/08/28	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8882653	2023/08/25	2023/08/25	Ming Dong
Total Phosphorus Low Level Total	KONE	8882652	2023/08/27	2023/08/28	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8870994	N/A	2023/08/23	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8870265	N/A	2023/08/27	Viorica Rotaru
pH	AT	8870326	2023/08/22	2023/08/23	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Raj Jagdish Masani
Sulphate by Automated Turbidimetry	KONE	8870295	N/A	2023/08/23	Alina Dobreanu
Total Dissolved Solids	BAL	8870145	2023/08/22	2023/08/23	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Raj Jagdish Masani
Total Kjeldahl Nitrogen in Water	SKAL	8871271	2023/08/23	2023/08/24	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8870558	2023/08/23	2023/08/23	Razieh Tabesh
Turbidity	AT	8870285	N/A	2023/08/23	Vidhi Khatri

Bureau Veritas ID: WSK548 Dup
Sample ID: BH14-15
Matrix: Water

Collected: 2023/08/15
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Dissolved Solids	BAL	8870145	2023/08/22	2023/08/23	Shaneil Hall

Bureau Veritas ID: WSK549
Sample ID: Travel Blank
Matrix: Water

Collected: 2023/08/15
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8870323	N/A	2023/08/23	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8862602	N/A	2023/08/24	Automated Statchk
Chloride by Automated Colourimetry	KONE	8870291	N/A	2023/08/23	Alina Dobreanu
Conductivity	AT	8870320	N/A	2023/08/23	Nachiketa Gohil
Fluoride	ISE	8870325	2023/08/22	2023/08/23	Nachiketa Gohil
Dissolved Mercury (low level)	CV/AA	8871473	2023/08/23	2023/08/23	Japneet Gill
Mercury (low level)	CV/AA	8871461	2023/08/23	2023/08/23	Japneet Gill
Dissolved Metals Analysis by ICP	ICP	8869105	2023/08/23	2023/08/24	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8873711	N/A	2023/08/25	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8886745	N/A	2023/08/30	Thuy Linh Nguyen
Total Metals Analysis by ICP	ICP	8870624	2023/08/23	2023/08/24	Suban Kanapathippllai
Cyanide (Free)	SPEC	8882654	N/A	2023/08/28	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8882653	2023/08/25	2023/08/25	Ming Dong
Total Phosphorus Low Level Total	KONE	8882652	2023/08/27	2023/08/28	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8870994	N/A	2023/08/23	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8870265	N/A	2023/08/27	Viorica Rotaru

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O9982
Report Date: 2023/08/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: WM

TEST SUMMARY

Bureau Veritas ID: WSK549
Sample ID: Travel Blank
Matrix: Water

Collected: 2023/08/15
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH	AT	8870326	2023/08/22	2023/08/23	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Raj Jagdish Masani
Sulphate by Automated Turbidimetry	KONE	8870295	N/A	2023/08/23	Alina Dobreanu
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Raj Jagdish Masani
Total Kjeldahl Nitrogen in Water	SKAL	8871271	2023/08/23	2023/08/24	Rajni Tyagi
Turbidity	AT	8869856	N/A	2023/08/22	Vidhi Khatri

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	6.0°C

Sample WSK546 [Duplicate1] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
TSS Analysis:Analysis was performed past sample holding time. This may increase the variability associated with these results.
Acidity sample contained headspace.
Metal Analysis: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Sample WSK547 [MWS-14-04] : Acidity sample contained headspace.

Sample WSK548 [BH14-15] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
TSS Analysis:Analysis was performed past sample holding time. This may increase the variability associated with these results.
Metal Analysis: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8869105	Dissolved Sulphur (S)	2023/08/24	NC	80 - 120	104	80 - 120	<0.5	mg/L	0.36	25		
8869856	Turbidity	2023/08/22			99	80 - 120	<0.1	NTU	NC	20		
8870145	Total Dissolved Solids	2023/08/23			95	90 - 110	<10	mg/L	1.2	20		
8870265	Nitrate (N)	2023/08/27	99	80 - 120	98	80 - 120	<0.10	mg/L	0.61	20		
8870265	Nitrite (N)	2023/08/27	101	80 - 120	104	80 - 120	<0.010	mg/L	1.8	20		
8870285	Turbidity	2023/08/23			100	80 - 120	<0.1	NTU	13	20		
8870291	Dissolved Chloride (Cl-)	2023/08/23	NC	80 - 120	88	80 - 120	<1.0	mg/L	2.1	20		
8870295	Dissolved Sulphate (SO4)	2023/08/23	NC	75 - 125	105	80 - 120	<1.0	mg/L	0.34	20		
8870320	Conductivity	2023/08/23			100	85 - 115	<0.001	mS/cm	1.1	10		
8870323	Alkalinity (Total as CaCO3)	2023/08/23			97	85 - 115	<1.0	mg/L	0.77	20		
8870325	Fluoride (F-)	2023/08/23	90	80 - 120	95	80 - 120	<0.10	mg/L	6.6	20		
8870326	pH	2023/08/24			102	98 - 103			1.7	N/A		
8870558	Total Suspended Solids	2023/08/23			97	85 - 115	<1	mg/L	10	20		
8870624	Total Sulphur (S)	2023/08/24	NC	80 - 120	95	80 - 120	<0.5	mg/L				
8870994	Total Ammonia-N	2023/08/23	101	75 - 125	101	80 - 120	<0.050	mg/L	1.7	20		
8871271	Total Kjeldahl Nitrogen (TKN)	2023/08/24	101	80 - 120	98	80 - 120	<0.10	mg/L	5.0	20	102	80 - 120
8871461	Mercury (Hg)	2023/08/23	102	75 - 125	101	80 - 120	<0.01	ug/L	NC	20		
8871473	Dissolved Mercury (Hg)	2023/08/23	102	75 - 125	101	80 - 120	<0.01	ug/L	NC	20		
8873711	Dissolved Aluminum (Al)	2023/08/25	108	80 - 120	100	80 - 120	<0.0005	mg/L	NC	20		
8873711	Dissolved Antimony (Sb)	2023/08/25	116	80 - 120	100	80 - 120	<0.0001	mg/L	5.6	20		
8873711	Dissolved Arsenic (As)	2023/08/25	108	80 - 120	99	80 - 120	<0.0001	mg/L	3.4	20		
8873711	Dissolved Barium (Ba)	2023/08/25	NC	80 - 120	100	80 - 120	<0.0002	mg/L	1.1	20		
8873711	Dissolved Beryllium (Be)	2023/08/25	107	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8873711	Dissolved Bismuth (Bi)	2023/08/25	100	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8873711	Dissolved Boron (B)	2023/08/25	105	80 - 120	96	80 - 120	<0.001	mg/L	2.8	20		
8873711	Dissolved Cadmium (Cd)	2023/08/25	109	80 - 120	97	80 - 120	<0.00001	mg/L	NC	20		
8873711	Dissolved Calcium (Ca)	2023/08/25	NC	80 - 120	101	80 - 120	<0.02	mg/L	0.13	20		
8873711	Dissolved Cesium (Cs)	2023/08/25	104	80 - 120	100	80 - 120	<0.00002	mg/L	NC	N/A		
8873711	Dissolved Chromium (Cr)	2023/08/25	102	80 - 120	94	80 - 120	<0.0005	mg/L	NC	20		
8873711	Dissolved Cobalt (Co)	2023/08/25	102	80 - 120	101	80 - 120	<0.00005	mg/L	4.1	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8873711	Dissolved Copper (Cu)	2023/08/25	104	80 - 120	101	80 - 120	<0.0001	mg/L	2.3	20		
8873711	Dissolved Iron (Fe)	2023/08/25	105	80 - 120	102	80 - 120	<0.005	mg/L	4.4	20		
8873711	Dissolved Lead (Pb)	2023/08/25	106	80 - 120	99	80 - 120	<0.00005	mg/L	NC	20		
8873711	Dissolved Lithium (Li)	2023/08/25	123 (1)	80 - 120	107	80 - 120	<0.0005	mg/L	0.12	20		
8873711	Dissolved Magnesium (Mg)	2023/08/25	NC	80 - 120	97	80 - 120	<0.005	mg/L	1.3	20		
8873711	Dissolved Manganese (Mn)	2023/08/25	103	80 - 120	99	80 - 120	<0.0002	mg/L	3.2	20		
8873711	Dissolved Molybdenum (Mo)	2023/08/25	112	80 - 120	94	80 - 120	<0.00005	mg/L	0.60	20		
8873711	Dissolved Nickel (Ni)	2023/08/25	101	80 - 120	99	80 - 120	<0.0001	mg/L	0.15	20		
8873711	Dissolved Phosphorus (P)	2023/08/25	111	80 - 120	96	80 - 120	<0.005	mg/L	NC	20		
8873711	Dissolved Potassium (K)	2023/08/25	111	80 - 120	98	80 - 120	<0.02	mg/L	3.5	20		
8873711	Dissolved Rubidium (Rb)	2023/08/25	106	80 - 120	99	80 - 120	<0.00002	mg/L	5.2	N/A		
8873711	Dissolved Selenium (Se)	2023/08/25	108	80 - 120	101	80 - 120	<0.0002	mg/L	NC	20		
8873711	Dissolved Silicon (Si)	2023/08/25	NC	80 - 120	99	80 - 120	<0.005	mg/L	1.4	20		
8873711	Dissolved Silver (Ag)	2023/08/25	100	80 - 120	96	80 - 120	<0.00001	mg/L	NC	20		
8873711	Dissolved Sodium (Na)	2023/08/25	NC	80 - 120	101	80 - 120	<0.01	mg/L	4.3	20		
8873711	Dissolved Strontium (Sr)	2023/08/25	NC	80 - 120	98	80 - 120	<0.0001	mg/L	3.3	20		
8873711	Dissolved Tellurium (Te)	2023/08/25	111	80 - 120	95	80 - 120	<0.0001	mg/L	NC	20		
8873711	Dissolved Thallium (Tl)	2023/08/25	108	80 - 120	103	80 - 120	<0.000005	mg/L	NC	20		
8873711	Dissolved Thorium (Th)	2023/08/25	96	80 - 120	100	80 - 120	<0.0002	mg/L	NC	20		
8873711	Dissolved Tin (Sn)	2023/08/25	113	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8873711	Dissolved Titanium (Ti)	2023/08/25	109	80 - 120	100	80 - 120	<0.0005	mg/L	NC	20		
8873711	Dissolved Tungsten (W)	2023/08/25	118	80 - 120	105	80 - 120	<0.0001	mg/L	0.53	20		
8873711	Dissolved Uranium (U)	2023/08/25	107	80 - 120	97	80 - 120	<0.00001	mg/L	0.74	20		
8873711	Dissolved Vanadium (V)	2023/08/25	105	80 - 120	96	80 - 120	<0.00005	mg/L	NC	20		
8873711	Dissolved Zinc (Zn)	2023/08/25	103	80 - 120	100	80 - 120	<0.0005	mg/L	3.2	20		
8873711	Dissolved Zirconium (Zr)	2023/08/25	118	80 - 120	100	80 - 120	<0.0001	mg/L	3.9	20		
8882652	Total Phosphorus (P)	2023/08/28	119	80 - 120	107	80 - 120	<0.0010	mg/L	0.031	20	94	80 - 120
8882653	Strong Acid Dissoc. Cyanide (CN)	2023/08/25	98	80 - 120	103	80 - 120	<0.00050	mg/L				
8882654	Free Cyanide (CN)	2023/08/28	87	80 - 120	91	80 - 120	<2.0	ug/L				
8883391	Acidity	2023/08/29	104	80 - 120	104	80 - 120	<5.0	mg/L	NC	25		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8886745	. Aluminum (Al)	2023/08/30	104	80 - 120	96	80 - 120	<0.0005	mg/L	NC	20		
8886745	. Antimony (Sb)	2023/08/30	110	80 - 120	102	80 - 120	<0.0001	mg/L	NC	20		
8886745	. Arsenic (As)	2023/08/30	110	80 - 120	96	80 - 120	<0.0001	mg/L	NC	20		
8886745	. Barium (Ba)	2023/08/30	104	80 - 120	94	80 - 120	<0.0002	mg/L	NC	20		
8886745	. Beryllium (Be)	2023/08/30	112	80 - 120	94	80 - 120	<0.00005	mg/L	NC	20		
8886745	. Bismuth (Bi)	2023/08/30	74 (1)	80 - 120	97	80 - 120	<0.0001	mg/L	NC	20		
8886745	. Boron (B)	2023/08/30	107	80 - 120	95	80 - 120	<0.001	mg/L	NC	20		
8886745	. Cadmium (Cd)	2023/08/30	108	80 - 120	93	80 - 120	<0.000005	mg/L	NC	20		
8886745	. Calcium (Ca)	2023/08/30	105	80 - 120	97	80 - 120	<0.02	mg/L	NC	20		
8886745	. Cesium (Cs)	2023/08/30	103	80 - 120	96	80 - 120	<0.00002	mg/L	NC	N/A		
8886745	. Chromium (Cr)	2023/08/30	107	80 - 120	96	80 - 120	<0.0005	mg/L	NC	20		
8886745	. Cobalt (Co)	2023/08/30	108	80 - 120	96	80 - 120	<0.00005	mg/L	NC	20		
8886745	. Copper (Cu)	2023/08/30	106	80 - 120	94	80 - 120	<0.0001	mg/L	NC	20		
8886745	. Iron (Fe)	2023/08/30	109	80 - 120	97	80 - 120	<0.005	mg/L	NC	20		
8886745	. Lead (Pb)	2023/08/30	109	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8886745	. Lithium (Li)	2023/08/30	112	80 - 120	98	80 - 120	<0.0005	mg/L	NC	20		
8886745	. Magnesium (Mg)	2023/08/30	106	80 - 120	94	80 - 120	<0.005	mg/L	NC	20		
8886745	. Manganese (Mn)	2023/08/30	105	80 - 120	93	80 - 120	<0.0002	mg/L	NC	20		
8886745	. Molybdenum (Mo)	2023/08/30	109	80 - 120	98	80 - 120	<0.00005	mg/L	NC	20		
8886745	. Nickel (Ni)	2023/08/30	108	80 - 120	96	80 - 120	<0.0001	mg/L	NC	20		
8886745	. Phosphorus (P)	2023/08/30	114	80 - 120	90	80 - 120	<0.005	mg/L	NC	20		
8886745	. Potassium (K)	2023/08/30	106	80 - 120	94	80 - 120	<0.02	mg/L	NC	20		
8886745	. Rubidium (Rb)	2023/08/30	107	80 - 120	96	80 - 120	<0.00002	mg/L	NC	N/A		
8886745	. Selenium (Se)	2023/08/30	113	80 - 120	102	80 - 120	<0.00005	mg/L	NC	20		
8886745	. Silicon (Si)	2023/08/30	101	80 - 120	93	80 - 120	<0.005	mg/L	NC	20		
8886745	. Silver (Ag)	2023/08/30	108	80 - 120	96	80 - 120	<0.00001	mg/L	NC	20		
8886745	. Sodium (Na)	2023/08/30	106	80 - 120	94	80 - 120	<0.01	mg/L	NC	20		
8886745	. Strontium (Sr)	2023/08/30	108	80 - 120	96	80 - 120	<0.0001	mg/L	NC	20		
8886745	. Tellurium (Te)	2023/08/30	109	80 - 120	92	80 - 120	<0.0001	mg/L	NC	20		
8886745	. Thallium (Tl)	2023/08/30	112	80 - 120	100	80 - 120	<0.000005	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8886745	. Thorium (Th)	2023/08/30	96	80 - 120	98	80 - 120	<0.0002	mg/L	NC	20		
8886745	. Tin (Sn)	2023/08/30	109	80 - 120	96	80 - 120	<0.0001	mg/L	NC	20		
8886745	. Titanium (Ti)	2023/08/30	102	80 - 120	93	80 - 120	<0.0005	mg/L	NC	20		
8886745	. Tungsten (W)	2023/08/30	113	80 - 120	104	80 - 120	<0.0001	mg/L	NC	20		
8886745	. Uranium (U)	2023/08/30	110	80 - 120	98	80 - 120	<0.00001	mg/L	NC	20		
8886745	. Vanadium (V)	2023/08/30	107	80 - 120	96	80 - 120	<0.00005	mg/L	NC	20		
8886745	. Zinc (Zn)	2023/08/30	114	80 - 120	96	80 - 120	<0.0005	mg/L	NC	20		
8886745	. Zirconium (Zr)	2023/08/30	114	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike exceeds acceptance limits, probable matrix interference

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3O9982
Report Date: 2023/08/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: WM

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Brad Newman, B.Sc., C.Chem., Scientific Service Specialist

<original signed by>

Mike MacGillivray, Scientific Specialist (Inorganics)

<original signed by>

Sandy Yuan, M.Sc., QP, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 750214

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/31
Report #: R7791031
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3P0285
Received: 2023/08/16, 11:39

Sample Matrix: Ground Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	5	N/A	2023/08/28	ATL SOP-00205	SM 24 2310B m
Acidity (CaCO3) in water (1)	2	N/A	2023/08/29	ATL SOP-00205	SM 24 2310B m
Alkalinity	7	N/A	2023/08/18	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	7	N/A	2023/08/19	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	7	N/A	2023/08/22	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	7	N/A	2023/08/18	CAM SOP-00414	SM 23 2510 m
Dissolved Organic Carbon (DOC) (3)	2	N/A	2023/08/19	CAM SOP-00446	SM 23 5310 B m
Petroleum Hydro. CCME F1 & BTEX in Water	2	N/A	2023/08/21	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (4)	3	2023/08/21	2023/08/22	CAM SOP-00316	CCME PHC-CWS m
Fluoride	7	2023/08/18	2023/08/18	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	7	N/A	2023/08/26	CAM SOP 00102/00408/00447	SM 2340 B
Dissolved Mercury (low level)	7	2023/08/19	2023/08/22	CAM SOP-00453	EPA 7470 m
Mercury (low level)	7	2023/08/21	2023/08/21	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	7	2023/08/21	2023/08/22	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	6	N/A	2023/08/25	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS (low level)	1	N/A	2023/08/26	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	1	N/A	2023/08/29	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	6	N/A	2023/08/30	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	6	2023/08/22	2023/08/22	CAM SOP-00408	EPA 6010D m
Total Metals Analysis by ICP	1	2023/08/22	2023/08/23	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	7	N/A	2023/08/24	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	5	2023/08/22	2023/08/22	CAL SOP-00270	SM 23 4500-CN m
Cyanide, Strong Acid Dissociable (SAD) (2)	2	2023/08/23	2023/08/23	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	7	2023/08/24	2023/08/25	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	7	N/A	2023/08/21	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (5)	7	N/A	2023/08/21	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	7	2023/08/18	2023/08/18	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (6)	7	N/A	2023/08/17		Field pH Meter
Sulphate by Automated Turbidimetry	7	N/A	2023/08/22	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	6	2023/08/18	2023/08/21	CAM SOP-00428	SM 23 2540C m

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: Groundwater Sampling Program
Your C.O.C. #: 750214

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/31
Report #: R7791031
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3P0285
Received: 2023/08/16, 11:39

Sample Matrix: Ground Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Dissolved Solids	1	2023/08/19	2023/08/21	CAM SOP-00428	SM 23 2540C m
Field Temperature (6)	7	N/A	2023/08/17		Field Thermometer
Total Kjeldahl Nitrogen in Water	7	2023/08/18	2023/08/22	CAM SOP-00938	OMOE E3516 m
Low Level Total Suspended Solids	7	2023/08/19	2023/08/21	CAM SOP-00428	SM 23 2540D m
Turbidity	2	N/A	2023/08/18	CAM SOP-00417	SM 23 2130 B m
Turbidity	5	N/A	2023/08/19	CAM SOP-00417	SM 23 2130 B m
Volatile Organic Compounds and F1 PHCs	1	N/A	2023/08/21	CAM SOP-00230	EPA 8260C m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
(4) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following “Alberta Environment’s Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003”. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
(5) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(6) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3P0285
Report Date: 2023/08/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: M.F

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WSL993		WSL994			WSL995		
Sampling Date		2023/08/14 09:50		2023/08/14 10:43			2023/08/14 12:58		
COC Number		750214		750214			750214		
	UNITS	BH14-02A	QC Batch	BH1402	RDL	QC Batch	MW18 BR-21	RDL	QC Batch
Calculated Parameters									
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	370	8859121	620	1.0	8859121	130	1.0	8859121
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.2	8859121	1.0	1.0	8859121	3.3	1.0	8859121
Hardness (CaCO3)	mg/L	370	8860809	670	1.0	8860809	96	1.0	8860809
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	8859121	<1.0	1.0	8859121	<1.0	1.0	8859121
Field Measurements									
Field Temperature	Celsius	13.2	ONSITE	15.4	N/A	ONSITE	21.7	N/A	ONSITE
Field Measured pH	pH	7.20	ONSITE	6.55		ONSITE	8.37		ONSITE
Inorganics									
Acidity	mg/L	23	8883391	120	5.0	8880694	<5.0	5.0	8882924
Total Ammonia-N	mg/L	0.058	8863478	0.51	0.050	8863478	<0.050	0.050	8863478
Conductivity	mS/cm	0.682	8862631	1.38	0.001	8862631	0.285	0.001	8862631
Free Cyanide (CN)	ug/L	<2.0 (1)	8875715	2.1 (1)	2.0	8875715	2.3 (1)	2.0	8875715
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	8875714	<0.00050 (2)	0.00050	8875716	<0.00050 (2)	0.00050	8875714
Total Dissolved Solids	mg/L	395	8862207	790	10	8862207	190	10	8862207
Fluoride (F-)	mg/L	<0.10	8862685	<0.10	0.10	8862685	0.13	0.10	8862685
Total Kjeldahl Nitrogen (TKN)	mg/L	0.34	8862672	0.95	0.10	8862672	0.24	0.10	8862672
Dissolved Organic Carbon	mg/L	14	8862835	22	0.40	8862835			
pH	pH	7.55	8862684	7.23		8862684	8.45		8862684
Total Phosphorus (P)	mg/L	0.0062	8878798	0.030	0.0010	8878798	0.083	0.0010	8878798
Total Suspended Solids	mg/L	29	8863009	54	1	8863009	450	5	8863009
Dissolved Sulphate (SO4)	mg/L	<1.0	8864286	40	1.0	8864286	17	1.0	8864286
Turbidity	NTU	33	8861913	95	0.1	8862704	17	0.1	8861913
Alkalinity (Total as CaCO3)	mg/L	380	8862683	620	1.0	8862683	130	1.0	8862683
Dissolved Chloride (Cl-)	mg/L	6.0	8864249	71	1.0	8864249	<1.0	1.0	8864249
Nitrite (N)	mg/L	<0.010	8862833	<0.010	0.010	8863090	<0.010	0.010	8862833
Nitrate (N)	mg/L	<0.10	8862833	<0.10	0.10	8863090	<0.10	0.10	8862833

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3P0285
Report Date: 2023/08/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: M.F

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WSL993		WSL994			WSL995		
Sampling Date		2023/08/14 09:50		2023/08/14 10:43			2023/08/14 12:58		
COC Number		750214		750214			750214		
	UNITS	**BH14-02A**	**QC Batch**	**BH1402**	**RDL**	**QC Batch**	**MW18 BR-21**	**RDL**	**QC Batch**
Nitrate + Nitrite (N)	mg/L	<0.10	8862833	<0.10	0.10	8863090	<0.10	0.10	8862833

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3P0285
Report Date: 2023/08/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: M.F

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WSL996		WSL997		WSL998		
Sampling Date		2023/08/14 14:04		2023/08/14 08:00		2023/08/14 08:00		
COC Number		750214		750214		750214		
	UNITS	MW21-BR-21	QC Batch	Duplicate 2	QC Batch	Field Blank	RDL	QC Batch
Calculated Parameters								
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	320	8859121	370	8859121	1.9	1.0	8859121
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	8859121	1.1	8859121	<1.0	1.0	8859121
Hardness (CaCO3)	mg/L	450	8860809	370	8859021	<1.0	1.0	8859021
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	8859121	<1.0	8859121	<1.0	1.0	8859121
Field Measurements								
Field Temperature	Celsius	19.2	ONSITE	0.0	ONSITE	0.0	N/A	ONSITE
Field Measured pH	pH	6.59	ONSITE	0.0	ONSITE	0.0		ONSITE
Inorganics								
Acidity	mg/L	110	8880338	21	8880694	<5.0	5.0	8880338
Total Ammonia-N	mg/L	0.38	8863478	0.061	8863478	<0.050	0.050	8863478
Conductivity	mS/cm	0.813	8862631	0.680	8862631	0.001	0.001	8862631
Free Cyanide (CN)	ug/L	2.1 (1)	8875715	3.3 (1)	8875715	<2.0 (1)	2.0	8875715
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050 (2)	8875714	0.00057 (2)	8875716	<0.00050	0.00050	8875714
Total Dissolved Solids	mg/L	625	8862207	390	8862207	<10	10	8862553
Fluoride (F-)	mg/L	<0.10	8862685	<0.10	8862685	<0.10	0.10	8862685
Total Kjeldahl Nitrogen (TKN)	mg/L	0.94	8862672	0.37	8862672	<0.10	0.10	8862672
pH	pH	7.21	8862684	7.51	8862684	6.65		8862684
Total Phosphorus (P)	mg/L	0.022	8878798	0.0079	8878798	<0.0010	0.0010	8878798
Total Suspended Solids	mg/L	46	8863009	24	8863009	<1	1	8863009
Dissolved Sulphate (SO4)	mg/L	22	8864286	1.1	8864286	<1.0	1.0	8864286
Turbidity	NTU	80	8862704	36	8862704	<0.1	0.1	8862704
Alkalinity (Total as CaCO3)	mg/L	320	8862683	370	8862683	1.9	1.0	8862683
Dissolved Chloride (Cl-)	mg/L	44	8864249	1.8	8864249	<1.0	1.0	8864249
Nitrite (N)	mg/L	0.046	8862833	<0.010	8863090	<0.010	0.010	8862833
Nitrate (N)	mg/L	4.18	8862833	<0.10	8863090	<0.10	0.10	8862833

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3P0285
Report Date: 2023/08/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: M.F

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WSL996		WSL997		WSL998		
Sampling Date		2023/08/14 14:04		2023/08/14 08:00		2023/08/14 08:00		
COC Number		750214		750214		750214		
	UNITS	**MW21-BR-21**	**QC Batch**	**Duplicate 2**	**QC Batch**	**Field Blank**	**RDL**	**QC Batch**
Nitrate + Nitrite (N)	mg/L	4.23	8862833	<0.10	8863090	<0.10	0.10	8862833

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3P0285
Report Date: 2023/08/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: M.F

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WSL998			WSL999		
Sampling Date		2023/08/14 08:00			2023/08/14 08:00		
COC Number		750214			750214		
	UNITS	Field Blank Lab-Dup	RDL	QC Batch	Duplicate 5	RDL	QC Batch
Calculated Parameters							
Bicarb. Alkalinity (calc. as CaCO3)	mg/L				110	1.0	8859121
Carb. Alkalinity (calc. as CaCO3)	mg/L				4.9	1.0	8859121
Hardness (CaCO3)	mg/L				100	1.0	8860809
Hydrox. Alkalinity (calc. as CaCO3)	mg/L				<1.0	1.0	8859121
Field Measurements							
Field Temperature	Celsius				0.0	N/A	ONSITE
Field Measured pH	pH				0.0		ONSITE
Inorganics							
Acidity	mg/L				<5.0	5.0	8880450
Total Ammonia-N	mg/L				<0.050	0.050	8863478
Conductivity	mS/cm				0.268	0.001	8862631
Free Cyanide (CN)	ug/L				<2.0 (1)	2.0	8875715
Strong Acid Dissoc. Cyanide (CN)	mg/L				<0.00050	0.00050	8875714
Total Dissolved Solids	mg/L				185	10	8862207
Fluoride (F-)	mg/L				0.13	0.10	8862685
Total Kjeldahl Nitrogen (TKN)	mg/L				0.26	0.10	8862672
pH	pH				8.65		8862684
Total Phosphorus (P)	mg/L				0.082	0.0010	8878798
Total Suspended Solids	mg/L				520	5	8863009
Dissolved Sulphate (SO4)	mg/L				19	1.0	8864286
Turbidity	NTU	<0.1	0.1	8862704	22	0.1	8862704
Alkalinity (Total as CaCO3)	mg/L				120	1.0	8862683
Dissolved Chloride (Cl-)	mg/L				1.1	1.0	8864249
Nitrite (N)	mg/L				<0.010	0.010	8862833
Nitrate (N)	mg/L				<0.10	0.10	8862833

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3P0285
Report Date: 2023/08/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: M.F

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WSL998			WSL999		
Sampling Date		2023/08/14 08:00			2023/08/14 08:00		
COC Number		750214			750214		
	UNITS	**Field Blank Lab-Dup**	**RDL**	**QC Batch**	**Duplicate 5**	**RDL**	**QC Batch**
Nitrate + Nitrite (N)	mg/L				<0.10	0.10	8862833

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WSL993		WSL994		WSL995		
Sampling Date		2023/08/14 09:50		2023/08/14 10:43		2023/08/14 12:58		
COC Number		750214		750214		750214		
	UNITS	BH14-02A	RDL	BH1402	RDL	MW18 BR-21	RDL	QC Batch
Metals								
Dissolved Aluminum (Al)	mg/L	0.0204	0.0005	0.0084	0.0025	0.0082	0.0005	8873711
. Aluminum (Al)	mg/L	0.0040	0.0005	0.0623	0.0005	2.14	0.0025	8878756
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	<0.0005	0.0005	0.0007	0.0001	8873711
. Antimony (Sb)	mg/L	<0.0001	0.0001	<0.0001	0.0001	0.0013	0.0001	8878756
Dissolved Arsenic (As)	mg/L	0.0153	0.0001	0.0126	0.0005	0.0522	0.0005	8873711
. Arsenic (As)	mg/L	0.0048	0.0001	0.0171	0.0001	0.0812	0.0005	8878756
Dissolved Barium (Ba)	mg/L	0.0127	0.0002	0.046	0.001	0.0362	0.0002	8873711
. Barium (Ba)	mg/L	0.0090	0.0002	0.0507	0.0002	0.0518	0.0002	8878756
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	<0.00025	0.00025	<0.00005	0.00005	8873711
. Beryllium (Be)	mg/L	<0.00005	0.00005	<0.00005	0.00005	0.00007	0.00005	8878756
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	<0.0005	0.0005	<0.0001	0.0001	8873711
. Bismuth (Bi)	mg/L	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	8878756
Dissolved Boron (B)	mg/L	0.007	0.001	0.010	0.005	0.013	0.001	8873711
. Boron (B)	mg/L	0.007	0.001	0.012	0.001	0.016	0.001	8878756
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	<0.00005	0.00005	<0.00001	0.00001	8873711
. Cadmium (Cd)	mg/L	<0.000005	0.000005	<0.000005	0.000005	0.000278	0.000005	8878756
Dissolved Calcium (Ca)	mg/L	119	0.1	221	0.1	30.3	0.04	8873711
. Calcium (Ca)	mg/L	127	0.1	235	0.1	42.1	0.1	8878756
Dissolved Cesium (Cs)	mg/L	0.00021	0.00002	0.0014	0.0001	0.00004	0.00002	8873711
. Cesium (Cs)	mg/L	0.00021	0.00002	0.00160	0.00002	0.00130	0.00002	8878756
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	<0.0025	0.0025	<0.0005	0.0005	8873711
. Chromium (Cr)	mg/L	<0.0005	0.0005	0.0006	0.0005	0.0053	0.0005	8878756
Dissolved Cobalt (Co)	mg/L	<0.00005	0.00005	0.00243	0.00025	0.00015	0.00005	8873711
. Cobalt (Co)	mg/L	<0.00005	0.00005	0.00293	0.00005	0.0122	0.00005	8878756
Dissolved Copper (Cu)	mg/L	0.0002	0.0001	0.0009	0.0005	0.0009	0.0001	8873711
. Copper (Cu)	mg/L	0.0002	0.0001	0.0008	0.0001	0.0278	0.0001	8878756
Dissolved Iron (Fe)	mg/L	5.27	0.005	9.31	0.025	0.026	0.005	8873711
. Iron (Fe)	mg/L	0.612	0.005	10.0	0.025	4.70	0.005	8878756
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	<0.00025	0.00025	0.00044	0.00005	8873711
. Lead (Pb)	mg/L	<0.00005	0.00005	0.00011	0.00005	0.0303	0.00005	8878756

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WSL993		WSL994		WSL995		
Sampling Date		2023/08/14 09:50		2023/08/14 10:43		2023/08/14 12:58		
COC Number		750214		750214		750214		
	UNITS	BH14-02A	RDL	BH1402	RDL	MW18 BR-21	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0011	0.0005	<0.0025	0.0025	0.0086	0.0005	8873711
. Lithium (Li)	mg/L	0.0011	0.0005	0.0010	0.0005	0.0120	0.0005	8878756
Dissolved Magnesium (Mg)	mg/L	18.7	0.005	29.5	0.025	4.79	0.005	8873711
. Magnesium (Mg)	mg/L	20.2	0.005	31.4	0.005	5.34	0.005	8878756
Dissolved Manganese (Mn)	mg/L	1.74	0.001	2.45	0.001	0.0551	0.0002	8873711
. Manganese (Mn)	mg/L	1.35	0.001	2.34	0.001	0.139	0.0002	8878756
Mercury (Hg)	ug/L	<0.01	0.01	<0.01	0.01	0.01	0.01	8866179
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	<0.01	0.01	<0.01	0.01	8864550
Dissolved Molybdenum (Mo)	mg/L	0.00039	0.00005	<0.00025	0.00025	0.00420	0.00005	8873711
. Molybdenum (Mo)	mg/L	0.00045	0.00005	0.00033	0.00005	0.00462	0.00005	8878756
Dissolved Nickel (Ni)	mg/L	0.0003	0.0001	0.0015	0.0005	0.0006	0.0001	8873711
. Nickel (Ni)	mg/L	0.0003	0.0001	0.0020	0.0001	0.0178	0.0001	8878756
Dissolved Phosphorus (P)	mg/L	0.005	0.005	<0.025	0.025	<0.005	0.005	8873711
. Phosphorus (P)	mg/L	<0.005	0.005	0.035	0.005	0.086	0.005	8878756
Dissolved Potassium (K)	mg/L	0.78	0.02	2.4	0.1	6.63	0.02	8873711
. Potassium (K)	mg/L	0.89	0.02	2.95	0.02	7.72	0.02	8878756
Dissolved Rubidium (Rb)	mg/L	0.00180	0.00002	0.0061	0.0001	0.00239	0.00002	8873711
. Rubidium (Rb)	mg/L	0.00191	0.00002	0.00688	0.00002	0.00297	0.00002	8878756
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	<0.001	0.001	<0.0002	0.0002	8873711
. Selenium (Se)	mg/L	0.00008	0.00005	0.00017	0.00005	0.00008	0.00005	8878756
Dissolved Silicon (Si)	mg/L	7.11	0.025	8.08	0.025	7.56	0.025	8873711
. Silicon (Si)	mg/L	7.23	0.025	8.84	0.025	12.7	0.025	8878756
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	<0.00005	0.00005	<0.00001	0.00001	8873711
. Silver (Ag)	mg/L	<0.00001	0.00001	<0.00001	0.00001	<0.00001	0.00001	8878756
Dissolved Sodium (Na)	mg/L	2.83	0.01	7.48	0.05	21.2	0.01	8873711
. Sodium (Na)	mg/L	3.03	0.01	8.57	0.01	30.5	0.01	8878756
Dissolved Strontium (Sr)	mg/L	0.272	0.0001	0.463	0.0005	0.978	0.0001	8873711
. Strontium (Sr)	mg/L	0.258	0.0001	0.485	0.0001	1.02	0.0001	8878756
Dissolved Sulphur (S)	mg/L	<0.5	0.5	6.4	0.5	5.8	0.5	8865922
Total Sulphur (S)	mg/L	<0.5	0.5	6.5	0.5	7.2	0.5	8867850
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	<0.0005	0.0005	<0.0001	0.0001	8873711

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WSL993		WSL994		WSL995		
Sampling Date		2023/08/14 09:50		2023/08/14 10:43		2023/08/14 12:58		
COC Number		750214		750214		750214		
	UNITS	**BH14-02A**	**RDL**	**BH1402**	**RDL**	**MW18 BR-21**	**RDL**	**QC Batch**
. Tellurium (Te)	mg/L	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	8878756
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	<0.000025	0.000025	<0.000005	0.000005	8873711
. Thallium (Tl)	mg/L	<0.000005	0.000005	0.000006	0.000005	0.000047	0.000005	8878756
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	<0.001	0.001	<0.0002	0.0002	8873711
. Thorium (Th)	mg/L	<0.0002	0.0002	<0.0002	0.0002	0.0003	0.0002	8878756
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	<0.0005	0.0005	<0.0001	0.0001	8873711
. Tin (Sn)	mg/L	<0.0001	0.0001	<0.0001	0.0001	0.0006	0.0001	8878756
Dissolved Titanium (Ti)	mg/L	0.0014	0.0005	<0.0025	0.0025	0.0007	0.0005	8873711
. Titanium (Ti)	mg/L	0.0007	0.0005	0.0036	0.0005	0.0087	0.0005	8878756
Dissolved Tungsten (W)	mg/L	0.0005	0.0001	<0.0005	0.0005	0.0047	0.0001	8873711
. Tungsten (W)	mg/L	0.0004	0.0001	0.0003	0.0001	0.0110	0.0001	8878756
Dissolved Uranium (U)	mg/L	0.00021	0.00001	0.00062	0.00005	0.0180	0.00001	8873711
. Uranium (U)	mg/L	0.00024	0.00001	0.00077	0.00001	0.0275	0.00001	8878756
Dissolved Vanadium (V)	mg/L	0.00097	0.00005	0.00031	0.00025	0.00226	0.00005	8873711
. Vanadium (V)	mg/L	0.00029	0.00005	0.00051	0.00005	0.00745	0.00005	8878756
Dissolved Zinc (Zn)	mg/L	0.0010	0.0005	<0.0025	0.0025	0.236	0.0005	8873711
. Zinc (Zn)	mg/L	<0.0005	0.0005	0.0009	0.0005	6.36	0.005	8878756
Dissolved Zirconium (Zr)	mg/L	0.0016	0.0001	0.0009	0.0005	0.0030	0.0001	8873711
. Zirconium (Zr)	mg/L	0.0008	0.0001	0.0009	0.0001	0.0051	0.0001	8878756

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WSL996			WSL997		WSL998		
Sampling Date		2023/08/14 14:04			2023/08/14 08:00		2023/08/14 08:00		
COC Number		750214			750214		750214		
	UNITS	MW21-BR-21	RDL	QC Batch	Duplicate 2	RDL	Field Blank	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	mg/L	0.0677	0.0025	8873711	0.0136	0.0005	<0.0005	0.0005	8873711
. Aluminum (Al)	mg/L	0.115	0.0005	8878756	0.0215	0.0005	<0.0005	0.0005	8878756
Dissolved Antimony (Sb)	mg/L	0.0005	0.0005	8873711	<0.0001	0.0001	<0.0001	0.0001	8873711
. Antimony (Sb)	mg/L	0.0009	0.0001	8878756	<0.0001	0.0001	<0.0001	0.0001	8878756
Dissolved Arsenic (As)	mg/L	0.0119	0.0005	8873711	0.0145	0.0001	<0.0001	0.0001	8873711
. Arsenic (As)	mg/L	0.0150	0.0001	8878756	0.0162	0.0001	<0.0001	0.0001	8878756
Dissolved Barium (Ba)	mg/L	0.017	0.001	8873711	0.0124	0.0002	<0.0002	0.0002	8873711
. Barium (Ba)	mg/L	0.0171	0.0002	8878756	0.0128	0.0002	<0.0002	0.0002	8878756
Dissolved Beryllium (Be)	mg/L	<0.00025	0.00025	8873711	<0.00005	0.00005	<0.00005	0.00005	8873711
. Beryllium (Be)	mg/L	<0.00005	0.00005	8878756	<0.00005	0.00005	<0.00005	0.00005	8878756
Dissolved Bismuth (Bi)	mg/L	<0.0005	0.0005	8873711	<0.0001	0.0001	<0.0001	0.0001	8873711
. Bismuth (Bi)	mg/L	<0.0001	0.0001	8878756	<0.0001	0.0001	<0.0001	0.0001	8878756
Dissolved Boron (B)	mg/L	<0.005	0.005	8873711	0.007	0.001	<0.001	0.001	8873711
. Boron (B)	mg/L	0.005	0.001	8878756	0.007	0.001	<0.001	0.001	8878756
Dissolved Cadmium (Cd)	mg/L	<0.00005	0.00005	8873711	<0.00001	0.00001	<0.00001	0.00001	8873711
. Cadmium (Cd)	mg/L	0.000120	0.000005	8878756	<0.000005	0.000005	<0.000005	0.000005	8878756
Dissolved Calcium (Ca)	mg/L	136	0.1	8873711	116	0.1	<0.02	0.02	8873711
. Calcium (Ca)	mg/L	143	0.1	8878756	121	0.1	<0.02	0.02	8878756
Dissolved Cesium (Cs)	mg/L	0.0001	0.0001	8873711	0.00021	0.00002	<0.00002	0.00002	8873711
. Cesium (Cs)	mg/L	0.00014	0.00002	8878756	0.00021	0.00002	<0.00002	0.00002	8878756
Dissolved Chromium (Cr)	mg/L	<0.0025	0.0025	8873711	<0.0005	0.0005	<0.0005	0.0005	8873711
. Chromium (Cr)	mg/L	0.0016	0.0005	8878756	<0.0005	0.0005	<0.0005	0.0005	8878756
Dissolved Cobalt (Co)	mg/L	0.350	0.00025	8873711	<0.00005	0.00005	<0.00005	0.00005	8873711
. Cobalt (Co)	mg/L	0.369	0.00005	8878756	0.00005	0.00005	<0.00005	0.00005	8878756
Dissolved Copper (Cu)	mg/L	0.0027	0.0005	8873711	0.0003	0.0001	<0.0001	0.0001	8873711
. Copper (Cu)	mg/L	0.0124	0.0001	8878756	0.0002	0.0001	<0.0001	0.0001	8878756
Dissolved Iron (Fe)	mg/L	10.8	0.025	8873711	5.00	0.005	<0.005	0.005	8873711
. Iron (Fe)	mg/L	14.2	0.025	8878756	5.44	0.005	<0.005	0.005	8878756
Dissolved Lead (Pb)	mg/L	<0.00025	0.00025	8873711	<0.00005	0.00005	<0.00005	0.00005	8873711
. Lead (Pb)	mg/L	0.00120	0.00005	8878756	<0.00005	0.00005	<0.00005	0.00005	8878756

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WSL996			WSL997		WSL998		
Sampling Date		2023/08/14 14:04			2023/08/14 08:00		2023/08/14 08:00		
COC Number		750214			750214		750214		
	UNITS	MW21-BR-21	RDL	QC Batch	Duplicate 2	RDL	Field Blank	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	<0.0025	0.0025	8873711	0.0011	0.0005	<0.0005	0.0005	8873711
. Lithium (Li)	mg/L	0.0008	0.0005	8878756	0.0011	0.0005	<0.0005	0.0005	8878756
Dissolved Magnesium (Mg)	mg/L	25.6	0.025	8873711	19.1	0.005	<0.005	0.005	8873711
. Magnesium (Mg)	mg/L	26.1	0.005	8878756	19.7	0.005	<0.005	0.005	8878756
Dissolved Manganese (Mn)	mg/L	14.9	0.01	8873711	1.61	0.001	<0.0002	0.0002	8873711
. Manganese (Mn)	mg/L	13.5	0.01	8878756	1.60	0.001	<0.0002	0.0002	8878756
Mercury (Hg)	ug/L	<0.01	0.01	8866179	<0.01	0.01	<0.01	0.01	8866179
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8864550	<0.01	0.01	<0.01	0.01	8864550
Dissolved Molybdenum (Mo)	mg/L	0.00151	0.00025	8873711	0.00039	0.00005	0.00005	0.00005	8873711
. Molybdenum (Mo)	mg/L	0.00114	0.00005	8878756	0.00040	0.00005	0.00006	0.00005	8878756
Dissolved Nickel (Ni)	mg/L	0.0548	0.0005	8873711	0.0003	0.0001	<0.0001	0.0001	8873711
. Nickel (Ni)	mg/L	0.0565	0.0001	8878756	0.0003	0.0001	<0.0001	0.0001	8878756
Dissolved Phosphorus (P)	mg/L	<0.025	0.025	8873711	<0.005	0.005	<0.005	0.005	8873711
. Phosphorus (P)	mg/L	0.026	0.005	8878756	<0.005	0.005	<0.005	0.005	8878756
Dissolved Potassium (K)	mg/L	0.5	0.1	8873711	0.78	0.02	<0.02	0.02	8873711
. Potassium (K)	mg/L	0.62	0.02	8878756	0.87	0.02	<0.02	0.02	8878756
Dissolved Rubidium (Rb)	mg/L	0.0015	0.0001	8873711	0.00182	0.00002	<0.00002	0.00002	8873711
. Rubidium (Rb)	mg/L	0.00179	0.00002	8878756	0.00187	0.00002	<0.00002	0.00002	8878756
Dissolved Selenium (Se)	mg/L	<0.001	0.001	8873711	<0.0002	0.0002	<0.0002	0.0002	8873711
. Selenium (Se)	mg/L	0.00034	0.00005	8878756	0.00006	0.00005	<0.00005	0.00005	8878756
Dissolved Silicon (Si)	mg/L	6.68	0.025	8873711	6.86	0.025	<0.005	0.005	8873711
. Silicon (Si)	mg/L	7.06	0.025	8878756	7.44	0.025	<0.005	0.005	8878756
Dissolved Silver (Ag)	mg/L	<0.00005	0.00005	8873711	<0.00001	0.00001	<0.00001	0.00001	8873711
. Silver (Ag)	mg/L	0.00005	0.00001	8878756	<0.00001	0.00001	<0.00001	0.00001	8878756
Dissolved Sodium (Na)	mg/L	15.4	0.05	8873711	2.69	0.01	<0.01	0.01	8873711
. Sodium (Na)	mg/L	16.8	0.01	8878756	2.98	0.01	<0.01	0.01	8878756
Dissolved Strontium (Sr)	mg/L	0.181	0.0005	8873711	0.274	0.0001	<0.0001	0.0001	8873711
. Strontium (Sr)	mg/L	0.188	0.0001	8878756	0.259	0.0001	<0.0001	0.0001	8878756
Dissolved Sulphur (S)	mg/L	5.3	0.5	8865922	<0.5	0.5	<0.5	0.5	8865922
Total Sulphur (S)	mg/L	5.3	0.5	8868957	<0.5	0.5	<0.5	0.5	8867850
Dissolved Tellurium (Te)	mg/L	<0.0005	0.0005	8873711	<0.0001	0.0001	<0.0001	0.0001	8873711

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WSL996			WSL997		WSL998		
Sampling Date		2023/08/14 14:04			2023/08/14 08:00		2023/08/14 08:00		
COC Number		750214			750214		750214		
	UNITS	MW21-BR-21	RDL	QC Batch	Duplicate 2	RDL	Field Blank	RDL	QC Batch
. Tellurium (Te)	mg/L	<0.0001	0.0001	8878756	<0.0001	0.0001	<0.0001	0.0001	8878756
Dissolved Thallium (Tl)	mg/L	<0.000025	0.000025	8873711	<0.000005	0.000005	<0.000005	0.000005	8873711
. Thallium (Tl)	mg/L	0.000021	0.000005	8878756	<0.000005	0.000005	<0.000005	0.000005	8878756
Dissolved Thorium (Th)	mg/L	<0.001	0.001	8873711	<0.0002	0.0002	<0.0002	0.0002	8873711
. Thorium (Th)	mg/L	0.0002	0.0002	8878756	<0.0002	0.0002	<0.0002	0.0002	8878756
Dissolved Tin (Sn)	mg/L	<0.0005	0.0005	8873711	<0.0001	0.0001	<0.0001	0.0001	8873711
. Tin (Sn)	mg/L	<0.0001	0.0001	8878756	<0.0001	0.0001	<0.0001	0.0001	8878756
Dissolved Titanium (Ti)	mg/L	<0.0025	0.0025	8873711	0.0011	0.0005	<0.0005	0.0005	8873711
. Titanium (Ti)	mg/L	0.0032	0.0005	8878756	0.0015	0.0005	<0.0005	0.0005	8878756
Dissolved Tungsten (W)	mg/L	0.0013	0.0005	8873711	0.0005	0.0001	<0.0001	0.0001	8873711
. Tungsten (W)	mg/L	0.0007	0.0001	8878756	0.0005	0.0001	<0.0001	0.0001	8878756
Dissolved Uranium (U)	mg/L	0.00159	0.00005	8873711	0.00023	0.00001	<0.00001	0.00001	8873711
. Uranium (U)	mg/L	0.00191	0.00001	8878756	0.00024	0.00001	<0.00001	0.00001	8878756
Dissolved Vanadium (V)	mg/L	0.00131	0.00025	8873711	0.00091	0.00005	<0.00005	0.00005	8873711
. Vanadium (V)	mg/L	0.00155	0.00005	8878756	0.00099	0.00005	<0.00005	0.00005	8878756
Dissolved Zinc (Zn)	mg/L	0.0641	0.0025	8873711	0.0006	0.0005	<0.0005	0.0005	8873711
. Zinc (Zn)	mg/L	0.0849	0.0005	8878756	0.0009	0.0005	<0.0005	0.0005	8878756
Dissolved Zirconium (Zr)	mg/L	0.0019	0.0005	8873711	0.0016	0.0001	<0.0001	0.0001	8873711
. Zirconium (Zr)	mg/L	0.0024	0.0001	8878756	0.0016	0.0001	<0.0001	0.0001	8878756

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WSL998			WSL999		
Sampling Date		2023/08/14 08:00			2023/08/14 08:00		
COC Number		750214			750214		
	UNITS	Field Blank Lab-Dup	RDL	QC Batch	Duplicate 5	RDL	QC Batch
Metals							
Dissolved Aluminum (Al)	mg/L				0.0053	0.0005	8873711
. Aluminum (Al)	mg/L				2.50	0.0025	8878756
Dissolved Antimony (Sb)	mg/L				0.0006	0.0001	8873711
. Antimony (Sb)	mg/L				0.0013	0.0001	8878756
Dissolved Arsenic (As)	mg/L				0.0539	0.0005	8873711
. Arsenic (As)	mg/L				0.0870	0.0005	8878756
Dissolved Barium (Ba)	mg/L				0.0374	0.0002	8873711
. Barium (Ba)	mg/L				0.0568	0.0002	8878756
Dissolved Beryllium (Be)	mg/L				<0.00005	0.00005	8873711
. Beryllium (Be)	mg/L				0.00008	0.00005	8878756
Dissolved Bismuth (Bi)	mg/L				<0.0001	0.0001	8873711
. Bismuth (Bi)	mg/L				<0.0001	0.0001	8878756
Dissolved Boron (B)	mg/L				0.012	0.001	8873711
. Boron (B)	mg/L				0.016	0.001	8878756
Dissolved Cadmium (Cd)	mg/L				<0.00001	0.00001	8873711
. Cadmium (Cd)	mg/L				0.000346	0.000005	8878756
Dissolved Calcium (Ca)	mg/L				32.2	0.04	8873711
. Calcium (Ca)	mg/L				44.4	0.1	8878756
Dissolved Cesium (Cs)	mg/L				0.00004	0.00002	8873711
. Cesium (Cs)	mg/L				0.00156	0.00002	8878756
Dissolved Chromium (Cr)	mg/L				<0.0005	0.0005	8873711
. Chromium (Cr)	mg/L				0.0062	0.0005	8878756
Dissolved Cobalt (Co)	mg/L				0.00015	0.00005	8873711
. Cobalt (Co)	mg/L				0.0147	0.00005	8878756
Dissolved Copper (Cu)	mg/L				0.0006	0.0001	8873711
. Copper (Cu)	mg/L				0.0321	0.0001	8878756
Dissolved Iron (Fe)	mg/L				0.022	0.005	8873711
. Iron (Fe)	mg/L				5.53	0.005	8878756
Dissolved Lead (Pb)	mg/L				0.00040	0.00005	8873711

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WSL998			WSL999		
Sampling Date		2023/08/14 08:00			2023/08/14 08:00		
COC Number		750214			750214		
	UNITS	Field Blank Lab-Dup	RDL	QC Batch	Duplicate 5	RDL	QC Batch
. Lead (Pb)	mg/L				0.0366	0.00005	8878756
Dissolved Lithium (Li)	mg/L				0.0082	0.0005	8873711
. Lithium (Li)	mg/L				0.0122	0.0005	8878756
Dissolved Magnesium (Mg)	mg/L				5.23	0.005	8873711
. Magnesium (Mg)	mg/L				5.85	0.005	8878756
Dissolved Manganese (Mn)	mg/L				0.0699	0.0002	8873711
. Manganese (Mn)	mg/L				0.159	0.0002	8878756
Mercury (Hg)	ug/L				0.01	0.01	8866179
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8864550	<0.01	0.01	8864550
Dissolved Molybdenum (Mo)	mg/L				0.00416	0.00005	8873711
. Molybdenum (Mo)	mg/L				0.00436	0.00005	8878756
Dissolved Nickel (Ni)	mg/L				0.0005	0.0001	8873711
. Nickel (Ni)	mg/L				0.0211	0.0001	8878756
Dissolved Phosphorus (P)	mg/L				<0.005	0.005	8873711
. Phosphorus (P)	mg/L				0.096	0.005	8878756
Dissolved Potassium (K)	mg/L				6.35	0.02	8873711
. Potassium (K)	mg/L				7.63	0.02	8878756
Dissolved Rubidium (Rb)	mg/L				0.00226	0.00002	8873711
. Rubidium (Rb)	mg/L				0.00308	0.00002	8878756
Dissolved Selenium (Se)	mg/L				<0.0002	0.0002	8873711
. Selenium (Se)	mg/L				0.00009	0.00005	8878756
Dissolved Silicon (Si)	mg/L				7.54	0.025	8873711
. Silicon (Si)	mg/L				13.1	0.025	8878756
Dissolved Silver (Ag)	mg/L				<0.00001	0.00001	8873711
. Silver (Ag)	mg/L				<0.00001	0.00001	8878756
Dissolved Sodium (Na)	mg/L				20.1	0.01	8873711
. Sodium (Na)	mg/L				29.1	0.01	8878756
Dissolved Strontium (Sr)	mg/L				0.952	0.0001	8873711
. Strontium (Sr)	mg/L				1.04	0.0001	8878756
Dissolved Sulphur (S)	mg/L				5.6	0.5	8865922

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WSL998			WSL999		
Sampling Date		2023/08/14 08:00			2023/08/14 08:00		
COC Number		750214			750214		
	UNITS	Field Blank Lab-Dup	RDL	QC Batch	Duplicate 5	RDL	QC Batch
Total Sulphur (S)	mg/L				7.0	0.5	8867850
Dissolved Tellurium (Te)	mg/L				<0.0001	0.0001	8873711
. Tellurium (Te)	mg/L				<0.0001	0.0001	8878756
Dissolved Thallium (Tl)	mg/L				<0.000005	0.000005	8873711
. Thallium (Tl)	mg/L				0.000052	0.000005	8878756
Dissolved Thorium (Th)	mg/L				<0.0002	0.0002	8873711
. Thorium (Th)	mg/L				0.0004	0.0002	8878756
Dissolved Tin (Sn)	mg/L				<0.0001	0.0001	8873711
. Tin (Sn)	mg/L				0.0007	0.0001	8878756
Dissolved Titanium (Ti)	mg/L				0.0006	0.0005	8873711
. Titanium (Ti)	mg/L				0.0100	0.0005	8878756
Dissolved Tungsten (W)	mg/L				0.0043	0.0001	8873711
. Tungsten (W)	mg/L				0.0081	0.0001	8878756
Dissolved Uranium (U)	mg/L				0.0163	0.00001	8873711
. Uranium (U)	mg/L				0.0264	0.00001	8878756
Dissolved Vanadium (V)	mg/L				0.00209	0.00005	8873711
. Vanadium (V)	mg/L				0.00801	0.00005	8878756
Dissolved Zinc (Zn)	mg/L				0.289	0.0005	8873711
. Zinc (Zn)	mg/L				7.09	0.005	8878756
Dissolved Zirconium (Zr)	mg/L				0.0033	0.0001	8873711
. Zirconium (Zr)	mg/L				0.0059	0.0001	8878756

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VOLATILE ORGANICS BY GC/MS (GROUND WATER)

Bureau Veritas ID		WSL996		
Sampling Date		2023/08/14 14:04		
COC Number		750214		
	UNITS	MW21-BR-21	RDL	QC Batch
Volatile Organics				
Benzene	ug/L	<0.17	0.17	8864402
Chloroform	ug/L	<0.20	0.20	8864402
1,2-Dichlorobenzene	ug/L	<0.50	0.50	8864402
1,4-Dichlorobenzene	ug/L	<0.50	0.50	8864402
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	8864402
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	8864402
Ethylbenzene	ug/L	0.50	0.20	8864402
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	8864402
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	8864402
Tetrachloroethylene	ug/L	<0.20	0.20	8864402
Toluene	ug/L	23	0.20	8864402
Trichloroethylene	ug/L	<0.20	0.20	8864402
p+m-Xylene	ug/L	<0.20	0.20	8864402
o-Xylene	ug/L	<0.20	0.20	8864402
Total Xylenes	ug/L	<0.20	0.20	8864402
F1 (C6-C10)	ug/L	40	25	8864402
F1 (C6-C10) - BTEX	ug/L	<25	25	8864402
Surrogate Recovery (%)				
4-Bromofluorobenzene	%	100		8864402
D4-1,2-Dichloroethane	%	104		8864402
D8-Toluene	%	93		8864402

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		WSL993	WSL994			WSL996		
Sampling Date		2023/08/14 09:50	2023/08/14 10:43			2023/08/14 14:04		
COC Number		750214	750214			750214		
	UNITS	BH14-02A	BH1402	RDL	QC Batch	MW21-BR-21	RDL	QC Batch
BTEX & F1 Hydrocarbons								
F1 (C6-C10)	ug/L	<25	<25	25	8865082			
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	100	8866764	<100	100	8866764
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	200	8866764	<200	200	8866764
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	200	8866764	<200	200	8866764
Reached Baseline at C50	ug/L	Yes	Yes		8866764	Yes		8866764
Surrogate Recovery (%)								
1,4-Difluorobenzene	%	105	104		8865082			
4-Bromofluorobenzene	%	98	96		8865082			
D10-o-Xylene	%	95	94		8865082			
D4-1,2-Dichloroethane	%	101	104		8865082			
o-Terphenyl	%	100	110		8866764	100		8866764

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WSL993
Sample ID: BH14-02A
Matrix: Ground Water

Collected: 2023/08/14
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8883391	N/A	2023/08/29	Brent Boudreau
Alkalinity	AT	8862683	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/19	Automated Statchk
Chloride by Automated Colourimetry	KONE	8864249	N/A	2023/08/22	Alina Dobreanu
Conductivity	AT	8862631	N/A	2023/08/18	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	8862835	N/A	2023/08/19	Gyulshen Idriz
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	8865082	N/A	2023/08/21	Anca Ganea
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8866764	2023/08/21	2023/08/22	Emir Danisman
Fluoride	ISE	8862685	2023/08/18	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8860809	N/A	2023/08/26	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8864550	2023/08/19	2023/08/22	Japneet Gill
Mercury (low level)	CV/AA	8866179	2023/08/21	2023/08/21	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8865922	2023/08/21	2023/08/22	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8873711	N/A	2023/08/25	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8878756	N/A	2023/08/29	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8867850	2023/08/22	2023/08/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8875715	N/A	2023/08/24	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8875714	2023/08/22	2023/08/22	Ming Dong
Total Phosphorus Low Level Total	KONE	8878798	2023/08/24	2023/08/25	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8863478	N/A	2023/08/21	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8862833	N/A	2023/08/21	Chandra Nandlal
pH	AT	8862684	2023/08/18	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Sulphate by Automated Turbidimetry	KONE	8864286	N/A	2023/08/22	Alina Dobreanu
Total Dissolved Solids	BAL	8862207	2023/08/18	2023/08/21	Razieh Tabesh
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Total Kjeldahl Nitrogen in Water	SKAL	8862672	2023/08/18	2023/08/22	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8863009	2023/08/19	2023/08/21	Razieh Tabesh
Turbidity	AT	8861913	N/A	2023/08/18	Gurparteek KAUR

Bureau Veritas ID: WSL994
Sample ID: BH1402
Matrix: Ground Water

Collected: 2023/08/14
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8880694	N/A	2023/08/28	Brent Boudreau
Alkalinity	AT	8862683	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/19	Automated Statchk
Chloride by Automated Colourimetry	KONE	8864249	N/A	2023/08/22	Alina Dobreanu
Conductivity	AT	8862631	N/A	2023/08/18	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	8862835	N/A	2023/08/19	Gyulshen Idriz
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	8865082	N/A	2023/08/21	Anca Ganea
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8866764	2023/08/21	2023/08/22	Emir Danisman
Fluoride	ISE	8862685	2023/08/18	2023/08/18	Nachiketa Gohil

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WSL994
Sample ID: BH1402
Matrix: Ground Water

Collected: 2023/08/14
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hardness (calculated as CaCO3)		8860809	N/A	2023/08/26	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8864550	2023/08/19	2023/08/22	Japneet Gill
Mercury (low level)	CV/AA	8866179	2023/08/21	2023/08/21	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8865922	2023/08/21	2023/08/22	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8873711	N/A	2023/08/25	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8878756	N/A	2023/08/30	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8867850	2023/08/22	2023/08/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8875715	N/A	2023/08/24	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8875716	2023/08/23	2023/08/23	Ming Dong
Total Phosphorus Low Level Total	KONE	8878798	2023/08/24	2023/08/25	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8863478	N/A	2023/08/21	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8863090	N/A	2023/08/21	Chandra Nandlal
pH	AT	8862684	2023/08/18	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Sulphate by Automated Turbidimetry	KONE	8864286	N/A	2023/08/22	Alina Dobreanu
Total Dissolved Solids	BAL	8862207	2023/08/18	2023/08/21	Razieh Tabesh
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Total Kjeldahl Nitrogen in Water	SKAL	8862672	2023/08/18	2023/08/22	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8863009	2023/08/19	2023/08/21	Razieh Tabesh
Turbidity	AT	8862704	N/A	2023/08/19	Leily Karimi

Bureau Veritas ID: WSL995
Sample ID: MW18 BR-21
Matrix: Ground Water

Collected: 2023/08/14
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8882924	N/A	2023/08/29	Brent Boudreau
Alkalinity	AT	8862683	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/19	Automated Statchk
Chloride by Automated Colourimetry	KONE	8864249	N/A	2023/08/22	Alina Dobreanu
Conductivity	AT	8862631	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8862685	2023/08/18	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8860809	N/A	2023/08/26	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8864550	2023/08/19	2023/08/22	Japneet Gill
Mercury (low level)	CV/AA	8866179	2023/08/21	2023/08/21	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8865922	2023/08/21	2023/08/22	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8873711	N/A	2023/08/25	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8878756	N/A	2023/08/30	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8867850	2023/08/22	2023/08/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8875715	N/A	2023/08/24	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8875714	2023/08/22	2023/08/22	Ming Dong
Total Phosphorus Low Level Total	KONE	8878798	2023/08/24	2023/08/25	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8863478	N/A	2023/08/21	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8862833	N/A	2023/08/21	Chandra Nandlal

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WSL995
Sample ID: MW18 BR-21
Matrix: Ground Water

Collected: 2023/08/14
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH	AT	8862684	2023/08/18	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Sulphate by Automated Turbidimetry	KONE	8864286	N/A	2023/08/22	Alina Dobreanu
Total Dissolved Solids	BAL	8862207	2023/08/18	2023/08/21	Razieh Tabesh
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Total Kjeldahl Nitrogen in Water	SKAL	8862672	2023/08/18	2023/08/22	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8863009	2023/08/19	2023/08/21	Razieh Tabesh
Turbidity	AT	8861913	N/A	2023/08/18	Gurparteek KAUR

Bureau Veritas ID: WSL996
Sample ID: MW21-BR-21
Matrix: Ground Water

Collected: 2023/08/14
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8880338	N/A	2023/08/28	Brent Boudreau
Alkalinity	AT	8862683	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/19	Automated Statchk
Chloride by Automated Colourimetry	KONE	8864249	N/A	2023/08/22	Alina Dobreanu
Conductivity	AT	8862631	N/A	2023/08/18	Nachiketa Gohil
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8866764	2023/08/21	2023/08/22	Emir Danisman
Fluoride	ISE	8862685	2023/08/18	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8860809	N/A	2023/08/26	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8864550	2023/08/19	2023/08/22	Japneet Gill
Mercury (low level)	CV/AA	8866179	2023/08/21	2023/08/21	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8865922	2023/08/21	2023/08/22	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8873711	N/A	2023/08/26	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8878756	N/A	2023/08/30	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8868957	2023/08/22	2023/08/23	Jaswinder Kaur
Cyanide (Free)	SPEC	8875715	N/A	2023/08/24	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8875714	2023/08/22	2023/08/22	Ming Dong
Total Phosphorus Low Level Total	KONE	8878798	2023/08/24	2023/08/25	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8863478	N/A	2023/08/21	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8862833	N/A	2023/08/21	Chandra Nandlal
pH	AT	8862684	2023/08/18	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Sulphate by Automated Turbidimetry	KONE	8864286	N/A	2023/08/22	Alina Dobreanu
Total Dissolved Solids	BAL	8862207	2023/08/18	2023/08/21	Razieh Tabesh
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Total Kjeldahl Nitrogen in Water	SKAL	8862672	2023/08/18	2023/08/22	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8863009	2023/08/19	2023/08/21	Razieh Tabesh
Turbidity	AT	8862704	N/A	2023/08/19	Leily Karimi
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8864402	N/A	2023/08/21	Denis Reid

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WSL997
Sample ID: Duplicate 2
Matrix: Ground Water

Collected: 2023/08/14
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8880694	N/A	2023/08/28	Brent Boudreau
Alkalinity	AT	8862683	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/19	Automated Statchk
Chloride by Automated Colourimetry	KONE	8864249	N/A	2023/08/22	Alina Dobreanu
Conductivity	AT	8862631	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8862685	2023/08/18	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8859021	N/A	2023/08/26	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8864550	2023/08/19	2023/08/22	Japneet Gill
Mercury (low level)	CV/AA	8866179	2023/08/21	2023/08/21	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8865922	2023/08/21	2023/08/22	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8873711	N/A	2023/08/25	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8878756	N/A	2023/08/30	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8867850	2023/08/22	2023/08/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8875715	N/A	2023/08/24	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8875716	2023/08/23	2023/08/23	Ming Dong
Total Phosphorus Low Level Total	KONE	8878798	2023/08/24	2023/08/25	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8863478	N/A	2023/08/21	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8863090	N/A	2023/08/21	Chandra Nandlal
pH	AT	8862684	2023/08/18	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Sulphate by Automated Turbidimetry	KONE	8864286	N/A	2023/08/22	Alina Dobreanu
Total Dissolved Solids	BAL	8862207	2023/08/18	2023/08/21	Razieh Tabesh
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Total Kjeldahl Nitrogen in Water	SKAL	8862672	2023/08/18	2023/08/22	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8863009	2023/08/19	2023/08/21	Razieh Tabesh
Turbidity	AT	8862704	N/A	2023/08/19	Leily Karimi

Bureau Veritas ID: WSL998
Sample ID: Field Blank
Matrix: Ground Water

Collected: 2023/08/14
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8880338	N/A	2023/08/28	Brent Boudreau
Alkalinity	AT	8862683	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/19	Automated Statchk
Chloride by Automated Colourimetry	KONE	8864249	N/A	2023/08/22	Alina Dobreanu
Conductivity	AT	8862631	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8862685	2023/08/18	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8859021	N/A	2023/08/26	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8864550	2023/08/19	2023/08/22	Japneet Gill
Mercury (low level)	CV/AA	8866179	2023/08/21	2023/08/21	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8865922	2023/08/21	2023/08/22	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8873711	N/A	2023/08/25	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8878756	N/A	2023/08/30	Azita Fazaeli

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3P0285
Report Date: 2023/08/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: M.F

TEST SUMMARY

Bureau Veritas ID: WSL998
Sample ID: Field Blank
Matrix: Ground Water

Collected: 2023/08/14
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals Analysis by ICP	ICP	8867850	2023/08/22	2023/08/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8875715	N/A	2023/08/24	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8875714	2023/08/22	2023/08/22	Ming Dong
Total Phosphorus Low Level Total	KONE	8878798	2023/08/24	2023/08/25	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8863478	N/A	2023/08/21	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8862833	N/A	2023/08/21	Chandra Nandlal
pH	AT	8862684	2023/08/18	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Sulphate by Automated Turbidimetry	KONE	8864286	N/A	2023/08/22	Alina Dobreanu
Total Dissolved Solids	BAL	8862553	2023/08/19	2023/08/21	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Total Kjeldahl Nitrogen in Water	SKAL	8862672	2023/08/18	2023/08/22	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8863009	2023/08/19	2023/08/21	Razieh Tabesh
Turbidity	AT	8862704	N/A	2023/08/19	Leily Karimi

Bureau Veritas ID: WSL998 Dup
Sample ID: Field Blank
Matrix: Ground Water

Collected: 2023/08/14
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Mercury (low level)	CV/AA	8864550	2023/08/19	2023/08/22	Japneet Gill
Turbidity	AT	8862704	N/A	2023/08/19	Leily Karimi

Bureau Veritas ID: WSL999
Sample ID: Duplicate 5
Matrix: Ground Water

Collected: 2023/08/14
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8880450	N/A	2023/08/28	Brent Boudreau
Alkalinity	AT	8862683	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/19	Automated Statchk
Chloride by Automated Colourimetry	KONE	8864249	N/A	2023/08/22	Alina Dobreanu
Conductivity	AT	8862631	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8862685	2023/08/18	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8860809	N/A	2023/08/26	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8864550	2023/08/19	2023/08/22	Japneet Gill
Mercury (low level)	CV/AA	8866179	2023/08/21	2023/08/21	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8865922	2023/08/21	2023/08/22	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8873711	N/A	2023/08/25	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8878756	N/A	2023/08/30	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8867850	2023/08/22	2023/08/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8875715	N/A	2023/08/24	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8875714	2023/08/22	2023/08/22	Ming Dong
Total Phosphorus Low Level Total	KONE	8878798	2023/08/24	2023/08/25	Mary Anne Dela Cruz

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3P0285
Report Date: 2023/08/31

Greenstone Mine
Client Project #: Groundwater Sampling Program
Your P.O. #: 4800001036
Sampler Initials: M.F

TEST SUMMARY

Bureau Veritas ID: WSL999
Sample ID: Duplicate 5
Matrix: Ground Water

Collected: 2023/08/14
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Ammonia-N	LACH/NH4	8863478	N/A	2023/08/21	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8862833	N/A	2023/08/21	Chandra Nandlal
pH	AT	8862684	2023/08/18	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Sulphate by Automated Turbidimetry	KONE	8864286	N/A	2023/08/22	Alina Dobreanu
Total Dissolved Solids	BAL	8862207	2023/08/18	2023/08/21	Razieh Tabesh
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Total Kjeldahl Nitrogen in Water	SKAL	8862672	2023/08/18	2023/08/22	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8863009	2023/08/19	2023/08/21	Razieh Tabesh
Turbidity	AT	8862704	N/A	2023/08/19	Leily Karimi

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	6.0°C
Package 2	3.7°C
Package 3	6.0°C
Package 4	3.3°C

Sample WSL993 [BH14-02A] : Acidity sample contained headspace.
Acidity: Sample integrity may have been compromised, sample analyzed past hold time.

Sample WSL994 [BH1402] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
Metal Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.
Acidity sample contained headspace.

Sample WSL995 [MW18 BR-21] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
Acidity sample contained headspace.
Acidity: Sample integrity may have been compromised, sample analyzed past hold time.

Sample WSL996 [MW21-BR-21] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
Metal Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.
Acidity sample contained headspace.

Sample WSL997 [Duplicate 2] : Acidity sample contained headspace.

Sample WSL998 [Field Blank] : Acidity sample contained headspace.

Sample WSL999 [Duplicate 5] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
Acidity sample contained headspace.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8864402	4-Bromofluorobenzene	2023/08/21	104	70 - 130	106	70 - 130	104	%				
8864402	D4-1,2-Dichloroethane	2023/08/21	100	70 - 130	101	70 - 130	99	%				
8864402	D8-Toluene	2023/08/21	103	70 - 130	101	70 - 130	94	%				
8865082	1,4-Difluorobenzene	2023/08/20	102	70 - 130	102	70 - 130	104	%				
8865082	4-Bromofluorobenzene	2023/08/20	98	70 - 130	99	70 - 130	98	%				
8865082	D10-o-Xylene	2023/08/20	93	70 - 130	92	70 - 130	93	%				
8865082	D4-1,2-Dichloroethane	2023/08/20	98	70 - 130	98	70 - 130	104	%				
8866764	o-Terphenyl	2023/08/22	102	60 - 130	102	60 - 130	98	%				
8861913	Turbidity	2023/08/18			99	80 - 120	<0.1	NTU	14	20		
8862207	Total Dissolved Solids	2023/08/21			97	90 - 110	<10	mg/L	8.0	20		
8862553	Total Dissolved Solids	2023/08/21			98	90 - 110	<10	mg/L	1.4	20		
8862631	Conductivity	2023/08/18			102	85 - 115	<0.001	mS/cm	0.26	10		
8862672	Total Kjeldahl Nitrogen (TKN)	2023/08/22	NC	80 - 120	98	80 - 120	<0.10	mg/L	1.8	20	92	80 - 120
8862683	Alkalinity (Total as CaCO3)	2023/08/18			95	85 - 115	<1.0	mg/L	1.5	20		
8862684	pH	2023/08/18			102	98 - 103			0.14	N/A		
8862685	Fluoride (F-)	2023/08/18	91	80 - 120	93	80 - 120	<0.10	mg/L	NC	20		
8862704	Turbidity	2023/08/19			99	80 - 120	<0.1	NTU	NC	20		
8862833	Nitrate (N)	2023/08/21	NC	80 - 120	98	80 - 120	<0.10	mg/L	0.16	20		
8862833	Nitrite (N)	2023/08/21	101	80 - 120	105	80 - 120	<0.010	mg/L	0.42	20		
8862835	Dissolved Organic Carbon	2023/08/19	92	80 - 120	96	80 - 120	<0.40	mg/L	0.38	20		
8863009	Total Suspended Solids	2023/08/21			95	85 - 115	<1	mg/L	13	20		
8863090	Nitrate (N)	2023/08/21	101	80 - 120	99	80 - 120	<0.10	mg/L	3.2	20		
8863090	Nitrite (N)	2023/08/21	104	80 - 120	106	80 - 120	<0.010	mg/L	2.7	20		
8863478	Total Ammonia-N	2023/08/21	101	75 - 125	101	80 - 120	<0.050	mg/L	11	20		
8864249	Dissolved Chloride (Cl-)	2023/08/22	NC	80 - 120	99	80 - 120	<1.0	mg/L	2.8	20		
8864286	Dissolved Sulphate (SO4)	2023/08/22	NC	75 - 125	101	80 - 120	<1.0	mg/L	2.2	20		
8864402	1,1,2,2-Tetrachloroethane	2023/08/21	93	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
8864402	1,2-Dichlorobenzene	2023/08/21	94	70 - 130	95	70 - 130	<0.50	ug/L	NC	30		
8864402	1,4-Dichlorobenzene	2023/08/21	94	70 - 130	95	70 - 130	<0.50	ug/L	NC	30		
8864402	Benzene	2023/08/21	96	70 - 130	97	70 - 130	<0.17	ug/L	NC	30		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8864402	Chloroform	2023/08/21	96	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
8864402	cis-1,2-Dichloroethylene	2023/08/21	100	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		
8864402	Ethylbenzene	2023/08/21	90	70 - 130	92	70 - 130	<0.20	ug/L	NC	30		
8864402	F1 (C6-C10) - BTEX	2023/08/21					<25	ug/L	NC	30		
8864402	F1 (C6-C10)	2023/08/21	91	60 - 140	92	60 - 140	<25	ug/L	NC	30		
8864402	Methylene Chloride(Dichloromethane)	2023/08/21	97	70 - 130	97	70 - 130	<2.0	ug/L	NC	30		
8864402	o-Xylene	2023/08/21	91	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
8864402	p+m-Xylene	2023/08/21	90	70 - 130	92	70 - 130	<0.20	ug/L	NC	30		
8864402	Tetrachloroethylene	2023/08/21	102	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
8864402	Toluene	2023/08/21	96	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
8864402	Total Xylenes	2023/08/21					<0.20	ug/L	NC	30		
8864402	trans-1,3-Dichloropropene	2023/08/21	102	70 - 130	95	70 - 130	<0.40	ug/L	NC	30		
8864402	Trichloroethylene	2023/08/21	98	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
8864550	Dissolved Mercury (Hg)	2023/08/22	101	75 - 125	98	80 - 120	<0.01	ug/L	NC	20		
8865082	F1 (C6-C10)	2023/08/20	99	60 - 140	97	60 - 140	<25	ug/L	NC	30		
8865922	Dissolved Sulphur (S)	2023/08/22	NC	80 - 120	102	80 - 120	<0.5	mg/L	0.85	25		
8866179	Mercury (Hg)	2023/08/21	99	75 - 125	100	80 - 120	<0.01	ug/L	NC	20		
8866764	F2 (C10-C16 Hydrocarbons)	2023/08/22	110	60 - 130	105	60 - 130	<100	ug/L	NC	30		
8866764	F3 (C16-C34 Hydrocarbons)	2023/08/22	112	60 - 130	111	60 - 130	<200	ug/L	NC	30		
8866764	F4 (C34-C50 Hydrocarbons)	2023/08/22	115	60 - 130	113	60 - 130	<200	ug/L	NC	30		
8867850	Total Sulphur (S)	2023/08/22	99	80 - 120	97	80 - 120	<0.5	mg/L				
8868957	Total Sulphur (S)	2023/08/23	95	80 - 120	96	80 - 120	<0.5	mg/L				
8873711	Dissolved Aluminum (Al)	2023/08/25	108	80 - 120	100	80 - 120	<0.0005	mg/L	NC	20		
8873711	Dissolved Antimony (Sb)	2023/08/25	116	80 - 120	100	80 - 120	<0.0001	mg/L	5.6	20		
8873711	Dissolved Arsenic (As)	2023/08/25	108	80 - 120	99	80 - 120	<0.0001	mg/L	3.4	20		
8873711	Dissolved Barium (Ba)	2023/08/25	NC	80 - 120	100	80 - 120	<0.0002	mg/L	1.1	20		
8873711	Dissolved Beryllium (Be)	2023/08/25	107	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8873711	Dissolved Bismuth (Bi)	2023/08/25	100	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8873711	Dissolved Boron (B)	2023/08/25	105	80 - 120	96	80 - 120	<0.001	mg/L	2.8	20		
8873711	Dissolved Cadmium (Cd)	2023/08/25	109	80 - 120	97	80 - 120	<0.00001	mg/L	NC	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8873711	Dissolved Calcium (Ca)	2023/08/25	NC	80 - 120	101	80 - 120	<0.02	mg/L	0.13	20		
8873711	Dissolved Cesium (Cs)	2023/08/25	104	80 - 120	100	80 - 120	<0.00002	mg/L	NC	N/A		
8873711	Dissolved Chromium (Cr)	2023/08/25	102	80 - 120	94	80 - 120	<0.0005	mg/L	NC	20		
8873711	Dissolved Cobalt (Co)	2023/08/25	102	80 - 120	101	80 - 120	<0.00005	mg/L	4.1	20		
8873711	Dissolved Copper (Cu)	2023/08/25	104	80 - 120	101	80 - 120	<0.0001	mg/L	2.3	20		
8873711	Dissolved Iron (Fe)	2023/08/25	105	80 - 120	102	80 - 120	<0.005	mg/L	4.4	20		
8873711	Dissolved Lead (Pb)	2023/08/25	106	80 - 120	99	80 - 120	<0.00005	mg/L	NC	20		
8873711	Dissolved Lithium (Li)	2023/08/25	123 (1)	80 - 120	107	80 - 120	<0.0005	mg/L	0.12	20		
8873711	Dissolved Magnesium (Mg)	2023/08/25	NC	80 - 120	97	80 - 120	<0.005	mg/L	1.3	20		
8873711	Dissolved Manganese (Mn)	2023/08/25	103	80 - 120	99	80 - 120	<0.0002	mg/L	3.2	20		
8873711	Dissolved Molybdenum (Mo)	2023/08/25	112	80 - 120	94	80 - 120	<0.00005	mg/L	0.60	20		
8873711	Dissolved Nickel (Ni)	2023/08/25	101	80 - 120	99	80 - 120	<0.0001	mg/L	0.15	20		
8873711	Dissolved Phosphorus (P)	2023/08/25	111	80 - 120	96	80 - 120	<0.005	mg/L	NC	20		
8873711	Dissolved Potassium (K)	2023/08/25	111	80 - 120	98	80 - 120	<0.02	mg/L	3.5	20		
8873711	Dissolved Rubidium (Rb)	2023/08/25	106	80 - 120	99	80 - 120	<0.00002	mg/L	5.2	N/A		
8873711	Dissolved Selenium (Se)	2023/08/25	108	80 - 120	101	80 - 120	<0.0002	mg/L	NC	20		
8873711	Dissolved Silicon (Si)	2023/08/25	NC	80 - 120	99	80 - 120	<0.005	mg/L	1.4	20		
8873711	Dissolved Silver (Ag)	2023/08/25	100	80 - 120	96	80 - 120	<0.00001	mg/L	NC	20		
8873711	Dissolved Sodium (Na)	2023/08/25	NC	80 - 120	101	80 - 120	<0.01	mg/L	4.3	20		
8873711	Dissolved Strontium (Sr)	2023/08/25	NC	80 - 120	98	80 - 120	<0.0001	mg/L	3.3	20		
8873711	Dissolved Tellurium (Te)	2023/08/25	111	80 - 120	95	80 - 120	<0.0001	mg/L	NC	20		
8873711	Dissolved Thallium (Tl)	2023/08/25	108	80 - 120	103	80 - 120	<0.000005	mg/L	NC	20		
8873711	Dissolved Thorium (Th)	2023/08/25	96	80 - 120	100	80 - 120	<0.0002	mg/L	NC	20		
8873711	Dissolved Tin (Sn)	2023/08/25	113	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8873711	Dissolved Titanium (Ti)	2023/08/25	109	80 - 120	100	80 - 120	<0.0005	mg/L	NC	20		
8873711	Dissolved Tungsten (W)	2023/08/25	118	80 - 120	105	80 - 120	<0.0001	mg/L	0.53	20		
8873711	Dissolved Uranium (U)	2023/08/25	107	80 - 120	97	80 - 120	<0.00001	mg/L	0.74	20		
8873711	Dissolved Vanadium (V)	2023/08/25	105	80 - 120	96	80 - 120	<0.00005	mg/L	NC	20		
8873711	Dissolved Zinc (Zn)	2023/08/25	103	80 - 120	100	80 - 120	<0.0005	mg/L	3.2	20		
8873711	Dissolved Zirconium (Zr)	2023/08/25	118	80 - 120	100	80 - 120	<0.0001	mg/L	3.9	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8875714	Strong Acid Dissoc. Cyanide (CN)	2023/08/22	101	80 - 120	101	80 - 120	<0.00050	mg/L				
8875715	Free Cyanide (CN)	2023/08/24	96	80 - 120	89	80 - 120	<2.0	ug/L				
8875716	Strong Acid Dissoc. Cyanide (CN)	2023/08/23	102	80 - 120	104	80 - 120	<0.00050	mg/L				
8878756	. Aluminum (Al)	2023/08/30	119	80 - 120	100	80 - 120	<0.0005	mg/L	9.7	20		
8878756	. Antimony (Sb)	2023/08/30	118	80 - 120	103	80 - 120	<0.0001	mg/L	0	20		
8878756	. Arsenic (As)	2023/08/30	110	80 - 120	99	80 - 120	<0.0001	mg/L	2.4	20		
8878756	. Barium (Ba)	2023/08/30	107	80 - 120	98	80 - 120	<0.0002	mg/L	0.64	20		
8878756	. Beryllium (Be)	2023/08/30	101	80 - 120	100	80 - 120	<0.00005	mg/L	NC	20		
8878756	. Bismuth (Bi)	2023/08/30	95	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8878756	. Boron (B)	2023/08/30	NC	80 - 120	95	80 - 120	<0.001	mg/L	0.93	20		
8878756	. Cadmium (Cd)	2023/08/30	103	80 - 120	97	80 - 120	<0.000005	mg/L	NC	20		
8878756	. Calcium (Ca)	2023/08/30	NC	80 - 120	102	80 - 120	<0.02	mg/L	0.24	20		
8878756	. Cesium (Cs)	2023/08/30	106	80 - 120	101	80 - 120	<0.00002	mg/L	NC	N/A		
8878756	. Chromium (Cr)	2023/08/30	108	80 - 120	97	80 - 120	<0.0005	mg/L	NC	20		
8878756	. Cobalt (Co)	2023/08/30	104	80 - 120	97	80 - 120	<0.00005	mg/L	0.96	20		
8878756	. Copper (Cu)	2023/08/30	109	80 - 120	97	80 - 120	<0.0001	mg/L	11	20		
8878756	. Iron (Fe)	2023/08/30	108	80 - 120	100	80 - 120	<0.005	mg/L	0.18	20		
8878756	. Lead (Pb)	2023/08/30	96	80 - 120	96	80 - 120	<0.00005	mg/L	NC	20		
8878756	. Lithium (Li)	2023/08/30	108	80 - 120	101	80 - 120	<0.0005	mg/L	0.20	20		
8878756	. Magnesium (Mg)	2023/08/30	NC	80 - 120	98	80 - 120	<0.005	mg/L	0.63	20		
8878756	. Manganese (Mn)	2023/08/30	105	80 - 120	96	80 - 120	<0.0002	mg/L	1.6	20		
8878756	. Molybdenum (Mo)	2023/08/30	124 (1)	80 - 120	101	80 - 120	<0.00005	mg/L	1.9	20		
8878756	. Nickel (Ni)	2023/08/30	102	80 - 120	98	80 - 120	<0.0001	mg/L	0.34	20		
8878756	. Phosphorus (P)	2023/08/30	115	80 - 120	95	80 - 120	<0.005	mg/L	NC	20		
8878756	. Potassium (K)	2023/08/30	NC	80 - 120	99	80 - 120	<0.02	mg/L	0.34	20		
8878756	. Rubidium (Rb)	2023/08/30	109	80 - 120	101	80 - 120	<0.00002	mg/L	0.36	N/A		
8878756	. Selenium (Se)	2023/08/30	115	80 - 120	103	80 - 120	<0.00005	mg/L	NC	20		
8878756	. Silicon (Si)	2023/08/30	NC	80 - 120	102	80 - 120	<0.005	mg/L	0.74	20		
8878756	. Silver (Ag)	2023/08/30	92	80 - 120	101	80 - 120	<0.00001	mg/L	NC	20		
8878756	. Sodium (Na)	2023/08/30	NC	80 - 120	99	80 - 120	<0.01	mg/L	2.4	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8878756	. Strontium (Sr)	2023/08/30	NC	80 - 120	98	80 - 120	<0.0001	mg/L	0.14	20		
8878756	. Tellurium (Te)	2023/08/30	106	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8878756	. Thallium (Tl)	2023/08/30	97	80 - 120	97	80 - 120	<0.000005	mg/L	NC	20		
8878756	. Thorium (Th)	2023/08/30	92	80 - 120	99	80 - 120	<0.0002	mg/L	NC	20		
8878756	. Tin (Sn)	2023/08/30	118	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8878756	. Titanium (Ti)	2023/08/30	120	80 - 120	103	80 - 120	<0.0005	mg/L	NC	20		
8878756	. Tungsten (W)	2023/08/30	114	80 - 120	102	80 - 120	<0.0001	mg/L	3.7	20		
8878756	. Uranium (U)	2023/08/30	109	80 - 120	105	80 - 120	<0.00001	mg/L	4.9	20		
8878756	. Vanadium (V)	2023/08/30	113	80 - 120	98	80 - 120	<0.00005	mg/L	4.0	20		
8878756	. Zinc (Zn)	2023/08/30	96	80 - 120	97	80 - 120	<0.0005	mg/L	10	20		
8878756	. Zirconium (Zr)	2023/08/30	124 (1)	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8878798	Total Phosphorus (P)	2023/08/25	117	80 - 120	112	80 - 120	<0.0010	mg/L			89	80 - 120
8880338	Acidity	2023/08/28	89	80 - 120	103	80 - 120	<5.0	mg/L	NC	25		
8880450	Acidity	2023/08/28	93	80 - 120	104	80 - 120	<5.0	mg/L	NC	25		
8880694	Acidity	2023/08/28	89	80 - 120	104	80 - 120	<5.0	mg/L	NC	25		
8882924	Acidity	2023/08/29	104	80 - 120	104	80 - 120	<5.0	mg/L	NC	25		
8883391	Acidity	2023/08/29	104	80 - 120	104	80 - 120	<5.0	mg/L	NC	25		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike exceeds acceptance limits, probable matrix interference

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Brad Newman, B.Sc., C.Chem., Scientific Service Specialist

<original signed by>

Mike MacGillivray, Scientific Specialist (Inorganics)

<original signed by>

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: GROUNDWATER SAMPLING PROGRAM
Your C.O.C. #: 750229

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/31
Report #: R7791044
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3P0302
Received: 2023/08/16, 11:39

Sample Matrix: Ground Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	2	N/A	2023/08/28	ATL SOP-00205	SM 24 2310B m
Alkalinity	2	N/A	2023/08/18	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	2	N/A	2023/08/19	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	2	N/A	2023/08/22	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	2	N/A	2023/08/18	CAM SOP-00414	SM 23 2510 m
Fluoride	2	2023/08/18	2023/08/18	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	2	N/A	2023/08/26	CAM SOP 00102/00408/00447	SM 2340 B
Dissolved Mercury (low level)	2	2023/08/19	2023/08/22	CAM SOP-00453	EPA 7470 m
Mercury (low level)	2	2023/08/21	2023/08/21	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	2	2023/08/21	2023/08/22	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	2	N/A	2023/08/25	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	2	N/A	2023/08/30	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	2	2023/08/22	2023/08/22	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	2	N/A	2023/08/22	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	2	2023/08/23	2023/08/23	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	2	2023/08/24	2023/08/25	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	2	N/A	2023/08/22	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (3)	2	N/A	2023/08/21	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	2	2023/08/18	2023/08/18	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (4)	2	N/A	2023/08/17		Field pH Meter
Sulphate by Automated Turbidimetry	2	N/A	2023/08/22	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	2	2023/08/21	2023/08/22	CAM SOP-00428	SM 23 2540C m
Field Temperature (4)	2	N/A	2023/08/17		Field Thermometer
Total Kjeldahl Nitrogen in Water	1	2023/08/18	2023/08/22	CAM SOP-00938	OMOE E3516 m
Total Kjeldahl Nitrogen in Water	1	2023/08/22	2023/08/22	CAM SOP-00938	OMOE E3516 m
Low Level Total Suspended Solids	2	2023/08/22	2023/08/22	CAM SOP-00428	SM 23 2540D m
Turbidity	1	N/A	2023/08/18	CAM SOP-00417	SM 23 2130 B m
Turbidity	1	N/A	2023/08/19	CAM SOP-00417	SM 23 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: GROUNDWATER SAMPLING PROGRAM
Your C.O.C. #: 750229

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/08/31
Report #: R7791044
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3P0302

Received: 2023/08/16, 11:39

(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(4) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633
==========
This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		WSM125			WSM126		
Sampling Date		2023/08/14 14:38			2023/08/14 14:54		
COC Number		750229			750229		
	UNITS	MWS14-02 BR	RDL	QC Batch	MWS14-02 OB	RDL	QC Batch
Calculated Parameters							
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	290	1.0	8859121	290	1.0	8859121
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.7	1.0	8859121	1.7	1.0	8859121
Hardness (CaCO3)	mg/L	280	1.0	8860809	280	1.0	8860809
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8859121	<1.0	1.0	8859121
Field Measurements							
Field Temperature	Celsius	13.1	N/A	ONSITE	11.7	N/A	ONSITE
Field Measured pH	pH	7.01		ONSITE	7.28		ONSITE
Inorganics							
Acidity	mg/L	10	5.0	8880694	11	5.0	8880694
Total Ammonia-N	mg/L	0.22	0.050	8863491	0.082	0.050	8863491
Conductivity	mS/cm	0.537	0.001	8862631	0.541	0.001	8862631
Free Cyanide (CN)	ug/L	3.0 (1)	2.0	8870435	2.6 (1)	2.0	8870435
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050 (2)	0.00050	8875716	<0.00050 (2)	0.00050	8875716
Total Dissolved Solids	mg/L	300	10	8864414	310	10	8864414
Fluoride (F-)	mg/L	0.29	0.10	8862685	0.31	0.10	8862685
Total Kjeldahl Nitrogen (TKN)	mg/L	0.31	0.10	8868343	0.17	0.10	8862672
pH	pH	7.80		8862684	7.78		8862684
Total Phosphorus (P)	mg/L	0.079	0.0010	8878798	0.81	0.010	8878798
Total Suspended Solids	mg/L	130	2	8864410	2000	5	8865309
Dissolved Sulphate (SO4)	mg/L	5.9	1.0	8864286	8.0	1.0	8864286
Turbidity	NTU	9.4	0.1	8862704	45	0.1	8861913
Alkalinity (Total as CaCO3)	mg/L	290	1.0	8862683	300	1.0	8862683
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	8864249	<1.0	1.0	8864249
Nitrite (N)	mg/L	<0.010	0.010	8863090	<0.010	0.010	8862833
Nitrate (N)	mg/L	<0.10	0.10	8863090	<0.10	0.10	8862833
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8863090	<0.10	0.10	8862833

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com
Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WSM125		WSM126		
Sampling Date		2023/08/14 14:38		2023/08/14 14:54		
COC Number		750229		750229		
	UNITS	MWS14-02 BR	RDL	MWS14-02 OB	RDL	QC Batch
Metals						
Dissolved Aluminum (Al)	mg/L	0.0040	0.0005	0.0008	0.0005	8873711
. Aluminum (Al)	mg/L	0.304	0.0005	3.07	0.0025	8878756
Dissolved Antimony (Sb)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8873711
. Antimony (Sb)	mg/L	0.0002	0.0001	<0.0001	0.0001	8878756
Dissolved Arsenic (As)	mg/L	0.0030	0.0001	0.0005	0.0001	8873711
. Arsenic (As)	mg/L	0.0085	0.0001	0.0017	0.0001	8878756
Dissolved Barium (Ba)	mg/L	0.0301	0.0002	0.0336	0.0002	8873711
. Barium (Ba)	mg/L	0.0401	0.0002	0.0621	0.0002	8878756
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	<0.00005	0.00005	8873711
. Beryllium (Be)	mg/L	<0.00005	0.00005	0.00016	0.00005	8878756
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8873711
. Bismuth (Bi)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8878756
Dissolved Boron (B)	mg/L	0.018	0.001	0.011	0.001	8873711
. Boron (B)	mg/L	0.021	0.001	0.021	0.001	8878756
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	<0.00001	0.00001	8873711
. Cadmium (Cd)	mg/L	0.000012	0.000005	0.000078	0.000025	8878756
Dissolved Calcium (Ca)	mg/L	76.7	0.1	78.3	0.1	8873711
. Calcium (Ca)	mg/L	84.1	0.1	246	0.1	8878756
Dissolved Cesium (Cs)	mg/L	0.00003	0.00002	<0.00002	0.00002	8873711
. Cesium (Cs)	mg/L	0.00018	0.00002	0.00028	0.00002	8878756
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	<0.0005	0.0005	8873711
. Chromium (Cr)	mg/L	0.0017	0.0005	0.0104	0.0005	8878756
Dissolved Cobalt (Co)	mg/L	<0.00005	0.00005	0.00008	0.00005	8873711
. Cobalt (Co)	mg/L	0.00038	0.00005	0.00328	0.00005	8878756
Dissolved Copper (Cu)	mg/L	0.0002	0.0001	0.0005	0.0001	8873711
. Copper (Cu)	mg/L	0.0021	0.0001	0.0101	0.0001	8878756
Dissolved Iron (Fe)	mg/L	2.13	0.005	0.418	0.005	8873711
. Iron (Fe)	mg/L	3.92	0.005	6.06	0.005	8878756
Dissolved Lead (Pb)	mg/L	<0.00005	0.00005	<0.00005	0.00005	8873711
. Lead (Pb)	mg/L	0.00067	0.00005	0.00370	0.00005	8878756
Dissolved Lithium (Li)	mg/L	0.0069	0.0005	0.0071	0.0005	8873711

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WSM125		WSM126		
Sampling Date		2023/08/14 14:38		2023/08/14 14:54		
COC Number		750229		750229		
	UNITS	MWS14-02 BR	RDL	MWS14-02 OB	RDL	QC Batch
. Lithium (Li)	mg/L	0.0073	0.0005	0.0124	0.0005	8878756
Dissolved Magnesium (Mg)	mg/L	20.4	0.005	19.3	0.005	8873711
. Magnesium (Mg)	mg/L	21.7	0.005	68.3	0.025	8878756
Dissolved Manganese (Mn)	mg/L	0.189	0.0002	0.0515	0.0002	8873711
. Manganese (Mn)	mg/L	0.171	0.0002	0.328	0.0002	8878756
Mercury (Hg)	ug/L	<0.01	0.01	0.01	0.01	8866179
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	<0.01	0.01	8864550
Dissolved Molybdenum (Mo)	mg/L	0.00107	0.00005	0.00128	0.00005	8873711
. Molybdenum (Mo)	mg/L	0.00424	0.00005	0.00078	0.00005	8878756
Dissolved Nickel (Ni)	mg/L	0.0001	0.0001	0.0002	0.0001	8873711
. Nickel (Ni)	mg/L	0.0012	0.0001	0.0071	0.0001	8878756
Dissolved Phosphorus (P)	mg/L	0.020	0.005	0.010	0.005	8873711
. Phosphorus (P)	mg/L	0.075	0.005	0.658	0.005	8878756
Dissolved Potassium (K)	mg/L	2.26	0.02	2.20	0.02	8873711
. Potassium (K)	mg/L	2.40	0.02	3.00	0.02	8878756
Dissolved Rubidium (Rb)	mg/L	0.00099	0.00002	0.00131	0.00002	8873711
. Rubidium (Rb)	mg/L	0.00157	0.00002	0.00727	0.00002	8878756
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	<0.0002	0.0002	8873711
. Selenium (Se)	mg/L	0.00005	0.00005	<0.00005	0.00005	8878756
Dissolved Silicon (Si)	mg/L	7.12	0.025	6.43	0.025	8873711
. Silicon (Si)	mg/L	8.09	0.025	11.5	0.025	8878756
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	<0.00001	0.00001	8873711
. Silver (Ag)	mg/L	<0.00001	0.00001	0.00001	0.00001	8878756
Dissolved Sodium (Na)	mg/L	5.59	0.01	4.96	0.01	8873711
. Sodium (Na)	mg/L	14.5	0.01	5.73	0.01	8878756
Dissolved Strontium (Sr)	mg/L	0.164	0.0001	0.126	0.0001	8873711
. Strontium (Sr)	mg/L	0.172	0.0001	0.221	0.0001	8878756
Dissolved Sulphur (S)	mg/L	2.1	0.5	2.9	0.5	8865922
Total Sulphur (S)	mg/L	2.1	0.5	3.2	0.5	8867850
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8873711
. Tellurium (Te)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8878756
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	<0.000005	0.000005	8873711

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		WSM125		WSM126		
Sampling Date		2023/08/14 14:38		2023/08/14 14:54		
COC Number		750229		750229		
	UNITS	MWS14-02 BR	RDL	MWS14-02 OB	RDL	QC Batch
. Thallium (Tl)	mg/L	0.000005	0.000005	0.000079	0.000005	8878756
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	<0.0002	0.0002	8873711
. Thorium (Th)	mg/L	<0.0002	0.0002	0.0022	0.0002	8878756
Dissolved Tin (Sn)	mg/L	<0.0001	0.0001	<0.0001	0.0001	8873711
. Tin (Sn)	mg/L	0.0001	0.0001	0.0001	0.0001	8878756
Dissolved Titanium (Ti)	mg/L	0.0007	0.0005	<0.0005	0.0005	8873711
. Titanium (Ti)	mg/L	0.0180	0.0005	0.162	0.0025	8878756
Dissolved Tungsten (W)	mg/L	0.0004	0.0001	<0.0001	0.0001	8873711
. Tungsten (W)	mg/L	0.0008	0.0001	<0.0001	0.0001	8878756
Dissolved Uranium (U)	mg/L	0.00017	0.00001	0.00074	0.00001	8873711
. Uranium (U)	mg/L	0.00031	0.00001	0.00167	0.00001	8878756
Dissolved Vanadium (V)	mg/L	0.00051	0.00005	<0.00005	0.00005	8873711
. Vanadium (V)	mg/L	0.00245	0.00005	0.00938	0.00005	8878756
Dissolved Zinc (Zn)	mg/L	0.0016	0.0005	0.0014	0.0005	8873711
. Zinc (Zn)	mg/L	0.0118	0.0005	0.0171	0.0005	8878756
Dissolved Zirconium (Zr)	mg/L	0.0006	0.0001	<0.0001	0.0001	8873711
. Zirconium (Zr)	mg/L	0.0006	0.0001	0.0006	0.0001	8878756

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3P0302
Report Date: 2023/08/31

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: R.D

TEST SUMMARY

Bureau Veritas ID: WSM125
Sample ID: MWS14-02 BR
Matrix: Ground Water

Collected: 2023/08/14
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8880694	N/A	2023/08/28	Brent Boudreau
Alkalinity	AT	8862683	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/19	Automated Statchk
Chloride by Automated Colourimetry	KONE	8864249	N/A	2023/08/22	Alina Dobreanu
Conductivity	AT	8862631	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8862685	2023/08/18	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8860809	N/A	2023/08/26	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8864550	2023/08/19	2023/08/22	Japneet Gill
Mercury (low level)	CV/AA	8866179	2023/08/21	2023/08/21	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8865922	2023/08/21	2023/08/22	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8873711	N/A	2023/08/25	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8878756	N/A	2023/08/30	Azita Fazaeli
Total Metals Analysis by ICP	ICP	8867850	2023/08/22	2023/08/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8870435	N/A	2023/08/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8875716	2023/08/23	2023/08/23	Ming Dong
Total Phosphorus Low Level Total	KONE	8878798	2023/08/24	2023/08/25	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8863491	N/A	2023/08/22	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8863090	N/A	2023/08/21	Chandra Nandlal
pH	AT	8862684	2023/08/18	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Sulphate by Automated Turbidimetry	KONE	8864286	N/A	2023/08/22	Alina Dobreanu
Total Dissolved Solids	BAL	8864414	2023/08/21	2023/08/22	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Total Kjeldahl Nitrogen in Water	SKAL	8868343	2023/08/22	2023/08/22	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8864410	2023/08/22	2023/08/22	Razieh Tabesh
Turbidity	AT	8862704	N/A	2023/08/19	Leily Karimi

Bureau Veritas ID: WSM126
Sample ID: MWS14-02 OB
Matrix: Ground Water

Collected: 2023/08/14
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8880694	N/A	2023/08/28	Brent Boudreau
Alkalinity	AT	8862683	N/A	2023/08/18	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8859121	N/A	2023/08/19	Automated Statchk
Chloride by Automated Colourimetry	KONE	8864249	N/A	2023/08/22	Alina Dobreanu
Conductivity	AT	8862631	N/A	2023/08/18	Nachiketa Gohil
Fluoride	ISE	8862685	2023/08/18	2023/08/18	Nachiketa Gohil
Hardness (calculated as CaCO3)		8860809	N/A	2023/08/26	Automated Statchk
Dissolved Mercury (low level)	CV/AA	8864550	2023/08/19	2023/08/22	Japneet Gill
Mercury (low level)	CV/AA	8866179	2023/08/21	2023/08/21	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8865922	2023/08/21	2023/08/22	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8873711	N/A	2023/08/25	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8878756	N/A	2023/08/30	Azita Fazaeli

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3P0302
Report Date: 2023/08/31

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: R.D

TEST SUMMARY

Bureau Veritas ID: WSM126
Sample ID: MWS14-02 OB
Matrix: Ground Water

Collected: 2023/08/14
Shipped:
Received: 2023/08/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals Analysis by ICP	ICP	8867850	2023/08/22	2023/08/22	Suban Kanapathippllai
Cyanide (Free)	SPEC	8870435	N/A	2023/08/22	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8875716	2023/08/23	2023/08/23	Ming Dong
Total Phosphorus Low Level Total	KONE	8878798	2023/08/24	2023/08/25	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8863491	N/A	2023/08/22	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8862833	N/A	2023/08/21	Chandra Nandlal
pH	AT	8862684	2023/08/18	2023/08/18	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Sulphate by Automated Turbidimetry	KONE	8864286	N/A	2023/08/22	Alina Dobreanu
Total Dissolved Solids	BAL	8864414	2023/08/21	2023/08/22	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/17	Jimmy Liu
Total Kjeldahl Nitrogen in Water	SKAL	8862672	2023/08/18	2023/08/22	Rajni Tyagi
Low Level Total Suspended Solids	BAL	8865309	2023/08/22	2023/08/22	Razieh Tabesh
Turbidity	AT	8861913	N/A	2023/08/18	Gurparteek KAUR

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	6.0°C
Package 2	3.7°C
Package 3	6.0°C
Package 4	3.3°C

Sample WSM125 [MWS14-02 BR] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
TSS Analysis: Analysis was performed past sample holding time. This may increase the variability associated with these results.
Acidity sample contained headspace.

Sample WSM126 [MWS14-02 OB] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used. Detection limits were adjusted accordingly.
TSS Analysis was performed past sample holding time. This may increase the variability associated with these results.

Acidity sample contained headspace.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3P0302
Report Date: 2023/08/31

QUALITY ASSURANCE REPORT

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: R.D

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8861913	Turbidity	2023/08/18			99	80 - 120	<0.1	NTU	14	20		
8862631	Conductivity	2023/08/18			102	85 - 115	<0.001	mS/cm	0.26	10		
8862672	Total Kjeldahl Nitrogen (TKN)	2023/08/22	NC	80 - 120	98	80 - 120	<0.10	mg/L	1.8	20	92	80 - 120
8862683	Alkalinity (Total as CaCO3)	2023/08/18			95	85 - 115	<1.0	mg/L	1.5	20		
8862684	pH	2023/08/18			102	98 - 103			0.14	N/A		
8862685	Fluoride (F-)	2023/08/18	91	80 - 120	93	80 - 120	<0.10	mg/L	NC	20		
8862704	Turbidity	2023/08/19			99	80 - 120	<0.1	NTU	NC	20		
8862833	Nitrate (N)	2023/08/21	NC	80 - 120	98	80 - 120	<0.10	mg/L	0.16	20		
8862833	Nitrite (N)	2023/08/21	101	80 - 120	105	80 - 120	<0.010	mg/L	0.42	20		
8863090	Nitrate (N)	2023/08/21	101	80 - 120	99	80 - 120	<0.10	mg/L	3.2	20		
8863090	Nitrite (N)	2023/08/21	104	80 - 120	106	80 - 120	<0.010	mg/L	2.7	20		
8863491	Total Ammonia-N	2023/08/23	NC	75 - 125	100	80 - 120	<0.050	mg/L	0.16 (1)	20		
8864249	Dissolved Chloride (Cl-)	2023/08/22	NC	80 - 120	99	80 - 120	<1.0	mg/L	2.8	20		
8864286	Dissolved Sulphate (SO4)	2023/08/22	NC	75 - 125	101	80 - 120	<1.0	mg/L	2.2	20		
8864410	Total Suspended Solids	2023/08/22			98	85 - 115	<1	mg/L	4.5	20		
8864414	Total Dissolved Solids	2023/08/22			95	90 - 110	<10	mg/L	0	20		
8864550	Dissolved Mercury (Hg)	2023/08/22	101	75 - 125	98	80 - 120	<0.01	ug/L	NC	20		
8865309	Total Suspended Solids	2023/08/22			95	85 - 115	<1	mg/L	16	20		
8865922	Dissolved Sulphur (S)	2023/08/22	NC	80 - 120	102	80 - 120	<0.5	mg/L	0.85	25		
8866179	Mercury (Hg)	2023/08/21	99	75 - 125	100	80 - 120	<0.01	ug/L	NC	20		
8867850	Total Sulphur (S)	2023/08/22	99	80 - 120	97	80 - 120	<0.5	mg/L				
8868343	Total Kjeldahl Nitrogen (TKN)	2023/08/22	98	80 - 120	98	80 - 120	<0.10	mg/L	6.1	20	97	80 - 120
8870435	Free Cyanide (CN)	2023/08/22	93	80 - 120	89	80 - 120	<2.0	ug/L				
8873711	Dissolved Aluminum (Al)	2023/08/25	108	80 - 120	100	80 - 120	<0.0005	mg/L	NC	20		
8873711	Dissolved Antimony (Sb)	2023/08/25	116	80 - 120	100	80 - 120	<0.0001	mg/L	5.6	20		
8873711	Dissolved Arsenic (As)	2023/08/25	108	80 - 120	99	80 - 120	<0.0001	mg/L	3.4	20		
8873711	Dissolved Barium (Ba)	2023/08/25	NC	80 - 120	100	80 - 120	<0.0002	mg/L	1.1	20		
8873711	Dissolved Beryllium (Be)	2023/08/25	107	80 - 120	97	80 - 120	<0.00005	mg/L	NC	20		
8873711	Dissolved Bismuth (Bi)	2023/08/25	100	80 - 120	101	80 - 120	<0.0001	mg/L	NC	20		
8873711	Dissolved Boron (B)	2023/08/25	105	80 - 120	96	80 - 120	<0.001	mg/L	2.8	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8873711	Dissolved Cadmium (Cd)	2023/08/25	109	80 - 120	97	80 - 120	<0.00001	mg/L	NC	20		
8873711	Dissolved Calcium (Ca)	2023/08/25	NC	80 - 120	101	80 - 120	<0.02	mg/L	0.13	20		
8873711	Dissolved Cesium (Cs)	2023/08/25	104	80 - 120	100	80 - 120	<0.00002	mg/L	NC	N/A		
8873711	Dissolved Chromium (Cr)	2023/08/25	102	80 - 120	94	80 - 120	<0.0005	mg/L	NC	20		
8873711	Dissolved Cobalt (Co)	2023/08/25	102	80 - 120	101	80 - 120	<0.00005	mg/L	4.1	20		
8873711	Dissolved Copper (Cu)	2023/08/25	104	80 - 120	101	80 - 120	<0.0001	mg/L	2.3	20		
8873711	Dissolved Iron (Fe)	2023/08/25	105	80 - 120	102	80 - 120	<0.005	mg/L	4.4	20		
8873711	Dissolved Lead (Pb)	2023/08/25	106	80 - 120	99	80 - 120	<0.00005	mg/L	NC	20		
8873711	Dissolved Lithium (Li)	2023/08/25	123 (2)	80 - 120	107	80 - 120	<0.0005	mg/L	0.12	20		
8873711	Dissolved Magnesium (Mg)	2023/08/25	NC	80 - 120	97	80 - 120	<0.005	mg/L	1.3	20		
8873711	Dissolved Manganese (Mn)	2023/08/25	103	80 - 120	99	80 - 120	<0.0002	mg/L	3.2	20		
8873711	Dissolved Molybdenum (Mo)	2023/08/25	112	80 - 120	94	80 - 120	<0.00005	mg/L	0.60	20		
8873711	Dissolved Nickel (Ni)	2023/08/25	101	80 - 120	99	80 - 120	<0.0001	mg/L	0.15	20		
8873711	Dissolved Phosphorus (P)	2023/08/25	111	80 - 120	96	80 - 120	<0.005	mg/L	NC	20		
8873711	Dissolved Potassium (K)	2023/08/25	111	80 - 120	98	80 - 120	<0.02	mg/L	3.5	20		
8873711	Dissolved Rubidium (Rb)	2023/08/25	106	80 - 120	99	80 - 120	<0.00002	mg/L	5.2	N/A		
8873711	Dissolved Selenium (Se)	2023/08/25	108	80 - 120	101	80 - 120	<0.0002	mg/L	NC	20		
8873711	Dissolved Silicon (Si)	2023/08/25	NC	80 - 120	99	80 - 120	<0.005	mg/L	1.4	20		
8873711	Dissolved Silver (Ag)	2023/08/25	100	80 - 120	96	80 - 120	<0.00001	mg/L	NC	20		
8873711	Dissolved Sodium (Na)	2023/08/25	NC	80 - 120	101	80 - 120	<0.01	mg/L	4.3	20		
8873711	Dissolved Strontium (Sr)	2023/08/25	NC	80 - 120	98	80 - 120	<0.0001	mg/L	3.3	20		
8873711	Dissolved Tellurium (Te)	2023/08/25	111	80 - 120	95	80 - 120	<0.0001	mg/L	NC	20		
8873711	Dissolved Thallium (Tl)	2023/08/25	108	80 - 120	103	80 - 120	<0.000005	mg/L	NC	20		
8873711	Dissolved Thorium (Th)	2023/08/25	96	80 - 120	100	80 - 120	<0.0002	mg/L	NC	20		
8873711	Dissolved Tin (Sn)	2023/08/25	113	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8873711	Dissolved Titanium (Ti)	2023/08/25	109	80 - 120	100	80 - 120	<0.0005	mg/L	NC	20		
8873711	Dissolved Tungsten (W)	2023/08/25	118	80 - 120	105	80 - 120	<0.0001	mg/L	0.53	20		
8873711	Dissolved Uranium (U)	2023/08/25	107	80 - 120	97	80 - 120	<0.00001	mg/L	0.74	20		
8873711	Dissolved Vanadium (V)	2023/08/25	105	80 - 120	96	80 - 120	<0.00005	mg/L	NC	20		
8873711	Dissolved Zinc (Zn)	2023/08/25	103	80 - 120	100	80 - 120	<0.0005	mg/L	3.2	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8873711	Dissolved Zirconium (Zr)	2023/08/25	118	80 - 120	100	80 - 120	<0.0001	mg/L	3.9	20		
8875716	Strong Acid Dissoc. Cyanide (CN)	2023/08/23	102	80 - 120	104	80 - 120	<0.00050	mg/L				
8878756	. Aluminum (Al)	2023/08/30	119	80 - 120	100	80 - 120	<0.0005	mg/L	9.7	20		
8878756	. Antimony (Sb)	2023/08/30	118	80 - 120	103	80 - 120	<0.0001	mg/L	0	20		
8878756	. Arsenic (As)	2023/08/30	110	80 - 120	99	80 - 120	<0.0001	mg/L	2.4	20		
8878756	. Barium (Ba)	2023/08/30	107	80 - 120	98	80 - 120	<0.0002	mg/L	0.64	20		
8878756	. Beryllium (Be)	2023/08/30	101	80 - 120	100	80 - 120	<0.00005	mg/L	NC	20		
8878756	. Bismuth (Bi)	2023/08/30	95	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8878756	. Boron (B)	2023/08/30	NC	80 - 120	95	80 - 120	<0.001	mg/L	0.93	20		
8878756	. Cadmium (Cd)	2023/08/30	103	80 - 120	97	80 - 120	<0.000005	mg/L	NC	20		
8878756	. Calcium (Ca)	2023/08/30	NC	80 - 120	102	80 - 120	<0.02	mg/L	0.24	20		
8878756	. Cesium (Cs)	2023/08/30	106	80 - 120	101	80 - 120	<0.00002	mg/L	NC	N/A		
8878756	. Chromium (Cr)	2023/08/30	108	80 - 120	97	80 - 120	<0.0005	mg/L	NC	20		
8878756	. Cobalt (Co)	2023/08/30	104	80 - 120	97	80 - 120	<0.00005	mg/L	0.96	20		
8878756	. Copper (Cu)	2023/08/30	109	80 - 120	97	80 - 120	<0.0001	mg/L	11	20		
8878756	. Iron (Fe)	2023/08/30	108	80 - 120	100	80 - 120	<0.005	mg/L	0.18	20		
8878756	. Lead (Pb)	2023/08/30	96	80 - 120	96	80 - 120	<0.00005	mg/L	NC	20		
8878756	. Lithium (Li)	2023/08/30	108	80 - 120	101	80 - 120	<0.0005	mg/L	0.20	20		
8878756	. Magnesium (Mg)	2023/08/30	NC	80 - 120	98	80 - 120	<0.005	mg/L	0.63	20		
8878756	. Manganese (Mn)	2023/08/30	105	80 - 120	96	80 - 120	<0.0002	mg/L	1.6	20		
8878756	. Molybdenum (Mo)	2023/08/30	124 (2)	80 - 120	101	80 - 120	<0.00005	mg/L	1.9	20		
8878756	. Nickel (Ni)	2023/08/30	102	80 - 120	98	80 - 120	<0.0001	mg/L	0.34	20		
8878756	. Phosphorus (P)	2023/08/30	115	80 - 120	95	80 - 120	<0.005	mg/L	NC	20		
8878756	. Potassium (K)	2023/08/30	NC	80 - 120	99	80 - 120	<0.02	mg/L	0.34	20		
8878756	. Rubidium (Rb)	2023/08/30	109	80 - 120	101	80 - 120	<0.00002	mg/L	0.36	N/A		
8878756	. Selenium (Se)	2023/08/30	115	80 - 120	103	80 - 120	<0.00005	mg/L	NC	20		
8878756	. Silicon (Si)	2023/08/30	NC	80 - 120	102	80 - 120	<0.005	mg/L	0.74	20		
8878756	. Silver (Ag)	2023/08/30	92	80 - 120	101	80 - 120	<0.00001	mg/L	NC	20		
8878756	. Sodium (Na)	2023/08/30	NC	80 - 120	99	80 - 120	<0.01	mg/L	2.4	20		
8878756	. Strontium (Sr)	2023/08/30	NC	80 - 120	98	80 - 120	<0.0001	mg/L	0.14	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8878756	. Tellurium (Te)	2023/08/30	106	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8878756	. Thallium (Tl)	2023/08/30	97	80 - 120	97	80 - 120	<0.000005	mg/L	NC	20		
8878756	. Thorium (Th)	2023/08/30	92	80 - 120	99	80 - 120	<0.0002	mg/L	NC	20		
8878756	. Tin (Sn)	2023/08/30	118	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8878756	. Titanium (Ti)	2023/08/30	120	80 - 120	103	80 - 120	<0.0005	mg/L	NC	20		
8878756	. Tungsten (W)	2023/08/30	114	80 - 120	102	80 - 120	<0.0001	mg/L	3.7	20		
8878756	. Uranium (U)	2023/08/30	109	80 - 120	105	80 - 120	<0.00001	mg/L	4.9	20		
8878756	. Vanadium (V)	2023/08/30	113	80 - 120	98	80 - 120	<0.00005	mg/L	4.0	20		
8878756	. Zinc (Zn)	2023/08/30	96	80 - 120	97	80 - 120	<0.0005	mg/L	10	20		
8878756	. Zirconium (Zr)	2023/08/30	124 (2)	80 - 120	100	80 - 120	<0.0001	mg/L	NC	20		
8878798	Total Phosphorus (P)	2023/08/25	117	80 - 120	112	80 - 120	<0.0010	mg/L			89	80 - 120
8880694	Acidity	2023/08/28	89	80 - 120	104	80 - 120	<5.0	mg/L	NC	25		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) TKN < NH4: Both values fall within acceptable RPD limits for duplicates and are likely equivalent.

(2) Matrix Spike exceeds acceptance limits, probable matrix interference

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Cristina Carriere, Senior Scientific Specialist

<original signed by>

Mike MacGillivray, Scientific Specialist (Inorganics)

<original signed by>

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: GROUNDWATER SAMPLING PROGRAM
Your C.O.C. #: 756016

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/09/05
Report #: R7798520
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3Q0849
Received: 2023/08/24, 16:26

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Acidity (CaCO3) in water (1)	1	N/A	2023/08/31	ATL SOP-00205	SM 24 2310B m
Alkalinity	1	N/A	2023/08/26	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	1	N/A	2023/08/28	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	1	N/A	2023/08/28	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	1	N/A	2023/08/26	CAM SOP-00414	SM 23 2510 m
Fluoride	1	2023/08/26	2023/08/26	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	1	N/A	2023/09/01	CAM SOP 00102/00408/00447	SM 2340 B
Mercury in Water by CVAA	1	2023/08/31	2023/08/31	CAM SOP-00453	EPA 7470A m
Dissolved Mercury (low level)	1	2023/08/30	2023/08/30	CAM SOP-00453	EPA 7470 m
Dissolved Metals Analysis by ICP	1	2023/08/29	2023/08/31	CAM SOP-00408	EPA 6010D m
Dissolved Metals by ICPMS (low level)	1	N/A	2023/09/01	CAM SOP-00447	EPA 6020B m
Metals in Water by ICPMS (low level)	1	N/A	2023/09/05	CAM SOP-00447	EPA 6020B m
Total Metals Analysis by ICP	1	2023/08/29	2023/08/31	CAM SOP-00408	EPA 6010D m
Cyanide (Free) (2)	1	N/A	2023/08/31	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	1	2023/08/31	2023/08/31	CAL SOP-00270	SM 23 4500-CN m
Total Phosphorus Low Level Total (2)	1	2023/09/03	2023/09/05	AB SOP-00024	SM 24 4500-P A,B,F m
Total Ammonia-N	1	N/A	2023/08/30	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (3)	1	N/A	2023/08/26	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH	1	2023/08/26	2023/08/26	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (4)	1	N/A	2023/08/25		Field pH Meter
Sulphate by Automated Turbidimetry	1	N/A	2023/08/28	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids	1	2023/08/29	2023/08/30	CAM SOP-00428	SM 23 2540C m
Field Temperature (4)	1	N/A	2023/08/25		Field Thermometer
Total Kjeldahl Nitrogen in Water	1	2023/08/29	2023/09/01	CAM SOP-00938	OMOE E3516 m
Total Suspended Solids	1	2023/08/29	2023/08/30	CAM SOP-00428	SM 23 2540D m
Turbidity	1	N/A	2023/08/26	CAM SOP-00417	SM 23 2130 B m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
(3) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(4) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: 4800001036
Your Project #: GROUNDWATER SAMPLING PROGRAM
Your C.O.C. #: 756016

Attention: Laura Vares

Greenstone Mine
6 Twilight Bay
Geraldton, ON
CANADA P0T 1M0

Report Date: 2023/09/05
Report #: R7798520
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3Q0849
Received: 2023/08/24, 16:26

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bureauveritas.com
Phone# (613)274-0573 Ext:7063633

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C3Q0849
Report Date: 2023/09/05

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WUQ056		
Sampling Date		2023/08/23 10:49		
COC Number		756016		
	UNITS	DP-C	RDL	QC Batch
Calculated Parameters				
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	330	1.0	8879030
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8879030
Hardness (CaCO3)	mg/L	270	1.0	8879029
Hydrox. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	8879030
Field Measurements				
Field Temperature	Celsius	13.7	N/A	ONSITE
Field Measured pH	pH	7.19		ONSITE
Inorganics				
Acidity	mg/L	16	5.0	8888776
Total Ammonia-N	mg/L	1.0	0.050	8882088
Conductivity	mS/cm	0.604	0.001	8879713
Free Cyanide (CN)	ug/L	<2.0 (1)	2.0	8893700
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8897890
Total Dissolved Solids	mg/L	320	10	8880491
Fluoride (F-)	mg/L	0.30	0.10	8879715
Total Kjeldahl Nitrogen (TKN)	mg/L	1.9	0.20	8884235
pH	pH	7.48		8879712
Total Phosphorus (P)	mg/L	0.52 (2)	0.010	8897891
Total Suspended Solids	mg/L	56000	1000	8882878
Dissolved Sulphate (SO4)	mg/L	<1.0	1.0	8879790
Turbidity	NTU	62	0.1	8879497
Alkalinity (Total as CaCO3)	mg/L	330	1.0	8879714
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	8879789
Nitrite (N)	mg/L	<0.010	0.010	8879690
Nitrate (N)	mg/L	<0.10	0.10	8879690

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
(2) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3Q0849
Report Date: 2023/09/05

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WUQ056		
Sampling Date		2023/08/23 10:49		
COC Number		756016		
	UNITS	**DP-C**	**RDL**	**QC Batch**
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8879690

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WUQ056			WUQ056		
Sampling Date		2023/08/23 10:49			2023/08/23 10:49		
COC Number		756016			756016		
	UNITS	DP-C	RDL	QC Batch	DP-C Lab-Dup	RDL	QC Batch
Metals							
Dissolved Aluminum (Al)	mg/L	0.0813	0.0005	8891696	0.0813	0.0005	8891696
. Aluminum (Al)	mg/L	0.016	0.005	8891693			
Dissolved Antimony (Sb)	mg/L	0.0004	0.0001	8891696	0.0004	0.0001	8891696
. Antimony (Sb)	mg/L	<0.0005	0.0005	8891693			
Dissolved Arsenic (As)	mg/L	0.0016	0.0001	8891696	0.0016	0.0001	8891696
. Arsenic (As)	mg/L	0.0012	0.0005	8891693			
Dissolved Barium (Ba)	mg/L	1.07	0.001	8891696	1.08	0.001	8891696
. Barium (Ba)	mg/L	3.11	0.002	8891693			
Dissolved Beryllium (Be)	mg/L	<0.00005	0.00005	8891696	<0.00005	0.00005	8891696
. Beryllium (Be)	mg/L	<0.00025	0.00025	8891693			
Dissolved Bismuth (Bi)	mg/L	<0.0001	0.0001	8891696	<0.0001	0.0001	8891696
. Bismuth (Bi)	mg/L	<0.0005	0.0005	8891693			
Dissolved Boron (B)	mg/L	0.052	0.001	8891696	0.053	0.001	8891696
. Boron (B)	mg/L	0.101	0.005	8891693			
Dissolved Cadmium (Cd)	mg/L	<0.00001	0.00001	8891696	<0.00001	0.00001	8891696
. Cadmium (Cd)	mg/L	0.000247	0.000025	8891693			
Dissolved Calcium (Ca)	mg/L	82.1	0.1	8891696	81.9	0.1	8891696
. Calcium (Ca)	mg/L	1030	1	8891693			
Dissolved Cesium (Cs)	mg/L	<0.00002	0.00002	8891696	<0.00002	0.00002	8891696
. Cesium (Cs)	mg/L	0.0001	0.0001	8891693			
Dissolved Chromium (Cr)	mg/L	<0.0005	0.0005	8891696	<0.0005	0.0005	8891696
. Chromium (Cr)	mg/L	<0.0025	0.0025	8891693			
Dissolved Cobalt (Co)	mg/L	0.00060	0.00005	8891696	0.00059	0.00005	8891696
. Cobalt (Co)	mg/L	0.00895	0.00025	8891693			
Dissolved Copper (Cu)	mg/L	0.0022	0.0001	8891696	0.0022	0.0001	8891696
. Copper (Cu)	mg/L	0.0050	0.0005	8891693			
Dissolved Iron (Fe)	mg/L	0.071	0.005	8891696	0.071	0.005	8891696
. Iron (Fe)	mg/L	0.038	0.025	8891693			
Dissolved Lead (Pb)	mg/L	0.00018	0.00005	8891696	0.00018	0.00005	8891696
. Lead (Pb)	mg/L	<0.00025	0.00025	8891693			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WUQ056			WUQ056		
Sampling Date		2023/08/23 10:49			2023/08/23 10:49		
COC Number		756016			756016		
	UNITS	DP-C	RDL	QC Batch	DP-C Lab-Dup	RDL	QC Batch
Dissolved Lithium (Li)	mg/L	0.0063	0.0005	8891696	0.0063	0.0005	8891696
. Lithium (Li)	mg/L	0.0100	0.0025	8891693			
Dissolved Magnesium (Mg)	mg/L	16.9	0.005	8891696	16.7	0.005	8891696
. Magnesium (Mg)	mg/L	25.9	0.025	8891693			
Dissolved Manganese (Mn)	mg/L	0.101	0.0002	8891696	0.102	0.0002	8891696
. Manganese (Mn)	mg/L	2.31	0.001	8891693			
Mercury (Hg)	mg/L	<0.0015	0.0015	8889048			
Dissolved Mercury (Hg)	ug/L	<0.01	0.01	8887271			
Dissolved Molybdenum (Mo)	mg/L	0.00106	0.00005	8891696	0.00103	0.00005	8891696
. Molybdenum (Mo)	mg/L	0.00119	0.00025	8891693			
Dissolved Nickel (Ni)	mg/L	0.0050	0.0001	8891696	0.0049	0.0001	8891696
. Nickel (Ni)	mg/L	0.0276	0.0005	8891693			
Dissolved Phosphorus (P)	mg/L	<0.005	0.005	8891696	<0.005	0.005	8891696
. Phosphorus (P)	mg/L	<0.025	0.025	8891693			
Dissolved Potassium (K)	mg/L	2.50	0.02	8891696	2.48	0.02	8891696
. Potassium (K)	mg/L	3.1	0.1	8891693			
Dissolved Rubidium (Rb)	mg/L	0.00240	0.00002	8891696	0.00236	0.00002	8891696
. Rubidium (Rb)	mg/L	0.0082	0.0001	8891693			
Dissolved Selenium (Se)	mg/L	<0.0002	0.0002	8891696	<0.0002	0.0002	8891696
. Selenium (Se)	mg/L	<0.00025	0.00025	8891693			
Dissolved Silicon (Si)	mg/L	6.74	0.025	8891696	6.60	0.025	8891696
. Silicon (Si)	mg/L	5.90	0.025	8891693			
Dissolved Silver (Ag)	mg/L	<0.00001	0.00001	8891696	<0.00001	0.00001	8891696
. Silver (Ag)	mg/L	<0.00005	0.00005	8891693			
Dissolved Sodium (Na)	mg/L	5.17	0.01	8891696	5.25	0.01	8891696
. Sodium (Na)	mg/L	3.81	0.05	8891693			
Dissolved Strontium (Sr)	mg/L	0.201	0.0001	8891696	0.199	0.0001	8891696
. Strontium (Sr)	mg/L	0.863	0.0005	8891693			
Dissolved Sulphur (S)	mg/L	0.8	0.5	8883608	0.8	0.5	8883608
Total Sulphur (S)	mg/L	12	5	8882926			
Dissolved Tellurium (Te)	mg/L	<0.0001	0.0001	8891696	<0.0001	0.0001	8891696

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WUQ056			WUQ056		
Sampling Date		2023/08/23 10:49			2023/08/23 10:49		
COC Number		756016			756016		
	UNITS	DP-C	RDL	QC Batch	DP-C Lab-Dup	RDL	QC Batch
. Tellurium (Te)	mg/L	<0.0005	0.0005	8891693			
Dissolved Thallium (Tl)	mg/L	<0.000005	0.000005	8891696	<0.000005	0.000005	8891696
. Thallium (Tl)	mg/L	0.000138	0.000025	8891693			
Dissolved Thorium (Th)	mg/L	<0.0002	0.0002	8891696	<0.0002	0.0002	8891696
. Thorium (Th)	mg/L	<0.001	0.001	8891693			
Dissolved Tin (Sn)	mg/L	0.0032	0.0001	8891696	0.0033	0.0001	8891696
. Tin (Sn)	mg/L	<0.0005	0.0005	8891693			
Dissolved Titanium (Ti)	mg/L	0.0036	0.0005	8891696	0.0034	0.0005	8891696
. Titanium (Ti)	mg/L	0.0033	0.0025	8891693			
Dissolved Tungsten (W)	mg/L	0.0003	0.0001	8891696	0.0002	0.0001	8891696
. Tungsten (W)	mg/L	<0.0005	0.0005	8891693			
Dissolved Uranium (U)	mg/L	0.00063	0.00001	8891696	0.00061	0.00001	8891696
. Uranium (U)	mg/L	0.0115	0.00005	8891693			
Dissolved Vanadium (V)	mg/L	0.00036	0.00005	8891696	0.00036	0.00005	8891696
. Vanadium (V)	mg/L	0.00054	0.00025	8891693			
Dissolved Zinc (Zn)	mg/L	0.0352	0.0005	8891696	0.0355	0.0005	8891696
. Zinc (Zn)	mg/L	0.175	0.0025	8891693			
Dissolved Zirconium (Zr)	mg/L	0.0002	0.0001	8891696	0.0002	0.0001	8891696
. Zirconium (Zr)	mg/L	0.0012	0.0005	8891693			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3Q0849
Report Date: 2023/09/05

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: RD

TEST SUMMARY

Bureau Veritas ID: WUQ056
Sample ID: DP-C
Matrix: Water

Collected: 2023/08/23
Shipped:
Received: 2023/08/24

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	8888776	N/A	2023/08/31	Brent Boudreau
Alkalinity	AT	8879714	N/A	2023/08/26	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	8879030	N/A	2023/08/28	Automated Statchk
Chloride by Automated Colourimetry	KONE	8879789	N/A	2023/08/28	Alina Dobreanu
Conductivity	AT	8879713	N/A	2023/08/26	Nachiketa Gohil
Fluoride	ISE	8879715	2023/08/26	2023/08/26	Nachiketa Gohil
Hardness (calculated as CaCO3)		8879029	N/A	2023/09/01	Automated Statchk
Mercury in Water by CVAA	CV/AA	8889048	2023/08/31	2023/08/31	Gagandeep Rai
Dissolved Mercury (low level)	CV/AA	8887271	2023/08/30	2023/08/30	Gagandeep Rai
Dissolved Metals Analysis by ICP	ICP	8883608	2023/08/29	2023/08/31	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8891696	N/A	2023/09/01	Arefa Dabhad
Metals in Water by ICPMS (low level)	ICP1/MS	8891693	N/A	2023/09/05	Arefa Dabhad
Total Metals Analysis by ICP	ICP	8882926	2023/08/29	2023/08/31	Suban Kanapathippllai
Cyanide (Free)	SPEC	8893700	N/A	2023/08/31	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8897890	2023/08/31	2023/08/31	Ming Dong
Total Phosphorus Low Level Total	KONE	8897891	2023/09/03	2023/09/05	Mary Anne Dela Cruz
Total Ammonia-N	LACH/NH4	8882088	N/A	2023/08/30	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8879690	N/A	2023/08/26	Nimarta Singh
pH	AT	8879712	2023/08/26	2023/08/26	Nachiketa Gohil
Field Measured pH	PH	ONSITE	N/A	2023/08/25	Shwetaben Patel
Sulphate by Automated Turbidimetry	KONE	8879790	N/A	2023/08/28	Alina Dobreanu
Total Dissolved Solids	BAL	8880491	2023/08/29	2023/08/30	Shaneil Hall
Field Measured pH	PH	ONSITE	N/A	2023/08/25	Shwetaben Patel
Total Kjeldahl Nitrogen in Water	SKAL	8884235	2023/08/29	2023/09/01	Rajni Tyagi
Total Suspended Solids	BAL	8882878	2023/08/29	2023/08/30	Shaneil Hall
Turbidity	AT	8879497	N/A	2023/08/26	Gurparteek KAUR

Bureau Veritas ID: WUQ056 Dup
Sample ID: DP-C
Matrix: Water

Collected: 2023/08/23
Shipped:
Received: 2023/08/24

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals Analysis by ICP	ICP	8883608	2023/08/29	2023/08/31	Suban Kanapathippllai
Dissolved Metals by ICPMS (low level)	ICP1/MS	8891696	N/A	2023/09/01	Arefa Dabhad

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	9.7°C

Sample WUQ056 [DP-C] : TSS Analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used.
Acidity sanple contained headspace.

Metals Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3Q0849
Report Date: 2023/09/05

QUALITY ASSURANCE REPORT

Greenstone Mine
Client Project #: GROUNDWATER SAMPLING PROGRAM
Your P.O. #: 4800001036
Sampler Initials: RD

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8879497	Turbidity	2023/08/26			99	80 - 120	<0.1	NTU	3.4	20		
8879690	Nitrate (N)	2023/08/26	89	80 - 120	99	80 - 120	<0.10	mg/L	1.2	20		
8879690	Nitrite (N)	2023/08/26	91	80 - 120	105	80 - 120	<0.010	mg/L	NC	20		
8879712	pH	2023/08/26			101	98 - 103			0.74	N/A		
8879713	Conductivity	2023/08/26			101	85 - 115	<0.001	mS/cm	0.063	10		
8879714	Alkalinity (Total as CaCO3)	2023/08/26			93	85 - 115	<1.0	mg/L	0.53	20		
8879715	Fluoride (F-)	2023/08/26	96	80 - 120	100	80 - 120	<0.10	mg/L	NC	20		
8879789	Dissolved Chloride (Cl-)	2023/08/28	NC	80 - 120	99	80 - 120	<1.0	mg/L	0.32	20		
8879790	Dissolved Sulphate (SO4)	2023/08/28	NC	75 - 125	101	80 - 120	<1.0	mg/L	1.1	20		
8880491	Total Dissolved Solids	2023/08/30			98	90 - 110	<10	mg/L	0	20		
8882088	Total Ammonia-N	2023/08/30	107	75 - 125	104	80 - 120	<0.050	mg/L	3.6	20		
8882878	Total Suspended Solids	2023/08/30			101	85 - 115	<10	mg/L	NC	20		
8882926	Total Sulphur (S)	2023/08/31	NC	80 - 120	99	80 - 120	<0.5	mg/L				
8883608	Dissolved Sulphur (S)	2023/08/31	104	80 - 120	97	80 - 120	<0.5	mg/L	0.77	25		
8884235	Total Kjeldahl Nitrogen (TKN)	2023/08/31	112	80 - 120	99	80 - 120	<0.10	mg/L	0.77	20	98	80 - 120
8887271	Dissolved Mercury (Hg)	2023/08/30	107	75 - 125	108	80 - 120	<0.01	ug/L	NC	20		
8888776	Acidity	2023/08/31	103	80 - 120	103	80 - 120	<5.0	mg/L	NC	25		
8889048	Mercury (Hg)	2023/08/31	96	75 - 125	101	80 - 120	<0.00010	mg/L	NC	20		
8891693	. Aluminum (Al)	2023/09/01	NC	80 - 120	103	80 - 120	<0.0005	mg/L	0.059 (2)	20		
8891693	. Antimony (Sb)	2023/09/01	122 (1)	80 - 120	106	80 - 120	<0.0001	mg/L				
8891693	. Arsenic (As)	2023/09/01	115	80 - 120	102	80 - 120	<0.0001	mg/L				
8891693	. Barium (Ba)	2023/09/01	109	80 - 120	101	80 - 120	<0.0002	mg/L				
8891693	. Beryllium (Be)	2023/09/01	107	80 - 120	98	80 - 120	<0.00005	mg/L				
8891693	. Bismuth (Bi)	2023/09/01	109	80 - 120	103	80 - 120	<0.0001	mg/L				
8891693	. Boron (B)	2023/09/01	103	80 - 120	98	80 - 120	<0.001	mg/L				
8891693	. Cadmium (Cd)	2023/09/01	115	80 - 120	101	80 - 120	<0.000005	mg/L				
8891693	. Calcium (Ca)	2023/09/01	NC	80 - 120	103	80 - 120	<0.02	mg/L				
8891693	. Cesium (Cs)	2023/09/01	109	80 - 120	103	80 - 120	<0.00002	mg/L				
8891693	. Chromium (Cr)	2023/09/01	112	80 - 120	105	80 - 120	<0.0005	mg/L				
8891693	. Cobalt (Co)	2023/09/01	105	80 - 120	99	80 - 120	<0.00005	mg/L				

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8891693	. Copper (Cu)	2023/09/01	109	80 - 120	99	80 - 120	<0.0001	mg/L				
8891693	. Iron (Fe)	2023/09/01	109	80 - 120	103	80 - 120	<0.005	mg/L				
8891693	. Lead (Pb)	2023/09/01	111	80 - 120	102	80 - 120	<0.00005	mg/L				
8891693	. Lithium (Li)	2023/09/01	119	80 - 120	108	80 - 120	<0.0005	mg/L				
8891693	. Magnesium (Mg)	2023/09/01	NC	80 - 120	106	80 - 120	<0.005	mg/L				
8891693	. Manganese (Mn)	2023/09/01	109	80 - 120	102	80 - 120	<0.0002	mg/L				
8891693	. Molybdenum (Mo)	2023/09/01	108	80 - 120	97	80 - 120	<0.00005	mg/L				
8891693	. Nickel (Ni)	2023/09/01	105	80 - 120	100	80 - 120	<0.0001	mg/L				
8891693	. Phosphorus (P)	2023/09/01	114	80 - 120	98	80 - 120	<0.005	mg/L				
8891693	. Potassium (K)	2023/09/01	113	80 - 120	101	80 - 120	<0.02	mg/L				
8891693	. Rubidium (Rb)	2023/09/01	114	80 - 120	103	80 - 120	<0.00002	mg/L				
8891693	. Selenium (Se)	2023/09/01	116	80 - 120	103	80 - 120	<0.00005	mg/L				
8891693	. Silicon (Si)	2023/09/01	112	80 - 120	100	80 - 120	<0.005	mg/L				
8891693	. Silver (Ag)	2023/09/01	110	80 - 120	101	80 - 120	<0.00001	mg/L				
8891693	. Sodium (Na)	2023/09/01	NC	80 - 120	105	80 - 120	<0.01	mg/L				
8891693	. Strontium (Sr)	2023/09/01	NC	80 - 120	102	80 - 120	<0.0001	mg/L				
8891693	. Tellurium (Te)	2023/09/01	116	80 - 120	100	80 - 120	<0.0001	mg/L				
8891693	. Thallium (Tl)	2023/09/01	116	80 - 120	109	80 - 120	<0.000005	mg/L				
8891693	. Thorium (Th)	2023/09/01	95	80 - 120	101	80 - 120	<0.0002	mg/L				
8891693	. Tin (Sn)	2023/09/01	118	80 - 120	102	80 - 120	<0.0001	mg/L				
8891693	. Titanium (Ti)	2023/09/01	115	80 - 120	102	80 - 120	<0.0005	mg/L				
8891693	. Tungsten (W)	2023/09/01	116	80 - 120	103	80 - 120	<0.0001	mg/L				
8891693	. Uranium (U)	2023/09/01	116	80 - 120	107	80 - 120	<0.00001	mg/L				
8891693	. Vanadium (V)	2023/09/01	107	80 - 120	98	80 - 120	<0.00005	mg/L				
8891693	. Zinc (Zn)	2023/09/01	112	80 - 120	102	80 - 120	<0.0005	mg/L				
8891693	. Zirconium (Zr)	2023/09/01	118	80 - 120	103	80 - 120	<0.0001	mg/L				
8891696	Dissolved Aluminum (Al)	2023/09/01	NC	80 - 120	103	80 - 120	<0.0005	mg/L	0.041	20		
8891696	Dissolved Antimony (Sb)	2023/09/01	120	80 - 120	105	80 - 120	<0.0001	mg/L	2.6	20		
8891696	Dissolved Arsenic (As)	2023/09/01	111	80 - 120	105	80 - 120	<0.0001	mg/L	0.93	20		
8891696	Dissolved Barium (Ba)	2023/09/01	NC	80 - 120	99	80 - 120	<0.0002	mg/L	0.54	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8891696	Dissolved Beryllium (Be)	2023/09/01	105	80 - 120	100	80 - 120	<0.00005	mg/L	NC	20		
8891696	Dissolved Bismuth (Bi)	2023/09/01	103	80 - 120	103	80 - 120	<0.0001	mg/L	NC	20		
8891696	Dissolved Boron (B)	2023/09/01	NC	80 - 120	96	80 - 120	<0.001	mg/L	1.5	20		
8891696	Dissolved Cadmium (Cd)	2023/09/01	115	80 - 120	100	80 - 120	<0.00001	mg/L	NC	20		
8891696	Dissolved Calcium (Ca)	2023/09/01	NC	80 - 120	104	80 - 120	<0.02	mg/L	0.25	20		
8891696	Dissolved Cesium (Cs)	2023/09/01	108	80 - 120	101	80 - 120	<0.00002	mg/L	NC	N/A		
8891696	Dissolved Chromium (Cr)	2023/09/01	109	80 - 120	107	80 - 120	<0.0005	mg/L	NC	20		
8891696	Dissolved Cobalt (Co)	2023/09/01	103	80 - 120	101	80 - 120	<0.00005	mg/L	1.9	20		
8891696	Dissolved Copper (Cu)	2023/09/01	107	80 - 120	98	80 - 120	<0.0001	mg/L	0.37	20		
8891696	Dissolved Iron (Fe)	2023/09/01	108	80 - 120	106	80 - 120	<0.005	mg/L	0.069	20		
8891696	Dissolved Lead (Pb)	2023/09/01	107	80 - 120	100	80 - 120	<0.00005	mg/L	1.7	20		
8891696	Dissolved Lithium (Li)	2023/09/01	115	80 - 120	110	80 - 120	<0.0005	mg/L	0.36	20		
8891696	Dissolved Magnesium (Mg)	2023/09/01	NC	80 - 120	108	80 - 120	<0.005	mg/L	1.2	20		
8891696	Dissolved Manganese (Mn)	2023/09/01	NC	80 - 120	104	80 - 120	<0.0002	mg/L	1.2	20		
8891696	Dissolved Molybdenum (Mo)	2023/09/01	110	80 - 120	94	80 - 120	<0.00005	mg/L	2.9	20		
8891696	Dissolved Nickel (Ni)	2023/09/01	101	80 - 120	104	80 - 120	<0.0001	mg/L	0.61	20		
8891696	Dissolved Phosphorus (P)	2023/09/01	113	80 - 120	97	80 - 120	<0.005	mg/L	NC	20		
8891696	Dissolved Potassium (K)	2023/09/01	NC	80 - 120	105	80 - 120	<0.02	mg/L	1.0	20		
8891696	Dissolved Rubidium (Rb)	2023/09/01	107	80 - 120	106	80 - 120	<0.00002	mg/L	1.8	N/A		
8891696	Dissolved Selenium (Se)	2023/09/01	113	80 - 120	104	80 - 120	<0.0002	mg/L	NC	20		
8891696	Dissolved Silicon (Si)	2023/09/01	NC	80 - 120	102	80 - 120	<0.005	mg/L	2.1	20		
8891696	Dissolved Silver (Ag)	2023/09/01	101	80 - 120	101	80 - 120	<0.00001	mg/L	NC	20		
8891696	Dissolved Sodium (Na)	2023/09/01	NC	80 - 120	107	80 - 120	<0.01	mg/L	1.5	20		
8891696	Dissolved Strontium (Sr)	2023/09/01	NC	80 - 120	104	80 - 120	<0.0001	mg/L	0.70	20		
8891696	Dissolved Tellurium (Te)	2023/09/01	114	80 - 120	99	80 - 120	<0.0001	mg/L	NC	20		
8891696	Dissolved Thallium (Tl)	2023/09/01	112	80 - 120	110	80 - 120	<0.000005	mg/L	NC	20		
8891696	Dissolved Thorium (Th)	2023/09/01	94	80 - 120	99	80 - 120	<0.0002	mg/L	NC	20		
8891696	Dissolved Tin (Sn)	2023/09/01	117	80 - 120	102	80 - 120	<0.0001	mg/L	1.2	20		
8891696	Dissolved Titanium (Ti)	2023/09/01	110	80 - 120	103	80 - 120	<0.0005	mg/L	6.0	20		
8891696	Dissolved Tungsten (W)	2023/09/01	116	80 - 120	106	80 - 120	<0.0001	mg/L	0.80	20		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8891696	Dissolved Uranium (U)	2023/09/01	112	80 - 120	103	80 - 120	<0.00001	mg/L	2.1	20		
8891696	Dissolved Vanadium (V)	2023/09/01	105	80 - 120	101	80 - 120	<0.00005	mg/L	1.4	20		
8891696	Dissolved Zinc (Zn)	2023/09/01	105	80 - 120	105	80 - 120	<0.0005	mg/L	0.86	20		
8891696	Dissolved Zirconium (Zr)	2023/09/01	119	80 - 120	100	80 - 120	<0.0001	mg/L	3.4	20		
8893700	Free Cyanide (CN)	2023/08/31	92	80 - 120	93	80 - 120	<2.0	ug/L				
8897890	Strong Acid Dissoc. Cyanide (CN)	2023/08/31	NC	80 - 120	102	80 - 120	<0.00050	mg/L				
8897891	Total Phosphorus (P)	2023/09/05	111	80 - 120	93	80 - 120	<0.0010	mg/L			88	80 - 120

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike exceeds acceptance limits, probable matrix interference

(2) POTENTIAL EXCEEDANCE FOR PARAMETER

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Anastassia Hamanov, Scientific Specialist

<original signed by>

Janah Rhyno, Scientific Specialist

<original signed by>

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Table C-4-1
Summary of Groundwater Analytical Results - Groundwater
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Sample Location			BH14-02		BH14-02A			BH14-15			DP-C		G6-BR-14		G6-OB-14		G7-OB1-14			G7-OB2-14	
Sample Date			29-Jun-23	14-Aug-23	29-Jun-23	14-Aug-23	14-Aug-23	28-Jun-23	15-Aug-23	15-Aug-23	6-Jul-23	23-Aug-23	5-Jul-23	3-Aug-23	5-Jul-23	3-Aug-23	20-Jun-23	20-Jun-23	1-Aug-23	20-Jun-23	1-Aug-23
Sample ID			BH14-02	BH1402	BH14-02A	BH14-02A	Duplicate 2	BH14-15	BH14-15	Duplicate1	DPC	DP-C	G6-BR-14	G6-BR-14	G6-OB-14	G6-OB-14	G7-OB1-14	Duplicate 3	G7-OB1-14	G7-OB2-14	G7-OB2-14
Sampling Company			GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory			BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order			C3J6649	C3P0285	C3J6649	C3P0285	C3P0285	C3J6607	C3O9982	C3O9982	C3L8153	C3Q0849	C3K1437	C3N6294	C3K1437	C3N6294	C3I6244	C3I6244	C3N6453	C3I6244	C3N6453
Laboratory Sample ID			WHF444	WSL994	WHF445	WSL993	WSL997	WHF142	WSK548	WSK546	WLR815	WUQ056	WIE414	WPN594	WIE413	WPN595	WFB490	WFB491	WPO528	WFB489	WPO527
Sample Type	Units	MOE APV					Field Duplicate			Field Duplicate								Field Duplicate			
Field Parameters																					
pH, Field	S.U.	n/v	6.52	6.55	7.18	7.20	0.0	7.31	6.70	-	-	7.19	7.34	7.36	7.72	7.84	7.58	-	-	7.53	-
Temperature, Field	deg C	n/v	12.1	15.4	6.9	13.2	0.0	8.7	15.5	-	-	13.7	9.7	12.9	10.6	14.5	9.0	-	-	5.4	-
General Chemistry																					
Acidity	mg/L	n/v	110	120	22	23	21	22	33	39	<5.6	16	10	9.2	<5.0	<5.0	<5.0	<5.0	<5.0	7.6	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	n/v	430	620	330	370	370	350	370	370	410	330	290	290	130	120	150	150	160	210	190
Alkalinity, Carbonate (as CaCO3)	mg/L	n/v	1.1	1.0	1.7	1.2	1.1	2.2	<1.0	<1.0	2.5	<1.0	3.0	3.1	1.1	<1.0	1.2	1.4	1.9	1.6	2.8
Alkalinity, Hydroxide (as CaCO3)	mg/L	n/v	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	n/v	430	620	330	380	370	350	370	370	410	330	290	300	130	120	150	160	160	220	190
Ammonia (as N)	mg/L	n/v	0.45	0.51	0.15	0.058	0.061	0.32	0.15	0.16	7.0	1.0	0.43	0.59 QA	<0.050	<0.050	0.065	0.062	<0.050	0.083	0.079
Chloride	mg/L	180[A]	53	71	2.6	6.0	1.8	<1.0	4.6	5.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0 MI	<1.0	<1.0	<1.0
Cyanide (Free)	mg/L	n/v	0.0033 ICB	0.0021 ICB	0.0021 ICB	<0.002 ICB	0.0033 ICB	0.0026 ICB	<0.002 ICB	<0.002 ICB	0.0066 ICB	<0.002 ICB	0.0021 ICB	<0.002 ICB	<0.002 ICB	<0.002 ICB	0.0052 ICB	0.0054 ICB	0.0023 ICB	0.0047 ICB	<0.002 ICB
Cyanide (Strong Acid Dissociable)	mg/L	n/v	<0.00050 CYN	<0.00050 CYN	<0.00050 CYN	<0.00050	0.00057 CYN	<0.00050 CYN	0.00051	0.00062	0.00095 CYN	<0.00050	<0.00050 CYN	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050 CYN	<0.00050	<0.00050
Dissolved Organic Carbon (DOC)	mg/L	n/v	12	22	14	14	-	-	-	-	-	-	-	-	-	-	5.0	5.2	-	3.6	-
Electrical Conductivity, Lab	µS/cm	n/v	975	1,380	608	682	680	646	688	696	739	604	522	523	252	220	296	298	286	414	338
Fluoride	mg/L	n/v	<0.10	<0.10	<0.10	<0.10	<0.10	0.39	0.17	0.18	0.20	0.30	0.33	0.32	<0.10	<0.10	0.12	0.12	0.11	0.20	0.12
Hardness (as CaCO3)	mg/L	n/v	530	670	350	370	370	330	370	370	410	270	260	260	130	120	150	160	170	210	210
Nitrate (as N)	mg/L	n/v	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	n/v	<0.10	<0.10	<0.10	<0.10	<0.10	0.12	<0.10	<0.10	<0.10	<0.10	0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	n/v	<0.010	<0.010	<0.010	<0.010	<0.010	0.017	0.010	<0.010	<0.010	<0.010	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.013
pH, lab	S.U.	n/v	7.44	7.23	7.75	7.55	7.51	7.82	7.38	7.39	7.81	7.48	8.04	8.04	7.95	7.96	7.93	8.00	8.10	7.88	8.20
Phosphorus, Total	mg/L	n/v	0.085	0.030	0.014	0.0062	0.0079	1.5	1.5	0.84	0.23	0.52 DB	0.54	0.075	0.10	0.013	0.069	0.077	0.070	1.1	1.7
Sulfate	mg/L	n/v	<1.0	40	<1.0	<1.0	1.1	7.0	31	31	<1.0	<1.0	<1.0	<1.0	1.9	2.3	<1.0	<1.0	<1.0	2.7	1.5
Total Dissolved Solids	mg/L	n/v	760	790	335	395	390	445	425	400	480	320	280	285	130	90	175	190	160	220	215
Total Kjeldahl Nitrogen	mg/L	n/v	0.88	0.95	0.41	0.34	0.37	0.70	0.74	0.58	7.3	1.9	0.54	0.52 QA	0.13	<0.10	0.25	0.20	0.28	0.35	0.64
Total Suspended Solids	mg/L	n/v	62	54	13	29	24	23,000	2,100	2,500	-	56,000	4,700	18	330	64	67	110	370	3,900	2,100
Turbidity, Lab	NTU	n/v	16	95	11	33	36	4.1	480	630	100	62	2.0	2.0	3.3	2.5	18	39	7.0	18	12
Metals, Dissolved																					
Aluminum	µg/L	n/v	12	8.4	13.1	20.4	13.6	0.9	3.3	3.3	9	81.3	21.3	2.4	1.5	82.7	2.8	3.8	38.7	4.6	6.3
Antimony	µg/L	1,600[A]	<0.5	<0.5	<0.1	<0.1	<0.1	0.2	0.3	0.3	<0.5	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	150[A]	26.5	12.6	10.1	15.3	14.5	4.2	5.6	5.6	2.2	1.6	1.3	1.1	0.5	0.4	0.8	0.8	0.9	0.8	1.1
Barium	µg/L	2,300[A]	35	46	11.7	12.7	12.4	72.5	56.6	56.1	1,280	1,070	45.4	48	10.7	8.3	10	9.9	10.2	22.1	22
Beryllium	µg/L	5.3[A]	<0.25	<0.25	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	n/v	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	3,550[A]	10	10	6	7	7	62	41	40	57	52	27	27	6	5	5	5	5	8	7
Cadmium	µg/L	0.21[A]	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	n/v	179	221	113	119	116	88.6	110	109	127	82.1	68.4	68.2	36.7	34.9	47.8	49.6	52.6	64.6	64.7
Cesium	µg/L	n/v	1.8	1.4	0.2	0.21	0.21	<0.02	<0.02	<0.02	<0.1	<0.02	0.45	0.53	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	64[A]	<2.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	0.6	0.9	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	µg/L	5.2[A]	2.56	2.43	<0.05	<0.05	<0.05	0.62	2.1	2.09	1.5	0.6	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	6.9[A]	<0.5	0.9	0.3	0.2	0.3	0.2	0.8	1.5	3	2.2	0.3	0.5	0.6	0.4	0.1	4.3	0.6	0.5	0.7
Iron	µg/L	n/v	15,000	9,310	3,170	5,270	5,000	1,970	1,440	1,430	17,800	71	852	839	<5	116	468	433	667	677	585
Lead	µg/L	2[A]	<0.25	<0.25	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.25	0.18	0.06	<0.05	<0.05	0.1	<0.05	<0.05	0.06	<0.05	0.05
Lithium	µg/L	n/v	<2.5	<2.5	1	1.1	1.1	10	6.2	6.1	<2.5	6.3	7.2	7.2	1.3	0.9	0.8	0.9	0.8	1.8	1.2
Magnesium	mg/L	n/v	21.5	29.5	16.4	18.7	19.1	25.3	23.4	23.3	22.4	16.9	22.7	22.8	8.84	7.97	8.29	8.07	8.84	12.9	11.6
Manganese	µg/L	n/v	2,700	2,450	1,020	1,740	1,610	92.2	360	360	1,130	101	47	44	7.3	6.7	57.4	58.7	62.8	43.6	42.9
Mercury	µg/L	0.77[A]	<0.01	***<10,000***	<0.01	***<10,000***	***<10,000***	<0.01	***<10,000***	***<10,000***	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	<0.01	***<10,000***	<0.01	***<10,000***
Molybdenum	µg/L	730[A]	0.63	<0.25	0.26	0.39	0.39	1.68	1.31	1.32	0.36	1.06	0.99	0.54	0.22	0.09	0.18	0.18	0.19	0.23	0.26
Nickel	µg/L	39[A]	1.6	1.5	0.2	0.3	0.3	0.8	2.8	2.9	7.6	5	0.1	<0.1	0.2	0.3	<0.1	0.1	0.2	<0.1	0.7
Phosphorus	µg/L	n/v	35	<25	5	5	<5	14	8	9	107	<5	47	43	10	12	15	15	31	18	15
Potassium	mg/L	n/v	1.8	2.4	0.92	0.78	0.78	3.15	2.04	2.07	1.1	2.50	2.23	2.22	0.37	0.32	0.61	0.61	0.67	1.05	1.00
Rubidium	µg/L	n/v	4.5	6.1	1.61	1.8	1.82	1.68	2.73	2.74	1.7	2.4	0.88	0.78	0.46	0.43	1.11	1.09	1.17	1.71	2.29
Selenium	µg/L	5[A]	<1	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	n/v	8,240	8,080	7,130	7,110	6,860	8,870	6,260	6,230	11,000	6,740	8,970	8,520	4,960	4,820	4,780	4,770	4,990	5,560	5,560
Silver	µg/L	0.12[A]	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	180[A]	7.19	7.48	3.30	2.83	2.69	30.6	13.7	13.9	5.56	5.17	14.6	13.5	2.26	1.90	1.83	1.90	1.91	2.54	2.49
Strontium	µg/L	n/v	352	463	224	272	274	217	258	257	179	201	305	302	35.2	30.8	46.3	46.1	50.8	72	66.8
Sulfur	µg/L	n/v	<500	6,400	<500	<500	<500	2,000	10,000	10,000	<500	800	<500	<500	800	600	<500	<500	<500	1,000	700
Tellurium	µg/L	n/v	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	40[A]	<0.025	<0.025	<0.005	<0.005	<0.005	<0.005	0.008	0.009	<0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	n/v	<1	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Tin	µg/L	n/v	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	3.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	n/v	<2.5	<2.5	1.1	1.4	1.1	0.6	0.6	0.6	<2.5	3.6	1.8	0.7	<0.5	5.7	<0.5	<0.5	3.2	0.9	1.1
Tungsten	µg/L	n/v	0.5	<0.5	0.8	0.5	0.5	1.6	0.7	0.7	<0.5	0.3	0.9	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	33[A]	0.58	0.62	0.22	0.21	0.23	0.43	0.79	0.77	0.1	0.63	0.05	0.02	0.19	0.14	<0.01	<0.01	0.01	0.03	0.03
Vanadium	µg/L	20[A]	0.41	0.31	0.87	0.97	0.91	0.34	0.18	0.17	<0.25	0.36	0.09	<0.05	0.83	1.3	0.48	0.45	0.55	0.66	1.14
Zinc	µg/L	89[A]	<2.5	<2.5	<0.5	1	0.6	<0.5	1.6	2.2	**652[A]**	35.2	0.9	1	0.8	1.1	0.7	1	1.3	0.6	2.1
Zirconium	µg/L	n/v	1.2	0.9	1.5	1.6	1.6	0.3	0.5	0.5	<0.5	0.2	0.5	0.4	<0.1	<0.1	0.9	0.9	1	0.8	1.6

See notes on last page

Table C-4-1
Summary of Groundwater Analytical Results - Groundwater
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Sample Location			BH14-02		BH14-02A			BH14-15			DP-C		G6-BR-14		G6-OB-14		G7-OB1-14			G7-OB2-14	
Sample Date			29-Jun-23	14-Aug-23	29-Jun-23	14-Aug-23	14-Aug-23	28-Jun-23	15-Aug-23	15-Aug-23	6-Jul-23	23-Aug-23	5-Jul-23	3-Aug-23	5-Jul-23	3-Aug-23	20-Jun-23	20-Jun-23	1-Aug-23	20-Jun-23	1-Aug-23
Sample ID			BH14-02	BH1402	BH14-02A	BH14-02A	Duplicate 2	BH14-15	BH14-15	Duplicate1	DPC	DP-C	G6-BR-14	G6-BR-14	G6-OB-14	G6-OB-14	G7-OB1-14	Duplicate 3	G7-OB1-14	G7-OB2-14	G7-OB2-14
Sampling Company			GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory			BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order			C3J6649	C3P0285	C3J6649	C3P0285	C3P0285	C3J6607	C3O9982	C3O9982	C3L8153	C3Q0849	C3K1437	C3N6294	C3K1437	C3N6294	C3I6244	C3I6244	C3N6453	C3I6244	C3N6453
Laboratory Sample ID			WHF444	WSL994	WHF445	WSL993	WSL997	WHF142	WSK548	WSK546	WLR815	WUQ056	WIE414	WPN594	WIE413	WPN595	WFB490	WFB491	WPO528	WFB489	WPO527
Sample Type	Units	MOE APV					Field Duplicate			Field Duplicate								Field Duplicate			
Metals, Total																					
Aluminum	µg/L	n/v	483	62.3	96.5	4	21.5	320	6,000	5,410	13.7	16	1,980	60.1	849	188	554	519	506	1,900	4,770
Antimony	µg/L	1,600[A]	<0.5	<0.1	<0.1	<0.1	<0.1	0.4	<0.5	<0.5	0.4	<0.5	<0.5	<0.1	0.4	<0.1	0.1	0.2	<0.1	<0.5	<1
Arsenic	µg/L	150[A]	39.8	17.1	10.2	4.8	16.2	2.5	17.8	19.2	2.3	1.2	2.1	1	1.3	0.5	1.2	1.2	1	1.6	4
Barium	µg/L	2,300[A]	48	50.7	16.2	9	12.8	143	109	104	**4,040[A]**	**3,110[A]**	70	51.4	25	9.9	17.2	16.7	12	44	76
Beryllium	µg/L	5.3[A]	<0.25	<0.05	<0.05	<0.05	<0.05	0.14	0.35	0.34	<0.05	<0.25	<0.25	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.5
Bismuth	µg/L	n/v	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<1
Boron	µg/L	3,550[A]	11	12	7	7	7	75	52	51	280	101	35	31	6	5	6	6	6	24	40
Cadmium	µg/L	0.21[A]	0.027	<0.005	<0.005	<0.005	<0.005	**0.248[A]**	0.194	0.176	0.011	**0.247[A]**	0.039	<0.005	0.016	<0.005	0.019	0.016	0.011	0.09	0.21
Calcium	mg/L	n/v	208	235	110	127	121	693	423	364	133	1,030	125	68.9	51.5	37.8	68.9	71.8	65.7	303	599
Cesium	µg/L	n/v	2.1	1.6	0.23	0.21	0.21	0.08	0.5	0.5	<0.02	0.1	1.9	0.68	0.09	0.02	0.09	0.08	0.06	0.2	0.4
Chromium	µg/L	64[A]	2.6	0.6	0.6	<0.5	<0.5	0.9	21.1	18.9	<0.5	<2.5	6	<0.5	2.8	1.2	1.9	1.9	1.4	7.8	20
Cobalt	µg/L	5.2[A]	4.8	2.93	0.11	<0.05	0.05	4.43	**9.69[A]**	**8.88[A]**	1.73	**8.95[A]**	1.64	0.07	0.88	0.2	0.67	0.61	0.44	3.45	**8.4[A]**
Copper	µg/L	6.9[A]	6.1	0.8	0.4	0.2	0.2	2.8	**28.3[A]**	**24.9[A]**	1.5	5	4.8	0.3	3.5	0.6	2	1.9	1.2	5.1	**22[A]**
Iron	µg/L	n/v	21,300	10,000	4,390	612	5,440	2,480	14,900	14,000	4,120	38	4,260	918	1,150	260	1,450	1,370	1,410	4,670	11,000
Lead	µg/L	2[A]	1.96	0.11	0.21	<0.05	<0.05	0.15	**9.07[A]**	**8[A]**	0.13	<0.25	**3.66[A]**	0.28	**14.5[A]**	0.2	0.95	1.12	0.52	**4.1[A]**	**11.7[A]**
Lithium	µg/L	n/v	<2.5	1	1.3	1.1	1.1	13.8	17	15.5	1.9	10	11.1	7.7	2.4	1	1.8	1.7	1.6	5.4	11
Magnesium	mg/L	n/v	25.2	31.4	16.3	20.2	19.7	122	101	87.5	24.3	25.9	37.4	23.0	12.6	8.72	11.9	12.6	12.2	78.9	180
Manganese	µg/L	n/v	3,160	2,340	968	1,350	1,600	1,030	898	805	1,500	2,310	169	49.9	62.6	13.5	96	96.2	100	361	803
Mercury	µg/L	0.77[A]	<0.01	***<10,000***	<0.01	***<10,000***	***<10,000***	***<1.5***	**20,000[A]**	**10,000[A]**	<0.01	***<1.5***	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	<0.01	***<10,000***	0.01	<0.1
Molybdenum	µg/L	730[A]	0.49	0.33	0.25	0.45	0.4	1.88	0.47	0.5	0.84	1.19	0.77	0.46	0.11	0.07	0.14	0.13	0.14	<0.25	<0.5
Nickel	µg/L	39[A]	4	2	0.6	0.3	0.3	7.1	18.9	17.6	4.4	27.6	5	0.2	2.2	0.5	1.6	1.5	1	6.4	16
Phosphorus	µg/L	n/v	96	35	16	<5	<5	44	1,210	981	13	<25	315	57	109	19	96	98	75	1,270	2,190
Potassium	mg/L	n/v	2.2	2.95	1.04	0.89	0.87	3.83	3.1	3.0	1.62	3.1	2.6	2.31	0.50	0.33	0.82	0.82	0.70	1.4	1.8
Rubidium	µg/L	n/v	6.2	6.88	1.94	1.91	1.87	5.73	14.9	13.8	2.32	8.2	4.2	0.91	1.73	0.59	2.39	2.29	1.97	5.1	10.9
Selenium	µg/L	5[A]	<0.25	0.17	0.05	0.08	0.06	0.06	<0.25	<0.25	0.06	<0.25	<0.25	<0.05	0.09	0.06	<0.05	<0.05	<0.05	<0.25	<0.5
Silicon	µg/L	n/v	9,050	8,840	7,220	7,230	7,440	9,670	13,900	13,600	8,720	5,900	11,400	8,540	5,360	5,050	6,000	5,850	5,500	8,140	10,800
Silver	µg/L	0.12[A]	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.01	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.1
Sodium	mg/L	180[A]	8.67	8.57	5.17	3.03	2.98	27.7	13.0	13.0	7.69	3.81	15.1	14.2	1.91	1.98	1.92	1.93	1.88	2.79	2.5
Strontium	µg/L	n/v	425	485	222	258	259	593	420	388	223	863	350	317	45	32.4	61.7	61.8	58.7	198	341
Sulfur	µg/L	n/v	700	6,500	700	<500	<500	7,200	11,000	11,000	700	12,000	<500	<500	700	700	<500	<500	<500	1,300	1,600
Tellurium	µg/L	n/v	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<1
Thallium	µg/L	40[A]	0.03	0.006	<0.005	<0.005	<0.005	0.04	0.176	0.152	<0.005	0.138	0.025	<0.005	0.021	0.006	0.014	0.015	0.01	0.078	0.2
Thorium	µg/L	n/v	<1	<0.2	<0.2	<0.2	<0.2	<0.2	1	1	<0.2	<1	<1	<0.2	<0.2	<0.2	0.4	0.4	0.2	1	<2
Tin	µg/L	n/v	<0.5	<0.1	0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<1
Titanium	µg/L	n/v	21.3	3.6	4	0.7	1.5	22.5	165	163	1.1	3.3	84.7	4.5	40.9	10.9	34.8	33	26.2	84.6	144
Tungsten	µg/L	n/v	<0.5	0.3	0.9	0.4	0.5	3.2	0.8	0.8	<0.1	<0.5	0.5	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<1
Uranium	µg/L	33[A]	0.82	0.77	0.29	0.24	0.24	0.36	1.98	1.85	0.29	11.5	0.59	0.05	0.22	0.15	0.09	0.09	0.06	1.29	3
Vanadium	µg/L	20[A]	2	0.51	1.27	0.29	0.99	3.03	**20.9[A]**	18.8	0.11	0.54	5.05	0.18	2.81	1.57	2.11	2.01	1.65	8.66	**21.8[A]**
Zinc	µg/L	89[A]	6.6	0.9	1.8	<0.5	0.9	12.3	35.8	32.1	**792[A]**	**175[A]**	15.1	1.2	6.8	1.5	6.1	6.6	3	14.3	34
Zirconium	µg/L	n/v	1.6	0.9	1.3	0.8	1.6	0.8	4.5	4.5	<0.1	1.2	2.6	0.6	0.2	0.1	1.6	1.7	1.6	2.3	6

See notes on last page

Table C-4-1
Summary of Groundwater Analytical Results - Groundwater
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Sample Location			M1		MW01-OB1-18		MW01-OB2-18		MW02-OB-18		MW3-BR-13		MW03-BR-18				MW3-OB-13			MW03-OB-18		MW6-OB-13	
Sample Date			5-Jun-23	10-Aug-23	5-Jun-23	10-Aug-23	5-Jun-23	10-Aug-23	5-Jun-23	2-Aug-23	8-Jun-23	13-Aug-23	5-Jun-23	5-Jun-23	13-Aug-23	13-Aug-23	8-Jun-23	8-Jun-23	13-Aug-23	5-Jun-23	13-Aug-23	8-Jun-23	2-Aug-23
Sample ID			M1 Pond	Pond M1	MW01-OB1-18	MW01-OB1-18	MW01-OB2-18	MW01-OB2-18	MW02-OB-18	MW02-OB-18	MW3-BR-13	MW3-BR-13	MW03-BR-18	Duplicate 4	MW03-BR-18	Duplicate 6	MW3-OB-13	DOUP #5	MW3-OB-13	MW03-OB-18	MW03-OB-18	MW6-OB-13	MW6-OB-13
Sampling Company			GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory			BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order			C3G5381	C3O7544	C3G5381	C3O7544	C3G5381	C3O7544	C3G5381	C3N6265	C3H0991	C3O7765	C3G5381	C3G5381	C3O7765	C3O7765	C3H0991	C3H0991	C3O7765	C3G5381	C3O7765	C3H0991	C3N6265
Laboratory Sample ID			WAS212	WRX366	WAS209	WRX373	WAS210	WRX372	WAS211	WPN315	WBX438	WRY344	WAS208	WAS214	WRY346	WRY349	WBX437	WBX440	WRY345	WAS207	WRY347	WBX439	WPN320
Sample Type	Units	MOE APV												Field Duplicate		Field Duplicate		Field Duplicate					
Field Parameters																							
pH, Field	S.U.	n/v	7.02	6.95	6.83	6.93	6.89	7.12	6.99	-	-	7.15	7.74	-	7.71	-	-	-	7.33	7.01	7.1	-	-
Temperature, Field	deg C	n/v	14.6	13.8	12.9	12.8	10.3	14.7	13.3	-	-	9.1	9.1	-	11.2	-	-	-	9.2	9.4	10.7	-	-
General Chemistry																							
Acidity	mg/L	n/v	32	31	110	50	65	35	31	26	91	54	11	10	<5.0	26	25	16	16	32	11	40	46
Alkalinity, Bicarbonate (as CaCO3)	mg/L	n/v	420	430	580	540	450	450	160	120	420	380	330	320	330	360	420	390	400	360	350	300	230
Alkalinity, Carbonate (as CaCO3)	mg/L	n/v	1.6	1.5	1.3	2.6	1.6	1.6	<1.0	<1.0	1.6	1.8	2.9	3.3	2.7	1.6	2.5	3.3	2.2	1.6	1.3	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	n/v	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	n/v	420	430	580	540	450	460	160	120	420	380	330	320	330	360	420	400	400	360	350	300	230
Ammonia (as N)	mg/L	n/v	0.10	0.16	0.82	1.2	1.1	0.29	2.2	1.8	0.61	0.68	0.71 QA	0.71 QA	0.63	<0.050	0.46	0.75	0.43	0.066	<0.050	0.15	0.77
Chloride	mg/L	180[A]	4.5	33	1.3	1.6	2.7	2.7	3.1	4.5	7.3	5.8	<1.0	<1.0	1.1	<1.0	<1.0	3.1	3.3	<1.0	<1.0	100	150
Cyanide (Free)	mg/L	n/v	0.0052 ICB	0.0028 ICB	0.0054 ICB	<0.002 ICB	0.0044 ICB	0.003 ICB	0.0044 ICB	<0.002 ICB	<0.002 ICB	0.0023 ICB	0.0047 ICB	0.0052 ICB	0.0028 ICB	<0.002 ICB	<0.002 ICB	<0.002 ICB	<0.002 ICB	0.0052 ICB	0.0026 ICB	<0.002 ICB	<0.002 ICB
Cyanide (Strong Acid Dissociable)	mg/L	n/v	<0.00050	<0.00050 CYN	0.00100	0.00172	0.00229 CYN	0.00241 CYN	0.328	0.188	<0.00050	<0.00050 CYN	<0.00050	<0.00050	<0.00050 CYN	0.00073	0.00085	<0.00050	<0.00050	<0.00050	<0.00050 CYN	<0.00050	0.00164
Dissolved Organic Carbon (DOC)	mg/L	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Lab	µS/cm	n/v	885	882	2,400	1,950	2,930	2,780	3,430	3,420	905	718	597	593	588	683	782	764	759	683	687	954	922
Fluoride	mg/L	n/v	<0.10	0.13	<0.10	<0.10	0.23	0.26	0.18	0.20	0.35	0.29	0.21	0.22	0.26	0.39	0.42	0.40	0.37	0.36	0.39	<0.10	<0.10
Hardness (as CaCO3)	mg/L	n/v	470	490	1,500	1,600	1,500	1,500	2,300	2,500	550	370	300	300	300	390	410	400	410	390	390	210	1,400
Nitrate (as N)	mg/L	n/v	<0.10	0.39	<0.10	0.35	1.00	1.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.18	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	n/v	<0.10	0.41	<0.10	0.37	1.11	1.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.18	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	n/v	<0.010	0.013	<0.010	0.016	0.104	<0.010	0.014	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
pH, lab	S.U.	n/v	7.61	7.56	7.38	7.70	7.57	7.58	7.18	7.33	7.61	7.70	7.98	8.03	7.94	7.67	7.80	7.95	7.77	7.69	7.61	7.45	7.43
Phosphorus, Total	mg/L	n/v	0.010	0.033	0.89	4.1	0.65	0.83	5.2 DB	1.3	0.079	0.21	0.069	0.070	0.057 MS	0.30	0.047	1.1 DB	1.2	0.26	0.43	0.19	2.9
Sulfate	mg/L	n/v	3.1	7.0	920	710	1,300	1,300	2,300	2,400	63	19	<1.0	<1.0	<1.0	21	5.5	22	24	20	21	15	11
Total Dissolved Solids	mg/L	n/v	560	485	1,920	1,590	2,540	2,470	3,470	3,610	550	405	380	380	320	370	430	395	435	420	380	440	510
Total Kjeldahl Nitrogen	mg/L	n/v	0.25	0.38	1.0	1.2	1.5	0.95	3.1	2.6	0.98	0.91	0.64 QA	0.59 QA	0.63	0.12	0.58	1.3	0.81	<0.10	0.11	0.54	1.3
Total Suspended Solids	mg/L	n/v	30	68	7,200	18,000	220	61,000	8,100	40,000	34	110	26	17	38	570	560	230	2,900	140	1,300	290	5,500
Turbidity, Lab	NTU	n/v	15	1.8	67	2,100	18	3,300	55	9.2	53	24	12	15	5.8	7.3	12	15	10	33	4.5	36	25
Metals, Dissolved																							
Aluminum	µg/L	n/v	11.1	4.5	3	2.3	<2.5	0.9	<50	11	4.2	3.4	1.3	0.9	80.3	8	4.1	8.7	2.9	0.9	5.1	67.8	60.5
Antimony	µg/L	1,600[A]	0.2	0.2	<0.5	11.2	<0.5	0.3	<10	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	0.1
Arsenic	µg/L	150[A]	22.1	6.7	**1,010[A]**	**998[A]**	49.8	63	**16,800[A]**	**28,300[A]**	27.1	46.5	91.6	87.7	49.9	0.5	3.5	3.3	3	0.4	0.5	11	17.6
Barium	µg/L	2,300[A]	36.9	42.5	18	28.7	13	17.5	20	19	394	269	94	92.8	82.3	34.5	86.4	86	80.8	34.7	34.3	56.6	61.2
Beryllium	µg/L	5.3[A]	<0.05	<0.05	<0.25	<0.05	<0.25	<0.05	<5	<0.5	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	n/v	<0.1	<0.1	<0.5	<0.1	<0.5	<0.1	<10	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	3,550[A]	11	12	26	29	26	26	1,700	1,820	20	15	41	38	38	9	37	36	35	10	9	4	7
Cadmium	µg/L	0.21[A]	<0.01	<0.01	<0.05	<0.01	<0.05	0.03	***<1***	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01
Calcium	mg/L	n/v	138	151	299	290	291	282	592	644	174	118	71.1	74.1	73.3	118	97.6	96.9	92.2	116	118	66.3	89.7
Cesium	µg/L	n/v	0.03	0.12	0.2	0.33	0.2	0.18	<2	<0.2	0.96	0.97	0.24	0.24	0.19	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	64[A]	<0.5	<0.5	<2.5	<0.5	<2.5	<0.5	<50	<5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	2
Cobalt	µg/L	5.2[A]	**9.85[A]**	3.36	<0.25	0.14	<0.25	0.15	**11[A]**	**9.6[A]**	0.56	0.42	<0.05	<0.05	0.28	<0.05	0.39	0.34	0.48	<0.05	<0.05	3.07	3.56
Copper	µg/L	6.9[A]	0.5	0.7	<0.5	0.5	0.5	1.6	***<10***	1	0.2	<0.1	1.6	<0.1	2	<0.1	1	<0.1	0.2	1.2	0.1	0.4	0.1
Iron	µg/L	n/v	2,670	491	14,400	6,730	51	18	900	140	14,100	11,300	2,100	1,950	3,310	1,140	771	890	502	1,090	1,140	9,480	26,100
Lead	µg/L	2[A]	<0.05	<0.05	<0.25	0.12	<0.25	<0.05	***<5***	1.9	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.13	<0.05
Lithium	µg/L	n/v	1.6	1.6	11.1	12.5	110	115	120	118	12.5	7.3	9.7	9.5	9.4	6.9	8.3	8.2	9.4	6.7	6.8	1.3	1.1
Magnesium	mg/L	n/v	30.0	26.8	190	205	194	187	209	218	27.8	19.4	29.4	27.7	29.2	23.7	39.5	39.0	43.2	23.6	23.8	9.75	12.1
Manganese	µg/L	n/v	2,720	585	78	76.9	243	264	610	840	532	386	40.1	38.5	67.4	54.1	88.6	83.4	81.8	55.1	54.6	1,560	1,990
Mercury	µg/L	0.77[A]	<0.01	***<10,000***	<0.01	<0.10	<0.01	<0.10	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	<0.01	***<10,000***	***<10,000***	<0.01	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	***<10,000***
Molybdenum	µg/L	730[A]	1.7	1.13	2.9	3.15	3.59	4.11	17	25.5	0.25	0.73	1.06	1.02	1.41	0.69	1.85	1.72	2.32	0.67	0.71	0.88	1.06
Nickel	µg/L	39[A]	6	4.5	<0.5	1	<0.5	0.6	20	12	0.4	0.3	0.2	<0.1	0.8	<0.1	1	0.9	1.6	<0.1	<0.1	1	1.1
Phosphorus	µg/L	n/v	6	<5	<25	<5	27	<5	<500	70	88	60	54	43	54	23	19	23	11	17	23	6	7
Potassium	mg/L	n/v	2.24	4.63	9.7	13.8	12.3	15.4	31	31.8	2.96	2.49	4.61	4.35	4.20	1.87	4.63	4.44	4.94	1.82	1.88	1.20	1.80
Rubidium	µg/L	n/v	1.92	3.54	10.3	15.2	15.3	16.8	7	6.5	1.84	1.64	1.24	1.21	1.22	1.41	1.93	1.86	2.1	1.38	1.49	0.8	2.04
Selenium	µg/L	5[A]	<0.2	<0.2	<1	<0.2	<1	<0.2	***<20***	<2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	n/v	6,980	7,400	10,400	11,900	8,470	9,230	5,700	7,720	11,800	10,700	6,930	7,180	7,910	7,150	7,870	7,870	9,000	6,810	7,160	4,550	5,420
Silver	µg/L	0.12[A]	<0.01	<0.01	<0.05	<0.01	<0.05	<0.01	***<1***	<0.1	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	180[A]	12.8	15.5	3.59	4.65	171	**191[A]**	86	81.8	11.6	9.74	13.7	12.7	13.6	3.94	16.8	16.0	16.8	3.88	3.99	72.5	90.4
Strontium	µg/L	n/v	291	241	998	1,070	1,350	1,320	1,570	1,630	535	369	559	555	561	118	578	592	572	120	119	143	166
Sulfur	µg/L	n/v	6,400	2,300	340,000	340,000	490,000	460,000	800,000	790,000	13,000	2,600	<500	<500	<500	7,300	6,800	6,500	8,700	7,600	7,100	3,500	2,000
Tellurium	µg/L	n/v	<0.1	<0.1	<0.5	<0.1	<0.5	<0.1	<10	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	40[A]	0.006	0.033	<0.025	<0.005	<0.025	<0.005	<0.5	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005
Thorium	µg/L	n/v	<0.2	<0.2	-	<0.2	-	<0.2	-	<2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	0.3	0.3
Tin	µg/L	n/v	<0.1	<0.1	<0.5	<0.1	<0.5	0.4	<10	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	0.1	<0.1
Titanium	µg/L	n/v	0.9	0.7	<2.5	0.9	<2.5	0.7	<50	<5	1.1	1.2	<0.5	<0.5	3.1	1.3	0.6	1.2	0.7	0.5	1	3	2.4
Tungsten	µg/L	n/v	0.2	<0.1	6.7	9.6	<0.5	0.5	<10	<1	2.8	2.8	0.3	0.3	0.5	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	0.1
Uranium	µg/L	33[A]	1.55	1.56	2.43	2.25	8.51	8.89	7	3.7	0.52	0.34	0.29	0.28	0.17	0.02	0.41	0.38	0.42	0.01	0.01	1.02	0.73
Vanadium	µg/L	20[A]	0.9	0.36	<0.25	1.13	<0.25	<0.05	<5	<0.5	0.84	0.71	<0.05	<0.05	0.44	0.05	0.07	0.1	0.09	<0.05	<0.05	5.66	7.16
Zinc	µg/L	89[A]	0.7	1.2	<2.5	2.3	3.7	13.3	<50	8	0.6	0.7	2.9	0.6	2.1	<0.5	2.6	1.6	1.1	1.1	<0.5	1.9	1.5
Zirconium	µg/L	n/v	2.4	0.7	0.6	0.7	<0.5	0.3	<10	<1	8.4	7.2	0.1	0.1	0.5	0.2	0.2	0.2	0.2	0.2	0.2	1.2	1.7

See notes on last page

Table C-4-1
Summary of Groundwater Analytical Results - Groundwater
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Sample Location			M1		MW01-OB1-18		MW01-OB2-18		MW02-OB-18		MW3-BR-13		MW03-BR-18				MW3-OB-13			MW03-OB-18		MW6-OB-13	
Sample Date			5-Jun-23	10-Aug-23	5-Jun-23	10-Aug-23	5-Jun-23	10-Aug-23	5-Jun-23	2-Aug-23	8-Jun-23	13-Aug-23	5-Jun-23	5-Jun-23	13-Aug-23	13-Aug-23	8-Jun-23	8-Jun-23	13-Aug-23	5-Jun-23	13-Aug-23	8-Jun-23	2-Aug-23
Sample ID			M1 Pond	Pond M1	MW01-OB1-18	MW01-OB1-18	MW01-OB2-18	MW01-OB2-18	MW02-OB-18	MW02-OB-18	MW3-BR-13	MW3-BR-13	MW03-BR-18	Duplicate 4	MW03-BR-18	Duplicate 6	MW3-OB-13	DOUP #5	MW3-OB-13	MW03-OB-18	MW03-OB-18	MW6-OB-13	MW6-OB-13
Sampling Company			GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory			BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order			C3G5381	C3O7544	C3G5381	C3O7544	C3G5381	C3O7544	C3G5381	C3N6265	C3H0991	C3O7765	C3G5381	C3G5381	C3O7765	C3O7765	C3H0991	C3H0991	C3O7765	C3G5381	C3O7765	C3H0991	C3N6265
Laboratory Sample ID			WAS212	WRX366	WAS209	WRX373	WAS210	WRX372	WAS211	WPN315	WBX438	WRY344	WAS208	WAS214	WRY346	WRY349	WBX437	WBX440	WRY345	WAS207	WRY347	WBX439	WPN320
Sample Type														Field Duplicate		Field Duplicate		Field Duplicate					
Metals, Total																							
Aluminum	µg/L	n/v	96.5	67.6	2,010	4,380	26.5	31	140,000	8,260	43.1	549	82	115	179	1,910	167	2,820	5,830	147	1,390	1,650	42,100
Antimony	µg/L	1,600[A]	0.2	0.1	<0.5	1	0.8	<1	74	2	<0.1	0.2	<0.1	<0.1	0.2	<0.1	<0.1	0.1	<0.5	<0.1	<0.1	0.2	<1
Arsenic	µg/L	150[A]	25.8	13.7	**1,520[A]**	**1,880[A]**	**8,810[A]**	**8,870[A]**	**56,000[A]**	**35,500[A]**	24.7	47.5	90.9	87.8	50.8	1.8	3.5	5	5.7	1.8	1.2	15.5	57
Barium	µg/L	2,300[A]	37.8	41.3	41	68	69	65	1,100	46	345	279	95.1	93.5	86.6	56.4	84.8	120	160	46.5	51.9	81.8	470
Beryllium	µg/L	5.3[A]	<0.05	<0.05	<0.25	<0.5	<0.25	<0.5	4.5	0.7	<0.05	0.1	<0.05	<0.05	0.06	0.13	<0.05	0.18	0.38	<0.05	0.09	0.35	4
Bismuth	µg/L	n/v	<0.1	<0.1	<0.5	<1	<0.5	<1	<10	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<1
Boron	µg/L	3,550[A]	12	11	32	30	29	30	1,900	1,930	21	17	40	39	41	19	36	43	66	11	17	5	40
Cadmium	µg/L	0.21[A]	0.006	0.01	0.102	0.18	<0.025	<0.05	**5.3[A]**	**0.6[A]**	<0.005	0.014	<0.005	<0.005	<0.005	0.059	0.008	0.073	**0.232[A]**	0.011	0.042	0.123	**1.07[A]**
Calcium	mg/L	n/v	147	142	353	278	305	290		738	165	121	76.7	74.6	74.9	257	104	265	577	133	213	80.2	415
Cesium	µg/L	n/v	0.03	0.11	0.6	1.2	0.2	0.2	-	1.2	0.83	1.5	0.25	0.26	0.25	0.22	0.03	0.31	0.5	0.02	0.15	0.16	0.6
Chromium	µg/L	64[A]	<0.5	<0.5	14.6	31	<2.5	<5	**490[A]**	39	0.7	2.5	<0.5	<0.5	0.8	6.2	1	11.2	22.6	<0.5	4	4.6	**71[A]**
Cobalt	µg/L	5.2[A]	**9.79[A]**	3.77	2.05	3.9	<0.25	<0.5	**260[A]**	**21[A]**	0.81	1.51	0.14	0.21	0.63	1.89	0.5	3.3	**7.35[A]**	0.13	1.23	**5.25[A]**	**46.1[A]**
Copper	µg/L	6.9[A]	1.1	1.8	**33.3[A]**	**74[A]**	1.4	1	**880[A]**	**38[A]**	0.2	1.9	0.3	0.2	2.1	5.9	0.9	4.7	**20.7[A]**	0.6	3.5	**7.5[A]**	**68[A]**
Iron	µg/L	n/v	2,890	1,540	43,300	74,300	172,000	162,000	1,400,000	84,500	12,900	12,200	2,730	3,040	4,420	6,600	1,240	6,750	12,800	7,820	5,310	13,000	125,000
Lead	µg/L	2[A]	0.15	0.11	**5.11[A]**	**10.7[A]**	0.63	<0.5	**370[A]**	**44.7[A]**	0.21	**2.63[A]**	0.49	0.21	0.43	**2.8[A]**	0.33	**4.02[A]**	**9.92[A]**	0.38	1.97	**10.9[A]**	**52.1[A]**
Lithium	µg/L	n/v	1.7	1.7	14.2	15	111	116	230	123	12.7	8.5	9.9	10	9.8	11.1	8.4	14.8	22.2	7.2	9.6	3.5	34
Magnesium	mg/L	n/v	31.7	26.6	215	185	209	181		252	29.4	21.1	31.0	30.1	29.7	61.3	39.8	78.7	157	27.5	51.0	13.4	98.7
Manganese	µg/L	n/v	2,750	857	458	856	320	311	14,000	3,010	558	431	45.2	46.8	76.6	260	95.3	386	807	74	182	1,560	4,540
Mercury	µg/L	0.77[A]	<0.01	***<10,000***	<0.01	***<1.5***	<0.01	<0.1	***<10***	<0.1	<0.01	***<10,000***	<0.01	<0.01	***<10,000***	***<10,000***	<0.01	<0.01	***<1.5***	<0.01	***<10,000***	0.01	***<1.5***
Molybdenum	µg/L	730[A]	1.66	0.92	1.69	2.5	5.22	5.1	25	12.6	0.35	0.77	1	0.95	1.47	0.41	1.63	0.68	0.52	0.63	0.36	0.26	<0.5
Nickel	µg/L	39[A]	6.3	4.3	5.9	13	0.5	<1	**610[A]**	**42[A]**	0.6	3.2	0.5	0.7	1.7	4	1.4	8.5	16.2	0.3	2.8	4.3	**75[A]**
Phosphorus	µg/L	n/v	19	27	913	1,050	62	70	-	1,510	82	133	70	69	65	637	44	621	1,520	340	473	121	1,400
Potassium	mg/L	n/v	2.49	4.02	11.0	10.6	13.9	13.1		33.9	2.98	2.54	4.95	4.68	4.24	2.39	4.55	5.59	5.8	2.01	2.16	1.48	5.4
Rubidium	µg/L	n/v	2.07	3.58	12.3	15.7	15.2	15.7	-	14.1	1.84	2.45	1.32	1.35	1.34	5.69	2.12	8.35	13.2	1.62	4.08	2.78	24.6
Selenium	µg/L	5[A]	0.34	0.07	<0.25	<0.5	<0.25	<0.5	***<20***	<0.5	0.05	0.06	0.08	0.07	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05	<0.05	0.07	<0.5
Silicon	µg/L	n/v	7,820	7,240	15,100	16,200	19,800	17,200	170,000	17,800	11,300	11,300	7,720	7,680	8,290	10,300	7,940	12,100	17,100	8,080	9,490	6,320	41,500
Silver	µg/L	0.12[A]	<0.01	<0.01	<0.05	<0.1	<0.05	<0.1	**2.5[A]**	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.1
Sodium	mg/L	180[A]	13.9	14.1	3.88	3.2	**198[A]**	**183[A]**		76.0	13.2	9.87	14.6	13.7	13.7	4.25	17.1	16.7	16.6	4.29	4.10	74.2	90.2
Strontium	µg/L	n/v	305	233	1,040	920	1,550	1,410	2,900	1,800	548	377	567	563	558	196	585	703	813	126	171	185	466
Sulfur	µg/L	n/v	6,600	3,000	350,000	250,000	540,000	440,000	870,000	800,000	16,000	2,700	<500	<500	<500	7,900	6,100	9,700	8,300	7,400	7,300	4,000	7,000
Tellurium	µg/L	n/v	<0.1	<0.1	<0.5	<1	<0.5	<1	<10	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<1
Thallium	µg/L	40[A]	0.019	0.054	0.028	<0.05	<0.025	<0.05	1.4	0.1	<0.005	0.005	<0.005	<0.005	<0.005	0.05	<0.005	0.053	0.157	<0.005	0.036	0.043	0.31
Thorium	µg/L	n/v	<0.2	<0.2	-	<2	-	<2	-	4	<0.2	0.4	-	-	<0.2	2.3	<0.2	1.2	2	-	1.5	2	<2
Tin	µg/L	n/v	<0.1	<0.1	<0.5	<1	<0.5	<1	<10	<1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.5	<0.1	<0.1	<0.1	<1
Titanium	µg/L	n/v	3.8	4.7	51.8	107	<2.5	5	2,900	110	2.9	22.8	2.5	3.2	5.3	118	11.9	113	155	10.2	79.4	35.2	87
Tungsten	µg/L	n/v	0.2	<0.1	5.7	14	4.3	5	99	4	3.7	4.2	0.3	0.3	0.4	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<1
Uranium	µg/L	33[A]	1.37	1.44	2.45	2.4	9.46	10.3	12	5.7	0.56	0.53	0.31	0.32	0.25	0.47	0.42	1.09	1.79	0.03	0.26	2.87	8.3
Vanadium	µg/L	20[A]	1.12	0.76	6.36	12.1	0.73	0.7	**300[A]**	18.2	0.9	1.88	0.35	0.51	0.97	6.45	0.59	10.4	**20.8[A]**	0.61	3.81	15.7	**117[A]**
Zinc	µg/L	89[A]	1.1	4.4	14.2	34	16.8	17	**1,700[A]**	**179[A]**	1.3	6	3.4	3.3	4.9	8.7	6	21.5	38.9	3.6	6.7	19.8	**174[A]**
Zirconium	µg/L	n/v	2.5	0.9	1.2	2	4.3	4	49	4	7.7	9.3	0.5	0.6	0.5	1.3	0.5	1.9	1.9	1.6	1.3	3.9	9

See notes on last page

Table C-4-1
Summary of Groundwater Analytical Results - Groundwater
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Sample Location			MW07-18		MW08-18		MW09-18		MW15-BR-14		MW15-OB-14		MW18-BR-21			MW19-BR-21		MW19-OB-21		MW20-BR-21			MW20-OB-21	MW21-BR-21	
Sample Date			13-Jun-23	3-Aug-23	13-Jun-23	3-Aug-23	13-Jun-23	3-Aug-23	29-Jun-23	8-Aug-23	29-Jun-23	8-Aug-23	8-Jun-23	14-Aug-23	14-Aug-23	8-Jun-23	1-Aug-23	8-Jun-23	1-Aug-23	5-Jul-23	5-Jul-23	8-Aug-23	5-Jul-23	29-Jun-23	14-Aug-23
Sample ID			MW07-18	MW07-18	MW08-18	MW08-18	MW09-18	MW09-18	MW15-BR-14	MW15-BR-14	MW15-OB-14	MW15-OB-14	MW18-BR-21	MW18 BR-21	Duplicate 5	MW19-BR-21	MW19-BR-21	MW19-OB-21	MW19-OB-21	MW20-BR-21	DUPLICATE 2	MW20-BR-21	MW20-OB-21	MW21-BR-21	MW21-BR-21
Sampling Company			GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory			BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order			C3H4242	C3N6294	C3H4242	C3N6294	C3H4242	C3N6294	C3J6649	C3O2508	C3J6649	C3O2508	C3H0991	C3P0285	C3P0285	C3H0991	C3N6453	C3H0991	C3N6453	C3K1437	C3K1437	C3O2508	C3K1437	C3J6649	C3P0285
Laboratory Sample ID			WCO644	WPN591	WCO643	WPN592	WCO642	WPN593	WHF447	WQV536	WHF446	WQV537	WBX434	WSL995	WSL999	WBX436	WPO525	WBX435	WPO526	WIE416	WIE419	WQV538	WIE415	WHF451	WSL996
Sample Type	Units	MOE APV													Field Duplicate						Field Duplicate				
Field Parameters																									
pH, Field	S.U.	n/v	6.68	6.91	7.18	7.13	6.85	7.11	7.46	7.61	7.51	-	10.29	8.37	-	-	-	-	-	11.96	-	-	7.60	6.64	6.59
Temperature, Field	deg C	n/v	14.9	23.6	14.0	19.4	15.0	20.1	6.8	13.6	7.3	-	8.5	21.7	-	-	-	-	-	15.8	-	-	15.7	9.3	19.2
General Chemistry																									
Acidity	mg/L	n/v	99	84	11	22	51	28	6.8	<5.0	6.2	6.2	<5.0	<5.0	<5.0	15	9.6	17	9.0	<5.0	<5.0	<5.0	<5.0	68	110
Alkalinity, Bicarbonate (as CaCO3)	mg/L	n/v	640	590	220	220	400	360	180	180	210	230	74	130	110	230	240	320	300	1.3	1.8	<1.0	180	300	320
Alkalinity, Carbonate (as CaCO3)	mg/L	n/v	1.3	2.1	<1.0	<1.0	1.2	2.3	1.6	2.1	2.1	4.2	24	3.3	4.9	1.1	2.1	2.4	3.0	210	240	110	2.1	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	n/v	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	870	740	880	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	n/v	640	590	220	220	400	360	180	180	210	230	99	130	120	230	240	320	300	1,100	990	990	190	300	320
Ammonia (as N)	mg/L	n/v	0.32	0.19	1.9	2.5	0.44	1.3	0.16 QA	0.12	<0.050	<0.050	<0.050	<0.050	<0.050	0.90	0.91	0.20	0.24	1.8	1.8	1.8	<0.050	0.36	0.38
Chloride	mg/L	180[A]	13	12	14	15	1.6	1.8	1.5	<1.0	1.7	<1.0	2.3	<1.0	1.1	96	120	55	96	2.6	3.4	2.8	<1.0	33	44
Cyanide (Free)	mg/L	n/v	0.0052 ICB	<0.002 ICB	<0.002 ICB	<0.002 ICB	0.0027 ICB	<0.002 ICB	0.0028 ICB	0.003 ICB	<0.002 ICB	0.0023 ICB	<0.002 ICB	0.0023 ICB	<0.002 ICB	<0.002 ICB	<0.002 ICB	<0.002 ICB	0.0026 ICB	0.0021 ICB	<0.002 ICB	<0.002 ICB	<0.002 ICB	0.0031 ICB	0.0021 ICB
Cyanide (Strong Acid Dissociable)	mg/L	n/v	0.0364	0.0367	0.00996	0.0241	0.0303	0.0519	<0.00050 CYN	<0.00050 CYN	<0.00050	<0.00050 CYN	<0.00050	<0.00050 CYN	<0.00050	0.00102	0.00120	0.0104	0.00709	<0.00050 CYN	<0.00050	<0.00050	<0.00050	0.00058 CYN	<0.00050 CYN
Dissolved Organic Carbon (DOC)	mg/L	n/v	-	-	-	-	-	-	-	-	3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Lab	µS/cm	n/v	2,060	2,280	3,010	2,870	3,150	2,770	360	357	418	427	258	285	268	927	920	911	951	4,690	4,300	4,300	415	756	813
Fluoride	mg/L	n/v	0.14	0.15	0.65	0.63	0.31	0.34	0.16	0.15	<0.10	<0.10	0.28	0.13	0.13	0.26	0.22	0.25	0.13	0.21	0.25	0.24	0.11	<0.10	<0.10
Hardness (as CaCO3)	mg/L	n/v	1,300	1,400	970	980	1,700	1,400	190	180	240	230	82	96	100	420	450	120	240	760	770	780	220	380	450
Nitrate (as N)	mg/L	n/v	<0.10	<0.10	<0.10	<0.10	<0.10	0.26	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	1.36	<0.10	4.18
Nitrate + Nitrite (as N)	mg/L	n/v	<0.10	<0.10	<0.10	<0.10	<0.10	0.29	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	1.36	<0.10	4.23
Nitrite (as N)	mg/L	n/v	<0.010	<0.010	<0.010	<0.010	<0.010	0.037	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.046
pH, lab	S.U.	n/v	7.32	7.57	7.37	7.61	7.51	7.83	8.00	8.09	8.03	8.30	9.53	8.45	8.65	7.70	7.98	7.91	8.02	12.2	12.2	12.2	8.09	7.37	7.21
Phosphorus, Total	mg/L	n/v	3.7	1.2	0.70	2.0	0.21	0.44	0.0032	0.0031	0.032	0.51	0.15	0.083	0.082	0.24	0.18	0.46	0.22 DB	0.0077	0.0053	0.026	0.047	0.0083	0.022
Sulfate	mg/L	n/v	530	930	1,300	1,500	1,400	1,400	10	12	6.9	9.1	23	17	19	19	30	50	58	4.5	3.2	4.7	26	45	22
Total Dissolved Solids	mg/L	n/v	1,640	1,980	2,110	2,320	2,760	2,240	200	215	210	240	200	190	185	640	590	485	550	1,040	1,080	1,080	240	445	625
Total Kjeldahl Nitrogen	mg/L	n/v	0.74	0.82	1.9	2.8	0.99	3.5	0.15 QA	0.16	0.10	0.19	0.26	0.24	0.26	0.93	1.1	0.33	0.36	2.2	2.1	2.2	<0.10	0.75	0.94
Total Suspended Solids	mg/L	n/v	4,000	4,800	520	2,300	61	71	4	7	200	1,000	390	450	520	120	120	660	540	20	18	190	180	53	46
Turbidity, Lab	NTU	n/v	36	5.2	47	10	13	2.6	0.8	0.8	0.5	91	30	17	22	31	5.0	17	4.6	0.3	0.3	28	3.5	0.7	80
Metals, Dissolved																									
Aluminum	µg/L	n/v	260	2.5	<2.5	3.7	2.6	3.7	3.7	4.1	28.6	2.2	15.5	8.2	5.3	8.3	3.6	5.5	7.6	224	222	243	202	60.5	67.7
Antimony	µg/L	1,600[A]	0.8	0.8	<0.5	0.6	<0.5	0.6	<0.1	<0.1	<0.1	<0.1	1.2	0.7	0.6	<0.1	<0.1	0.1	<0.1	<0.5	<0.5	0.4	<0.1	0.2	0.5
Arsenic	µg/L	150[A]	**1,620[A]**	**1,330[A]**	**7,940[A]**	**8,560[A]**	**1,150[A]**	**320[A]**	0.5	1.4	1.1	1.6	71.2	52.2	53.9	37.1	81.6	**626[A]**	**405[A]**	1	1	2.6	0.8	22.6	11.9
Barium	µg/L	2,300[A]	142	135	14	16	46	44	8	10.3	26.8	25.3	27.3	36.2	37.4	142	141	10.2	16.8	722	753	685	14.2	14.4	17
Beryllium	µg/L	5.3[A]	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.25	<0.05	<0.05	<0.05	<0.25
Bismuth	µg/L	n/v	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.1	<0.1	<0.5
Boron	µg/L	3,550[A]	13	16	82	102	55	39	10	10	6	6	15	13	12	33	32	21	22	<5	<5	3	7	4	<5
Cadmium	µg/L	0.21[A]	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.05	<0.05	<0.01	<0.01	0.05	<0.05
Calcium	mg/L	n/v	385	415	259	249	298	271	57.6	55.1	73.1	68.8	24.9	30.3	32.2	106	113	32.8	66.2	304	307	312	61.9	117	136
Cesium	µg/L	n/v	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.11	0.09	<0.02	<0.02	0.04	0.04	0.04	1.11	1.18	<0.02	<0.02	0.2	0.2	0.16	0.03	0.07	0.1
Chromium	µg/L	64[A]	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<2.5	<0.5	1.7	0.7	<2.5
Cobalt	µg/L	5.2[A]	**8.33[A]**	**7.37[A]**	2.76	2.86	3.89	1.24	0.11	0.15	0.27	0.36	0.12	0.15	0.15	1.22	1.48	2.2	2.22	<0.25	<0.25	0.17	0.23	**261[A]**	**350[A]**
Copper	µg/L	6.9[A]	1	<0.5	<0.5	4	0.8	1.7	0.1	0.4	0.6	0.6	1.3	0.9	0.6	0.2	<0.1	5.8	3.5	2.6	3.9	2.7	1.1	4.2	2.7
Iron	µg/L	n/v	18,300	12,600	17,800	15,000	8,550	2,280	245	262	49	32	14	26	22	5,980	4,980	192	239	<25	<25	<5	321	5,740	10,800
Lead	µg/L	2[A]	0.52	<0.25	<0.25	<0.25	<0.25	<0.25	<0.05	<0.05	<0.05	<0.05	0.68	0.44	0.4	<0.05	<0.05	<0.05	<0.05	0.89	0.9	0.85	0.26	0.27	<0.25
Lithium	µg/L	n/v	11.4	11.8	103	98.6	136	128	1.7	1.7	1.5	1.5	6.1	8.6	8.2	8.4	8.1	1.9	2.1	19.4	21.1	20.5	1.7	<0.5	<2.5
Magnesium	mg/L	n/v	86.2	92.6	78.7	85.6	227	174	11.3	11.4	13.8	13.9	4.77	4.79	5.23	38.5	40.0	9.49	18.3	<0.025	<0.025	0.020	15.1	20.6	25.6
Manganese	µg/L	n/v	1,410	1,250	620	620	693	291	60	64	15.8	17.6	22.3	55.1	69.9	552	399	361	749	<1	<1	<0.2	12.5	9,990	14,900
Mercury	µg/L	0.77[A]	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	***<10,000***	***<10,000***	<0.01	***<10,000***	0.05	**20,000[A]**	<0.01	<0.01	***<10,000***	-	<0.01	***<10,000***
Molybdenum	µg/L	730[A]	0.29	0.47	7.66	8.8	3.89	7.53	0.63	0.69	0.51	0.68	3.56	4.2	4.16	2.5	2.24	2.98	1.7	33	32.7	35.8	1.21	1.89	1.51
Nickel	µg/L	39[A]	6.1	7.1	2.1	4.5	10.4	5.1	<0.1	0.1	0.4	1.3	0.5	0.6	0.5	1.8	2.6	2.5	1.4	6.8	6.6	7.3	0.7	36.4	**54.8[A]**
Phosphorus	µg/L	n/v	34	48	<25	65	<25	218	<5	<5	9	7	<5	<5	<5	7	14	8	9	<25	35	6	24	10	<25
Potassium	mg/L	n/v	9.8	11.6	29.0	33.5	30.8	28.3	1.69	1.60	1.69	1.60	7.16	6.63	6.35	5.34	5.27	5.70	6.43	24.7	24.7	23.9	1.76	0.51	0.5
Rubidium	µg/L	n/v	7.2	7.8	8.9	10.2	10	10.3	2.85	3.02	2.53	2.34	2.29	2.39	2.26	3.98	4.12	0.12	0.14	48.2	47.9	48.3	1.31	1.29	1.5
Selenium	µg/L	5[A]	<1	<1	<1	<1	<1	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	0.2	1.5	<0.2	<1
Silicon	µg/L	n/v	12,600	11,600	3,890	4,530	8,180	9,300	6,890	6,950	4,700	4,630	7,570	7,560	7,540	7,220	8,220	5,090	5,010	494	513	607	5,140	5,490	6,680
Silver	µg/L	0.12[A]	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.01	<0.01	0.03	<0.05
Sodium	mg/L	180[A]	22.2	23.0	**276[A]**	**273[A]**	**188[A]**	**194[A]**	3.34	3.10	1.84	1.80	30.7	21.2	20.1	15.0	14.9	163	122	134	128	133	7.90	16.7	15.4
Strontium	µg/L	n/v	894	1,030	1,850	1,870	2,540	1,930	155	162	58.4	65.3	526	978	952	1,080	1,090	146	292	2,180	2,260	2,160	69.2	142	181
Sulfur	µg/L	n/v	220,000	270,000	480,000	450,000	560,000	490,000	4,000	4,000	2,700	3,300	6,900	5,800	5,600	10,000	11,000	14,000	19,000	1,900	1,900	1,800	10,000	16,000	5,300
Tellurium	µg/L	n/v	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.1	<0.1	<0.5
Thallium	µg/L	40[A]	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.005	<0.005	0.007	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.015	0.012	<0.025	<0.025	0.021	0.013	0.009	<0.025
Thorium	µg/L	n/v	<1	<1	<1	<1	<1	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<1	<1	<0.2	<0.2	<0.2	<1
Tin	µg/L	n/v	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	0.4	0.1	<0.1	<0.5
Titanium	µg/L	n/v	22.8	<2.5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	2.2	<0.5	0.6	0.7	0.6	0.5	<0.5	<0.5	0.7	<2.5	<2.5	<0.5	11.5	1.1	<2.5
Tungsten	µg/L	n/v	<0.5	<0.5	<0.5	0.7	0.6	0.5	0.5	0.5	0.3	0.4	5.9	4.7	4.3	5.8	5.9	<0.1	<0.1	9.7	9.8	9.6	0.5	2.6	1.3
Uranium	µg/L	33[A]	0.81	1.2	1.9	2.4	11.5	6.81	0.23	0.23	0.57	0.68	1.11	18	16.3	1.02	1.44	0.18	0.21	<0.05	<0.05	<0.01	0.45	1.49	1.59
Vanadium	µg/L	20[A]	1.46	<0.25	<0.25	<0.25	0.33	2.08	0.06	0.06	0.41	0.29	4.26	2.26	2.09	0.06	0.06	0.53	0.34	0.55	0.53	0.64	0.73	0.84	1.31
Zinc	µg/L	89[A]	3.9	6	<2.5	2.8	3	2.8	<0.5	1.1	2.3	2	**483[A]**	**236[A]**	**289[A]**	4.5	1	1	1.1	**1,030[A]**	**1,090[A]**	**835[A]**	**201[A]**	35.8	64.1
Zirconium	µg/L	n/v	0.6	<0.5	<0.5	<0.5	0.6	<0.5	0.2	0.2	<0.1	<0.1	2.5	3	3.3	0.1	0.1	2	1.2	<0.5	<0.5	<0.1	0.1	2	1.9

See notes on last page

Table C-4-1
Summary of Groundwater Analytical Results - Groundwater
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Sample Location			MW07-18		MW08-18		MW09-18		MW15-BR-14		MW15-OB-14		MW18-BR-21			MW19-BR-21		MW19-OB-21		MW20-BR-21			MW20-OB-21	MW21-BR-21	
Sample Date			13-Jun-23	3-Aug-23	13-Jun-23	3-Aug-23	13-Jun-23	3-Aug-23	29-Jun-23	8-Aug-23	29-Jun-23	8-Aug-23	8-Jun-23	14-Aug-23	14-Aug-23	8-Jun-23	1-Aug-23	8-Jun-23	1-Aug-23	5-Jul-23	5-Jul-23	8-Aug-23	5-Jul-23	29-Jun-23	14-Aug-23
Sample ID			MW07-18	MW07-18	MW08-18	MW08-18	MW09-18	MW09-18	MW15-BR-14	MW15-BR-14	MW15-OB-14	MW15-OB-14	MW18-BR-21	MW18 BR-21	Duplicate 5	MW19-BR-21	MW19-BR-21	MW19-OB-21	MW19-OB-21	MW20-BR-21	DUPLICATE 2	MW20-BR-21	MW20-OB-21	MW21-BR-21	MW21-BR-21
Sampling Company			GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory			BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order			C3H4242	C3N6294	C3H4242	C3N6294	C3H4242	C3N6294	C3J6649	C3O2508	C3J6649	C3O2508	C3H0991	C3P0285	C3P0285	C3H0991	C3N6453	C3H0991	C3N6453	C3K1437	C3K1437	C3O2508	C3K1437	C3J6649	C3P0285
Laboratory Sample ID			WCO644	WPN591	WCO643	WPN592	WCO642	WPN593	WHF447	WQV536	WHF446	WQV537	WBX434	WSL995	WSL999	WBX436	WPO525	WBX435	WPO526	WIE416	WIE419	WQV538	WIE415	WHF451	WSL996
Sample Type	Units	MOE APV													Field Duplicate						Field Duplicate				
Metals, Total																									
Aluminum	µg/L	n/v	6,330	6,640	1,470	7,260	119	77	20.4	28.4	172	3,920	2,750	2,140	2,500	3,480	1,310	1,750	712	301	258	541	183	119	115
Antimony	µg/L	1,600[A]	1.2	0.6	0.9	<1	<0.5	<1	0.1	0.1	<0.1	<0.5	1.6	1.3	1.3	0.3	0.2	0.2	<0.5	0.6	0.5	1	<0.1	1.4	0.9
Arsenic	µg/L	150[A]	**1,970[A]**	**2,150[A]**	**6,160[A]**	**9,820[A]**	**910[A]**	**346[A]**	0.6	1.7	1.3	2.9	106	81.2	87	52	85.5	**770[A]**	**514[A]**	1.2	1.1	3.8	0.4	13.2	15
Barium	µg/L	2,300[A]	159	126	22	55	45	42	8.9	11	25.5	73	61.3	51.8	56.8	166	166	25.5	24	756	740	718	11.6	13.5	17.1
Beryllium	µg/L	5.3[A]	0.44	0.33	<0.25	<0.5	<0.25	<0.5	<0.05	<0.05	<0.05	<0.25	0.09	0.07	0.08	0.09	<0.05	0.11	<0.25	<0.25	<0.25	<0.25	<0.05	0.05	<0.05
Bismuth	µg/L	n/v	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1
Boron	µg/L	3,550[A]	19	28	67	130	58	40	9	10	6	14	15	16	16	32	32	24	23	<5	<5	<5	6	4	5
Cadmium	µg/L	0.21[A]	0.164	0.137	0.025	0.15	<0.025	<0.05	<0.005	<0.005	0.008	0.174	**0.503[A]**	**0.278[A]**	**0.346[A]**	0.041	0.018	0.166	0.057	<0.025	<0.025	0.029	0.006	0.199	0.12
Calcium	mg/L	n/v	549	650	234	376	308	250	56.5	54.1	77.7	260	48.0	42.1	44.4	112	109	99.4	92.4	329	305	316	64.0	113	143
Cesium	µg/L	n/v	1.6	1	0.4	1.4	<0.1	<0.2	0.11	0.11	0.03	0.4	2.35	1.3	1.56	1.26	1.32	0.3	0.1	0.2	0.2	0.2	0.02	0.07	0.14
Chromium	µg/L	64[A]	48.3	33.6	9.9	44	<2.5	<5	<0.5	<0.5	0.7	11.1	6.5	5.3	6.2	12.1	4.9	11.2	4.9	<2.5	<2.5	<2.5	1.8	1.3	1.6
Cobalt	µg/L	5.2[A]	**17.3[A]**	**18.4[A]**	4.61	**15.3[A]**	3.89	1.6	0.14	0.12	0.34	3.45	**24[A]**	**12.2[A]**	**14.7[A]**	2.58	1.88	**9.66[A]**	5.11	<0.25	<0.25	0.4	0.18	**158[A]**	**369[A]**
Copper	µg/L	6.9[A]	**49.5[A]**	**29.1[A]**	4.2	**23[A]**	<0.5	4	0.2	0.3	1.3	**27.4[A]**	**41.3[A]**	**27.8[A]**	**32.1[A]**	5.5	2.5	**210[A]**	**70[A]**	2.7	2.8	3.5	0.7	**19.7[A]**	**12.4[A]**
Iron	µg/L	n/v	62,600	36,900	21,200	53,400	8,570	1,850	268	379	273	5,540	6,450	4,700	5,530	13,800	9,880	6,230	2,590	157	82	499	335	21,600	14,200
Lead	µg/L	2[A]	**16.2[A]**	**10.1[A]**	**5.59[A]**	**27.7[A]**	0.52	<0.5	<0.05	0.08	0.2	**4.24[A]**	**60.7[A]**	**30.3[A]**	**36.6[A]**	**3.7[A]**	1.33	**6.19[A]**	**2.4[A]**	1.31	1.26	1.85	0.26	0.7	1.2
Lithium	µg/L	n/v	17.1	21.1	88.6	120	137	146	1.6	1.9	1.8	6.7	7.9	12	12.2	12	9.8	4.8	3.1	21.2	21.7	20.5	1.6	0.5	0.8
Magnesium	mg/L	n/v	131	148	72.8	124	232	165	11.5	11.7	14.4	54.8	7.59	5.34	5.85	40.6	39.4	27.7	25.1	0.435	0.131	2.37	15.1	18.2	26.1
Manganese	µg/L	n/v	3,270	2,120	786	1,830	700	266	60.4	66.8	16.4	223	191	139	159	716	495	544	831	4	2	19	10.1	6,750	13,500
Mercury	µg/L	0.77[A]	<0.1	**20,000[A]**	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	**10,000[A]**	<0.01	**10,000[A]**	**10,000[A]**	<0.01	***<10,000***	0.48	**70,000[A]**	<0.01	<0.01	***<10,000***	<0.01	0.02	***<10,000***
Molybdenum	µg/L	730[A]	<0.25	0.29	5.88	5.5	3.73	7.6	0.63	0.62	0.5	<0.25	2.47	4.62	4.36	1.99	2.41	1.37	1.24	32.2	32.5	32.4	0.62	0.76	1.14
Nickel	µg/L	39[A]	**44.6[A]**	37.1	14.3	**62[A]**	10	6	0.1	0.1	0.9	11.3	32.3	17.8	21.1	8.4	4.6	12.9	5.4	7	6.5	7.9	0.5	33.5	**56.5[A]**
Phosphorus	µg/L	n/v	1,440	819	243	1,040	35	650	<5	6	31	572	111	86	96	253	93	353	142	45	38	51	36	13	26
Potassium	mg/L	n/v	14.0	16.4	25.1	34.5	32.0	28.0	1.61	1.63	1.64	2.6	6.67	7.72	7.63	5.14	5.31	5.87	6.4	24.2	23.6	23.8	1.48	0.46	0.62
Rubidium	µg/L	n/v	27.7	22.9	10.8	25.5	10	11.9	2.98	3.06	2.5	11	3.02	2.97	3.08	4.43	4.21	2.54	1.1	47.3	46.3	48.1	1.05	1.07	1.79
Selenium	µg/L	5[A]	<0.25	<0.25	<0.25	<0.5	<0.25	<0.5	<0.05	<0.05	<0.05	<0.25	0.07	0.08	0.09	<0.05	0.09	0.1	<0.25	0.26	<0.25	<0.25	1.51	0.17	0.34
Silicon	µg/L	n/v	19,400	20,100	5,350	12,900	8,760	9,510	6,800	7,030	4,850	12,500	12,300	12,700	13,100	10,600	9,000	7,600	6,120	891	801	2,160	5,040	6,100	7,060
Silver	µg/L	0.12[A]	<0.05	<0.05	<0.05	<0.1	<0.05	<0.1	<0.01	<0.01	<0.01	<0.05	0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0.05	<0.05	<0.05	<0.05	<0.01	0.06	0.05
Sodium	mg/L	180[A]	23.5	26.4	**244[A]**	**287[A]**	**198[A]**	**183[A]**	3.13	3.17	1.80	2.18	28.3	30.5	29.1	14.3	14.0	158	117	126	124	134	6.19	15.1	16.8
Strontium	µg/L	n/v	1,390	1,350	1,590	2,360	2,470	1,900	162	176	60.9	172	767	1,020	1,040	1,120	1,090	182	307	2,150	2,170	2,240	62.7	139	188
Sulfur	µg/L	n/v	250,000	300,000	390,000	510,000	570,000	460,000	4,100	4,300	2,600	3,700	7,600	7,200	7,000	11,000	11,000	14,000	20,000	2,000	1,900	1,900	10,000	17,000	5,300
Tellurium	µg/L	n/v	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1
Thallium	µg/L	40[A]	0.15	0.1	0.026	0.13	<0.025	0.05	<0.005	<0.005	0.009	0.083	0.065	0.047	0.052	0.017	0.009	0.193	0.072	<0.025	<0.025	<0.025	0.01	0.021	0.021
Thorium	µg/L	n/v	2	4	<1	4	<1	<2	<0.2	<0.2	<0.2	<1	0.5	0.3	0.4	0.7	-	1.7	-	<1	<1	<1	<0.2	<0.2	0.2
Tin	µg/L	n/v	<0.5	<0.5	<0.5	<1	<0.5	<1	<0.1	<0.1	<0.1	<0.5	0.6	0.6	0.7	0.9	0.8	0.1	<0.5	<0.5	0.6	0.9	<0.1	0.2	<0.1
Titanium	µg/L	n/v	207	310	67.2	238	3.8	<5	1.6	2.2	11.1	169	10.5	8.7	10	13	7	92.9	41.9	5.3	3	13.7	13.4	1.9	3.2
Tungsten	µg/L	n/v	<0.5	0.7	1.1	1	0.5	<1	0.5	0.5	0.1	<0.5	6.8	11	8.1	5.8	6.7	<0.1	<0.5	8.3	8.9	7.9	0.3	0.6	0.7
Uranium	µg/L	33[A]	1.35	2.13	1.86	3.6	11	7.1	0.25	0.25	0.62	1.11	1.8	27.5	26.4	1.41	1.4	0.37	0.29	<0.05	<0.05	0.08	0.42	2.95	1.91
Vanadium	µg/L	20[A]	**36.5[A]**	**24.8[A]**	5.39	**24.6[A]**	0.69	4.1	0.18	0.2	0.75	12.2	10.1	7.45	8.01	5.34	2.03	7.95	2.95	0.72	0.67	1.13	0.77	0.74	1.55
Zinc	µg/L	89[A]	56.9	44	19.8	79	3.6	<5	0.9	1.6	7	75.2	**7,800[A]**	**6,360[A]**	**7,090[A]**	**488[A]**	**206[A]**	20.4	8.9	**3,280[A]**	**2,780[A]**	**5,820[A]**	**108[A]**	**119[A]**	84.9
Zirconium	µg/L	n/v	3.4	5	1	2	0.8	<1	0.2	0.3	0.2	1.7	7.4	5.1	5.9	1.5	0.8	5.7	2.8	<0.5	<0.5	<0.5	0.1	1.8	2.4

See notes on last page

Table C-4-1
Summary of Groundwater Analytical Results - Groundwater
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Sample Location			MW22-OB-21			MW23-OB-21		MW24-BR-21			MW24-OB-21		MW25-BR-21		MW25-OB-21		MWS-14-02 (BR)		MWS-14-02 (OB)		MWS-14-03 OB1	
Sample Date			14-Jun-23	14-Jun-23	10-Aug-23	29-Jun-23	10-Aug-23	13-Jun-23	2-Aug-23	2-Aug-23	13-Jun-23	2-Aug-23	29-Jun-23	2-Aug-23	29-Jun-23	2-Aug-23	30-Jun-23	14-Aug-23	30-Jun-23	14-Aug-23	5-Jul-23	10-Aug-23
Sample ID			MW22-OB-21	GW Duplicate 1	MW22-OB-21	MW23-OB-21	MW23-OB-21	MW24-BR-21	MW24-BR-21	DUPLICATE 3	MW24-OB-21	MW24-OB-21	MW25-BR-21	MW25-BR-21	MW25-OB-21	MW25-OB-21	MWS-14-02-BR	MWS14-02 BR	MWS-14-02-OB	MWS14-02 OB	MWS-14-03-OB1	MWS-14-03-OB1
Sampling Company			GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory			BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order			C3H7099	C3H7099	C3O7544	C3J6649	C3O7544	C3H4242	C3N6265	C3N6265	C3H4242	C3N6265	C3J6649	C3N6265	C3J6649	C3N6265	C3J8805	C3P0302	C3J8805	C3P0302	C3K1437	C3O7544
Laboratory Sample ID			WDD736	WDD737	WRX371	WHF450	WRX370	WCO646	WPN316	WPN321	WCO645	WPN317	WHF449	WPN319	WHF448	WPN318	WHR237	WSM125	WHR238	WSM126	WIE411	WRX367
Sample Type	Units	MOE APV		Field Duplicate						Field Duplicate												
Field Parameters																						
pH, Field	S.U.	n/v	7.84	-	7.52	7.4	7.41	7.96	-	-	7.88	-	7.99	-	7.64	-	-	7.01	-	7.28	8.05	8.11
Temperature, Field	deg C	n/v	5.9	-	13.5	7.8	14.5	17.6	-	-	12.2	-	5.5	-	6.4	-	-	13.1	-	11.7	6.9	9.5
General Chemistry																						
Acidity	mg/L	n/v	<5.0	<5.0	6.4	12	8.2	<5.0	<5.0	<5.0	5.4	<5.0	6.4	<5.0	6.6	6.8	6.0	10	<5.0	11	<5.0	<5.0
Alkalinity, Bicarbonate (as CaCO3)	mg/L	n/v	180	180	280	250	260	160	180	180	170	170	230	220	220	230	280	290	260	290	160	170
Alkalinity, Carbonate (as CaCO3)	mg/L	n/v	1.6	1.7	2.3	1.7	1.5	1.6	3.1	2.9	1.6	1.7	3.0	3.1	2.3	2.3	2.2	1.7	2.3	1.7	11	1.9
Alkalinity, Hydroxide (as CaCO3)	mg/L	n/v	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	n/v	180	180	290	250	260	170	190	190	170	170	230	230	220	230	280	290	260	300	170	170
Ammonia (as N)	mg/L	n/v	0.22	0.24	0.23	0.21	0.14	0.54	0.51	0.56	0.25	0.13	0.21 QA	0.23	0.053	0.052	0.23	0.22	<0.050	0.082	0.23	0.19
Chloride	mg/L	180[A]	2.0	1.7	<1.0	3.0	1.2	2.7	2.3	2.5	<1.0	<1.0	1.4	<1.0	1.1	<1.0	<1.0	<1.0	3.9	<1.0	<1.0	2.9
Cyanide (Free)	mg/L	n/v	<0.002 ICB	<0.002 ICB	0.0028 ICB	<0.002 ICB	0.0023 ICB	0.0025 ICB	<0.002 ICB	<0.002 ICB	0.0022 ICB	<0.002 ICB	0.0021 ICB	<0.002 ICB	<0.002 ICB	<0.002 ICB	0.0026 ICB	0.003 ICB	0.0028 ICB	0.0026 ICB	<0.002 ICB	0.0037 ICB
Cyanide (Strong Acid Dissociable)	mg/L	n/v	<0.00050	<0.00050	<0.00050 CYN	<0.00050	<0.00050 CYN	<0.00050 CYN	<0.00050	<0.00050	<0.00050 CYN	<0.00050	<0.00050 CYN	<0.00050	<0.00050	<0.00050	<0.00050 CYN	<0.00050 CYN	<0.00050 CYN	<0.00050 CYN	<0.00050	<0.00050 CYN
Dissolved Organic Carbon (DOC)	mg/L	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Lab	µS/cm	n/v	348	347	518	480	490	416	438	438	325	313	426	409	411	411	531	537	491	541	305	313
Fluoride	mg/L	n/v	0.80	0.80	0.54	0.12	0.12	0.49	0.50	0.50	0.37	0.33	0.23	0.19	0.14	0.14	0.31	0.29	0.33	0.31	0.59	0.59
Hardness (as CaCO3)	mg/L	n/v	190	190	290	260	260	110	130	140	160	170	210	210	230	230	280	280	290	280	110	110
Nitrate (as N)	mg/L	n/v	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.11	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	n/v	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.11	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	n/v	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
pH, lab	S.U.	n/v	7.98	8.00	7.94	7.88	7.78	8.02	8.25	8.23	8.01	8.03	8.16	8.16	8.06	8.04	7.93	7.80	7.97	7.78	8.84	8.07
Phosphorus, Total	mg/L	n/v	1.1	1.7	0.41	0.43 DB	0.068	0.011	0.028	0.016	0.87	0.086	0.014	0.0024	0.097	0.60	0.025	0.079	0.24	0.81	0.056	0.041
Sulfate	mg/L	n/v	<1.0	<1.0	<1.0	5.1	5.8	37	41	42	4.1	2.5	<1.0	<1.0	2.4	3.0	3.8	5.9	8.8	8.0	<1.0	<1.0
Total Dissolved Solids	mg/L	n/v	235	255	305	245	285	205	240	270	145	195	240	250	215	240	305	300	290	310	175	165
Total Kjeldahl Nitrogen	mg/L	n/v	0.66	0.72	0.38	0.34	0.32	0.81	0.74	0.58	0.32	0.26	0.19 QA	0.39	<0.10	0.17	0.31	0.31	0.14	0.17	0.44	0.28
Total Suspended Solids	mg/L	n/v	190	3,100	4,100	170	55	25	62	35	740	97	24	20	850	1,300	7	130	1,500	2,000	44	52
Turbidity, Lab	NTU	n/v	6.9	2.5	8.4	1.9	130	1.2	2.8	3.4	8.8	7.0	3.2	2.0	2.3	12	12	9.4	5.8	45	2.9	440
Metals, Dissolved																						
Aluminum	µg/L	n/v	2.8	3.1	4.5	3	3.5	42.1	1.8	1.7	2.8	1.2	1.2	12.7	1	0.8	2.1	4	0.6	0.8	16.4	4.5
Antimony	µg/L	1,600[A]	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
Arsenic	µg/L	150[A]	1.1	1	1.4	1.6	2.2	0.9	1	0.9	0.3	0.5	0.3	0.6	1.2	1	2	3	0.4	0.5	0.3	0.4
Barium	µg/L	2,300[A]	27.7	28.1	49.2	36.1	31.7	11.4	19.5	18.1	20.1	20.1	34.1	24	35.3	29.4	30.6	30.1	33.2	33.6	23.6	24.5
Beryllium	µg/L	5.3[A]	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	n/v	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	3,550[A]	28	27	25	11	10	45	53	53	13	13	28	29	11	11	19	18	11	11	29	27
Cadmium	µg/L	0.21[A]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	n/v	43.0	44.2	68.2	79.3	78.3	24.8	34.0	34.7	45.8	49.5	56.7	53.3	68.5	67.8	77.3	76.7	82.4	78.3	24.1	23.6
Cesium	µg/L	n/v	<0.02	<0.02	<0.02	0.05	0.04	<0.02	0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	0.03	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	64[A]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	µg/L	5.2[A]	0.29	0.3	0.17	0.5	0.56	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	0.13	0.14	0.07	<0.05	<0.05	0.08	0.18	0.16
Copper	µg/L	6.9[A]	0.5	0.1	0.4	0.4	0.6	1.6	0.5	<0.1	2.9	<0.1	<0.1	0.4	0.7	0.4	<0.1	0.2	<0.1	0.5	0.2	0.4
Iron	µg/L	n/v	131	173	2,370	2,180	946	2,840	753	715	1,430	1,260	3,960	1,200	961	1,080	1,550	2,130	486	418	445	312
Lead	µg/L	2[A]	<0.05	<0.05	<0.05	<0.05	<0.05	0.23	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	n/v	10.8	11	13.1	2.4	2.3	8.4	9.2	9.2	3.4	3.2	5.2	5.2	1.6	1.5	7.5	6.9	6.7	7.1	4.3	4.4
Magnesium	mg/L	n/v	20.1	20.5	28.6	15.2	16.3	11.5	12.0	12.4	12.0	12.3	17.4	18.8	14.8	15.0	19.9	20.4	20.2	19.3	12.7	13.5
Manganese	µg/L	n/v	79.9	81	59.7	403	427	242	237	238	58.2	53	385	327	110	127	139	189	41.7	51.5	31.7	53.3
Mercury	µg/L	0.77[A]	<0.01	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	***<10,000***	***<10,000***	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	<0.10
Molybdenum	µg/L	730[A]	20	19.7	10.7	1.03	1.54	10.6	38.3	36.4	0.41	0.59	0.3	0.61	1.11	1.07	1.29	1.07	1.15	1.28	28.9	29.4
Nickel	µg/L	39[A]	2	2	1.1	0.9	1.1	0.7	0.2	0.2	<0.1	0.2	<0.1	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.4
Phosphorus	µg/L	n/v	<5	<5	13	5	<5	<5	11	11	27	30	<5	<5	<5	<5	19	20	12	10	10	<5
Potassium	mg/L	n/v	5.11	5.13	5.09	0.97	0.86	5.39	4.33	4.38	1.37	1.61	3.36	3.46	1.58	1.72	2.09	2.26	2.20	2.20	1.84	2.13
Rubidium	µg/L	n/v	1.38	1.39	1.52	1.13	1.31	5.47	4.75	4.57	1.12	1.16	3.68	3.89	2.24	2.36	1.1	0.99	1.24	1.31	0.78	1.2
Selenium	µg/L	5[A]	<0.2	<0.2	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	n/v	5,660	5,710	8,730	5,030	6,100	665	2,910	2,770	6,700	7,480	3,560	3,070	5,760	6,330	7,730	7,120	6,970	6,430	2,260	2,290
Silver	µg/L	0.12[A]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	180[A]	9.32	9.39	7.52	8.79	10.1	38.7	48.7	49.7	4.44	4.93	9.70	10.6	3.88	4.64	7.18	5.59	4.40	4.96	27.7	30.6
Strontium	µg/L	n/v	176	179	326	183	171	128	190	186	152	157	489	498	57.3	62.1	164	164	124	126	160	155
Sulfur	µg/L	n/v	<500	<500	<500	1,900	2,500	12,000	15,000	14,000	1,900	1,300	<500	700	1,300	1,300	2,200	2,100	2,800	2,900	<500	<500
Tellurium	µg/L	n/v	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	40[A]	0.008	0.005	<0.005	<0.005	<0.005	0.025	<0.005	<0.005	<0.005	<0.005	0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	n/v	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	<0.2	<0.2
Tin	µg/L	n/v	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1
Titanium	µg/L	n/v	<0.5	0.5	0.8	<0.5	<0.5	1.7	<0.5	<0.5	0.6	<0.5	<0.5	0.7	<0.5	<0.5	0.6	0.7	<0.5	<0.5	0.8	<0.5
Tungsten	µg/L	n/v	0.3	0.3	0.3	1.2	1.6	17.6	113	110	0.2	0.2	3.2	2.4	<0.1	0.1	0.6	0.4	<0.1	<0.1	7.8	6.3
Uranium	µg/L	33[A]	0.23	0.24	0.2	0.45	0.64	0.58	3.24	2.87	0.03	0.04	0.04	0.12	0.19	0.18	0.34	0.17	0.45	0.74	0.05	0.07
Vanadium	µg/L	20[A]	0.19	0.18	0.07	0.15	0.2	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.34	0.51	<0.05	<0.05	<0.05	<0.05
Zinc	µg/L	89[A]	0.8	0.7	2.4	8.3	8.9	**270[A]**	5.6	4.7	**104[A]**	18.6	**117[A]**	**408[A]**	10.6	6.9	<0.5	1.6	<0.5	1.4	<0.5	1
Zirconium	µg/L	n/v	<0.1	<0.1	0.1	0.5	0.7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	0.6	<0.1	<0.1	<0.1	<0.1

See notes on last page

Table C-4-1
Summary of Groundwater Analytical Results - Groundwater
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Sample Location			MW22-OB-21			MW23-OB-21		MW24-BR-21			MW24-OB-21		MW25-BR-21		MW25-OB-21		MWS-14-02 (BR)		MWS-14-02 (OB)		MWS-14-03 OB1	
Sample Date			14-Jun-23	14-Jun-23	10-Aug-23	29-Jun-23	10-Aug-23	13-Jun-23	2-Aug-23	2-Aug-23	13-Jun-23	2-Aug-23	29-Jun-23	2-Aug-23	29-Jun-23	2-Aug-23	30-Jun-23	14-Aug-23	30-Jun-23	14-Aug-23	5-Jul-23	10-Aug-23
Sample ID			MW22-OB-21	GW Duplicate 1	MW22-OB-21	MW23-OB-21	MW23-OB-21	MW24-BR-21	MW24-BR-21	DUPLICATE 3	MW24-OB-21	MW24-OB-21	MW25-BR-21	MW25-BR-21	MW25-OB-21	MW25-OB-21	MWS-14-02-BR	MWS14-02 BR	MWS-14-02-OB	MWS14-02 OB	MWS-14-03-OB1	MWS-14-03-OB1
Sampling Company			GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory			BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order			C3H7099	C3H7099	C3O7544	C3J6649	C3O7544	C3H4242	C3N6265	C3N6265	C3H4242	C3N6265	C3J6649	C3N6265	C3J6649	C3N6265	C3J8805	C3P0302	C3J8805	C3P0302	C3K1437	C3O7544
Laboratory Sample ID			WDD736	WDD737	WRX371	WHF450	WRX370	WCO646	WPN316	WPN321	WCO645	WPN317	WHF449	WPN319	WHF448	WPN318	WHR237	WSM125	WHR238	WSM126	WIE411	WRX367
Sample Type	Units	MOE APV		Field Duplicate						Field Duplicate												
Metals, Total																						
Aluminum	µg/L	n/v	3,730	9,720	2,180	4,920	813	83.1	210	95.5	2,700	246	48.2	26.4	1,180	2,660	11	304	700	3,070	467	273
Antimony	µg/L	1,600[A]	<0.5	<0.5	<0.5	<0.1	<0.1	0.2	0.3	0.2	<0.5	0.1	0.1	0.3	<0.1	<0.5	<0.1	0.2	0.2	<0.1	<0.1	<0.1
Arsenic	µg/L	150[A]	6.3	4.4	2.6	5.6	3.3	1	1.3	1.3	2.6	0.9	0.6	0.8	2.6	2.9	4.1	8.5	1.5	1.7	0.4	0.4
Barium	µg/L	2,300[A]	88	119	71	86.9	40.8	15.2	19.2	20.2	56	25	44.4	23.8	43	58	28.9	40.1	44.2	62.1	30.2	27.8
Beryllium	µg/L	5.3[A]	0.33	0.41	<0.25	0.48	0.07	<0.05	<0.05	<0.05	<0.25	<0.05	<0.05	<0.05	0.08	<0.25	<0.05	<0.05	<0.05	0.16	<0.05	<0.05
Bismuth	µg/L	n/v	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	3,550[A]	53	51	32	11	9	46	49	54	23	14	27	30	11	18	19	21	13	21	28	27
Cadmium	µg/L	0.21[A]	0.191	0.177	0.053	0.088	0.02	0.009	0.017	0.008	0.137	0.017	0.008	<0.005	0.047	0.096	<0.005	0.012	0.022	0.078	0.009	0.005
Calcium	mg/L	n/v	490	421	193	117	82.0	31.7	33.2	36.4	399	56.7	58.4	52.7	139	216	77.7	84.1	115	246	28.3	28.7
Cesium	µg/L	n/v	0.2	0.6	0.3	0.32	0.11	<0.02	0.03	0.02	0.2	0.03	<0.02	<0.02	0.13	0.3	0.05	0.18	0.09	0.28	0.04	0.04
Chromium	µg/L	64[A]	16.7	25.5	9.1	16.4	3.3	<0.5	1.1	<0.5	9.9	1.1	<0.5	<0.5	4.1	11.3	<0.5	1.7	2.8	10.4	1	0.9
Cobalt	µg/L	5.2[A]	**8.7[A]**	**8.61[A]**	2.86	3.76	1.39	0.18	0.33	0.12	4.93	0.28	<0.05	0.09	1.53	3.7	0.2	0.38	0.81	3.28	0.37	0.39
Copper	µg/L	6.9[A]	**19.2[A]**	**22.4[A]**	4.9	**12.8[A]**	3	1	2.6	1.1	**13.4[A]**	1.5	0.2	0.6	4.5	**10.1[A]**	0.1	2.1	2.6	**10.1[A]**	1.4	1.2
Iron	µg/L	n/v	9,280	12,600	6,850	12,700	3,470	7,410	10,400	4,850	10,200	4,550	6,180	1,720	9,130	8,810	2,660	3,920	1,560	6,060	1,530	1,180
Lead	µg/L	2[A]	**6.84[A]**	**8.09[A]**	**2.66[A]**	**6[A]**	1.26	0.24	0.45	0.2	**5.19[A]**	0.5	0.16	0.13	1.75	**4.51[A]**	<0.05	0.67	1.06	**3.7[A]**	0.51	0.48
Lithium	µg/L	n/v	18.2	22	17.1	6.3	2.8	8.5	9.1	9.1	8.5	3.7	5.2	5.3	2.9	4.7	6	7.3	7.4	12.4	5.1	4.9
Magnesium	mg/L	n/v	145	115	63.4	24.7	18.3	12.0	12.4	11.7	49.6	14.4	17.2	17.2	32.7	54.3	20.6	21.7	30.9	68.3	13.8	14.9
Manganese	µg/L	n/v	808	708	293	555	479	306	311	266	346	78.6	481	319	246	335	228	171	99.6	328	61	53.9
Mercury	µg/L	0.77[A]	<0.1	<0.1	***<10,000***	0.01	***<10,000***	<0.01	***<10,000***	***<10,000***	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	**10,000[A]**	<0.01	***<10,000***	<0.01	**10,000[A]**	<0.01	<0.1
Molybdenum	µg/L	730[A]	6.95	11	6.2	0.24	0.72	13.7	13.9	31.5	<0.25	0.55	0.34	0.6	0.19	<0.25	1.67	4.24	1.5	0.78	13.9	16.4
Nickel	µg/L	39[A]	15.1	17.5	6.8	12.1	3.9	0.6	1.2	0.4	9.3	0.8	0.2	0.3	2.7	6.9	0.2	1.2	2.2	7.1	0.9	0.9
Phosphorus	µg/L	n/v	2,130	1,700	492	387	69	5	16	23	1,800	87	22	6	276	636	25	75	195	658	64	41
Potassium	mg/L	n/v	6.0	7.9	5.5	1.35	0.93	4.87	4.85	4.35	1.7	1.57	3.03	3.40	1.67	2.0	2.34	2.40	2.55	3.00	1.99	2.06
Rubidium	µg/L	n/v	6.5	15.6	5.9	4.05	1.83	4.97	5.36	4.59	3.8	1.57	3.4	3.85	3.97	6.7	1.05	1.57	3.17	7.27	1.47	1.34
Selenium	µg/L	5[A]	<0.25	<0.25	<0.25	0.06	0.19	1.09	0.53	0.23	<0.25	0.05	<0.05	<0.05	<0.05	<0.25	0.2	0.05	<0.05	<0.05	<0.05	<0.05
Silicon	µg/L	n/v	11,500	11,200	11,600	12,600	6,720	1,000	1,650	2,570	9,860	7,510	5,270	3,070	7,350	10,200	7,410	8,090	6,740	11,500	3,490	2,910
Silver	µg/L	0.12[A]	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	0.02	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Sodium	mg/L	180[A]	9.70	10.8	7.49	8.36	6.56	38.4	43.1	47.6	4.69	4.70	9.20	9.87	4.16	4.58	8.07	14.5	6.12	5.73	26.5	29.5
Strontium	µg/L	n/v	409	375	376	210	175	157	168	194	363	164	510	483	92.7	130	165	172	149	221	170	163
Sulfur	µg/L	n/v	1,800	800	<500	3,100	2,000	13,000	14,000	14,000	1,700	1,400	<500	800	1,200	1,600	2,000	2,100	3,700	3,200	<500	<500
Tellurium	µg/L	n/v	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	40[A]	0.161	0.198	0.064	0.109	0.029	0.028	0.023	0.012	0.077	0.009	0.01	0.009	0.043	0.077	<0.005	0.005	0.023	0.079	0.007	<0.005
Thorium	µg/L	n/v	<1	2	1	0.6	<0.2	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	0.8	1	-	<0.2	-	2.2	<0.2	0.2
Tin	µg/L	n/v	<0.5	0.9	<0.5	0.3	0.3	0.3	0.6	0.5	<0.5	0.2	0.3	0.3	0.2	<0.5	<0.1	0.1	0.2	0.1	0.1	0.1
Titanium	µg/L	n/v	49.8	416	119	54.6	20.2	3.5	11.3	5	53.6	16.1	2.3	1.3	62.5	149	1.3	18	48.2	162	18.6	16.9
Tungsten	µg/L	n/v	<0.5	<0.5	<0.5	1.1	1.5	34.8	25.9	96.5	<0.5	0.2	3.6	2.1	<0.1	<0.5	0.4	0.8	<0.1	<0.1	1.3	1.3
Uranium	µg/L	33[A]	1.49	1.5	0.63	1.24	0.74	0.61	0.95	2.61	0.78	0.07	0.11	0.14	0.42	0.63	0.19	0.31	1.69	1.67	0.19	0.17
Vanadium	µg/L	20[A]	13.7	**21.1[A]**	7	11.8	2.33	0.21	0.57	0.31	10.1	0.76	0.13	0.06	3.31	8.39	0.87	2.45	2.3	9.38	0.66	0.59
Zinc	µg/L	89[A]	**208[A]**	**188[A]**	**158[A]**	**2,740[A]**	**452[A]**	**641[A]**	**1,430[A]**	**1,280[A]**	**1,420[A]**	**702[A]**	**1,380[A]**	**591[A]**	**1,060[A]**	**814[A]**	0.8	11.8	8.6	17.1	2.1	2.9
Zirconium	µg/L	n/v	2.2	11.1	1.3	3	1.6	<0.1	0.1	<0.1	0.6	0.3	<0.1	<0.1	0.6	0.8	0.8	0.6	0.8	0.6	0.4	0.4

See notes on last page

Table C-4-1
Summary of Groundwater Analytical Results - Groundwater
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Sample Location			MWS-14-03 OB2		MWS-14-04		MWS-14-06			MWS-14-07 BR		MWS-14-07 OB			SEEP 10		Field Blank		Trip Blank	
Sample Date			5-Jul-23	10-Aug-23	30-Jun-23	15-Aug-23	6-Jul-23	6-Jul-23	10-Aug-23	5-Jul-23	3-Aug-23	5-Jul-23	3-Aug-23	3-Aug-23	19-Jun-23	13-Aug-23	14-Jun-23	14-Aug-23	5-Jun-23	15-Aug-23
Sample ID			MWS-14-03-OB2	MWS-14-03-OB2	MWS-14-04	MWS-14-04	MWS-14-06	Duplicate 6	MWS14-06	MWS-14-07-BR	MWS-14-07-BR	MWS-14-07-OB	MWS-14-07-OB	DUPLICATE 4	Seep 10	Seep 10	Field Blank1	Field Blank	Trip Blank	Travel Blank
Sampling Company			GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory			BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order			C3K1437	C3O7544	C3J8805	C3O9982	C3K2251	C3K2251	C3O7544	C3K1437	C3N6294	C3K1437	C3N6294	C3N6294	C3I2612	C3O7765	C3H7099	C3P0285	C3G5381	C3O9982
Laboratory Sample ID			WIE412	WRX368	WHR236	WSK547	WIJ411	WIJ412	WRX369	WIE418	WPN597	WIE417	WPN596	WPN598	WEH725	WRY348	WDD738	WSL998	WAS213	WSK549
Sample Type	Units	MOE APV						Field Duplicate						Field Duplicate			Field Blank	Field Blank	Trip Blank	Trip Blank
Field Parameters																				
pH, Field	S.U.	n/v	7.57	7.51	-	7.25	7.31	-	7.05	7.41	7.05	7.18	7.15	-	6.97	7.11	-	-	-	-
Temperature, Field	deg C	n/v	9.0	8.92	-	11.6	15.5	-	11.7	11.0	9.9	11.8	13.6	-	18.1	15.6	-	-	-	-
General Chemistry																				
Acidity	mg/L	n/v	8.6	6.4	11	8.6	11	10	20	16	20	22	17	19	44	29	<5.0	<5.0	<5.0	-
Alkalinity, Bicarbonate (as CaCO3)	mg/L	n/v	240	260	320	330	230	230	290	370	330	280	280	280	320	310	<1.0	1.9	<1.0	1.7
Alkalinity, Carbonate (as CaCO3)	mg/L	n/v	2.5	1.9	2.8	2.2	1.8	1.8	<1.0	2.5	3.0	2.1	2.6	3.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3)	mg/L	n/v	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3)	mg/L	n/v	240	270	320	330	230	240	290	370	340	280	290	280	330	310	<1.0	1.9	<1.0	1.7
Ammonia (as N)	mg/L	n/v	0.24	0.23	<0.050	<0.050	0.19	0.15	0.057	0.089	0.085	<0.050	<0.050	<0.050	0.11	0.074	<0.050	<0.050	<0.050	<0.050
Chloride	mg/L	180[A]	<1.0	<1.0	1.4	<1.0	63	63	87	<1.0	<1.0	<1.0	<1.0	<1.0	**1,400[A]**	**600[A]**	<1.0	<1.0	<1.0	<1.0
Cyanide (Free)	mg/L	n/v	<0.002 ICB	0.0033 ICB	0.0028 ICB	0.0021 ICB	0.0033 ICB	0.0042 ICB	0.0023 ICB	0.0021 ICB	<0.002 ICB	<0.002 ICB	<0.002 ICB	<0.002 ICB	0.0052 ICB	0.0058 ICB	<0.002 ICB	<0.002 ICB	<0.002 ICB	<0.002 ICB
Cyanide (Strong Acid Dissociable)	mg/L	n/v	<0.00050	<0.00050 CYN	<0.00050 CYN	<0.00050 CYN	<0.00050 CYN	<0.00050 CYN	<0.00050 CYN	<0.00050 CYN	<0.00050	<0.00050	<0.00050	<0.00050	0.0681	0.0299	<0.00050	<0.00050	<0.00050	<0.00050
Dissolved Organic Carbon (DOC)	mg/L	n/v	-	-	-	-	-	-	-	-	-	2.5	2.4	-	-	-	-	-	-	-
Electrical Conductivity, Lab	µS/cm	n/v	451	480	614	624	728	729	1,060	686	617	517	521	512	6,580	4,350	1.0	1	2.0	1
Fluoride	mg/L	n/v	0.43	0.47	0.17	0.16	0.16	0.16	0.11	0.10	<0.10	<0.10	<0.10	<0.10	0.16	0.17	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L	n/v	160	230	330	330	320	320	510	260	280	280	280	280	1,600	1,700	<1.0	<1.0	<1.0	-
Nitrate (as N)	mg/L	n/v	0.24	<0.10	0.21	0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	n/v	0.24	<0.10	0.21	0.13	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite (as N)	mg/L	n/v	<0.010	<0.010	<0.010	0.017	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
pH, lab	S.U.	n/v	8.04	7.88	7.97	7.86	7.93	7.92	7.53	7.86	7.98	7.92	7.98	8.07	7.50	7.64	5.75	6.65	5.78	6.58
Phosphorus, Total	mg/L	n/v	0.51	0.20	0.0023	0.0017	0.64 DB	0.33 DB	0.053	0.0024	0.0017	0.0028	0.0035	<0.0010	1.6 CD	1.4 DB	<0.0010	<0.0010	<0.0010	<0.0010
Sulfate	mg/L	n/v	1.4	<1.0	16	20	33	30	150	16	13	4.7	5.9	5.3	960	1,400	<1.0	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L	n/v	260	275	360	340	425	415	685	350	325	290	260	280	4,120	3,030	<10	<10	<10	-
Total Kjeldahl Nitrogen	mg/L	n/v	0.32	0.25	0.12	0.17	0.34	0.33	0.27	0.20	0.20	<0.10	0.12	0.10	2.2	1.6	<0.10	<0.10	<0.10	<0.10
Total Suspended Solids	mg/L	n/v	850	260	3	11	590	260	620	22	9	56	10	3	520	440	<1	<1	<1	-
Turbidity, Lab	NTU	n/v	2.0	110	0.3	1.2	9.8	13	180	3.1	0.9	0.4	0.5	0.2	6.4	21	<0.1	<0.1	<0.1	<0.1
Metals, Dissolved																				
Aluminum	µg/L	n/v	26.8	15.8	2.1	1.1	2.2	5.7	2.3	4.2	1.6	4.3	1.3	1.1	8	4.8	0.9	<0.5	1.3	2.3
Antimony	µg/L	1,600[A]	0.4	<0.1	0.4	0.5	<0.1	0.1	0.3	0.1	0.1	<0.1	<0.1	<0.1	<1	<0.5	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	150[A]	5.8	5.6	1.4	1.3	4.7	4.8	21.1	1.1	1.1	1	1.2	1.2	**1,400[A]**	**984[A]**	<0.1	<0.1	<0.1	<0.1
Barium	µg/L	2,300[A]	22.8	26.5	135	138	43.8	44.6	78	18.1	16.6	15.8	16.6	17	75	90	<0.2	<0.2	<0.2	<0.2
Beryllium	µg/L	5.3[A]	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.25	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	n/v	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.5	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	3,550[A]	17	18	18	18	23	23	47	16	10	4	5	4	100	77	<1	<1	<1	<1
Cadmium	µg/L	0.21[A]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01	<0.1	<0.05	<0.01	<0.01	<0.01	<0.01
Calcium	mg/L	n/v	40.0	58.7	92.2	93.7	96.1	97.1	156	78.3	83.0	83.9	83.0	84.9	411	403	<0.02	<0.02	<0.02	<0.02
Cesium	µg/L	n/v	<0.02	<0.02	0.27	0.29	0.13	0.13	0.19	0.08	0.08	0.05	0.05	0.05	<0.2	<0.1	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	64[A]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<2.5	<0.5	<0.5	<0.5	<0.5
Cobalt	µg/L	5.2[A]	0.07	0.1	0.06	0.08	2.54	2.6	**7.33[A]**	0.49	0.51	0.06	0.07	0.07	1.6	1.74	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	6.9[A]	0.8	4.2	0.9	0.4	0.4	1	1.2	1.1	1.1	2.4	1.7	1.7	<1	0.8	<0.1	<0.1	<0.1	<0.1
Iron	µg/L	n/v	198	709	73	41	422	448	1,160	281	228	11	8	6	2,480	669	<5	<5	<5	<5
Lead	µg/L	2[A]	0.05	<0.05	<0.05	<0.05	<0.05	0.18	0.14	0.08	<0.05	<0.05	<0.05	0.06	<0.5	<0.25	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	n/v	7.3	7.4	3.9	4.1	3.3	3.4	3.5	2.1	1.8	1.6	1.5	1.5	9	10.9	<0.5	<0.5	<0.5	<0.5
Magnesium	mg/L	n/v	15.1	19.6	23.0	23.3	18.9	19.5	28.8	16.1	17.6	17.5	17.6	17.6	147	163	<0.005	<0.005	<0.005	<0.005
Manganese	µg/L	n/v	26.4	68.9	18.9	46.7	971	971	1,440	92.2	59.7	3.8	6	6.6	838	1,060	<0.2	<0.2	<0.2	<0.2
Mercury	µg/L	0.77[A]	<0.01	<0.10	<0.01	***<10,000***	<0.01	<0.01	<0.10	<0.01	***<10,000***	<0.01	***<10,000***	***<10,000***	<0.01	***<10,000***	<0.01	***<10,000***	<0.01	***<10,000***
Molybdenum	µg/L	730[A]	2.63	2.69	3.03	2.5	3.76	3.73	2.37	2.15	1.53	0.36	0.46	0.46	<0.5	<0.25	<0.05	0.05	<0.05	<0.05
Nickel	µg/L	39[A]	1.1	0.5	0.6	0.7	1.2	1.2	3.2	2.7	3	1.9	1.9	1.9	<1	1.4	<0.1	<0.1	<0.1	<0.1
Phosphorus	µg/L	n/v	48	45	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	70	73	<5	<5	<5	<5
Potassium	mg/L	n/v	1.60	1.45	0.98	0.90	1.74	1.75	3.36	1.52	1.41	1.10	1.18	1.17	24.5	24.1	<0.02	<0.02	<0.02	<0.02
Rubidium	µg/L	n/v	1.39	1.02	1.47	1.48	2.32	2.32	3.6	2.83	2.87	2.67	2.73	2.7	6.9	6.4	<0.02	<0.02	<0.02	<0.02
Selenium	µg/L	5[A]	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<1	<0.2	<0.2	<0.2	<0.2
Silicon	µg/L	n/v	7,020	8,490	7,600	7,110	5,310	5,350	6,250	4,990	4,950	4,730	4,930	4,870	8,050	7,230	<5	<5	<5	<5
Silver	µg/L	0.12[A]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.1	<0.05	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	180[A]	34.7	24.2	6.19	6.14	22.0	22.0	36.2	30.3	16.3	2.05	2.54	2.49	**902[A]**	**438[A]**	<0.01	<0.01	0.01	<0.01
Strontium	µg/L	n/v	163	205	259	296	308	313	410	88.8	89.5	74.3	72.3	73.1	2,210	2,450	<0.1	<0.1	<0.1	<0.1
Sulfur	µg/L	n/v	600	600	6,000	6,600	12,000	12,000	51,000	3,800	2,900	1,800	1,800	1,800	330,000	460,000	<500	<500	<500	<500
Tellurium	µg/L	n/v	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.5	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	40[A]	<0.005	<0.005	<0.005	<0.005	0.013	0.013	0.012	<0.005	<0.005	0.005	<0.005	<0.005	<0.05	<0.025	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	n/v	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<1	<0.2	<0.2	-	<0.2
Tin	µg/L	n/v	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<1	<0.5	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	n/v	2.3	1.5	<0.5	<0.5	0.6	0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<2.5	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	n/v	<0.1	0.2	0.4	0.6	0.4	0.4	0.3	1.3	0.9	<0.1	<0.1	<0.1	<1	1.2	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	33[A]	0.54	0.27	2.38	2.3	2.33	2.32	5.25	0.97	0.73	0.37	0.38	0.38	<0.1	0.36	<0.01	<0.01	<0.01	<0.01
Vanadium	µg/L	20[A]	0.24	0.09	<0.05	<0.05	0.12	0.13	0.18	0.18	0.13	0.1	0.1	0.1	<0.5	<0.25	<0.05	<0.05	<0.05	<0.05
Zinc	µg/L	89[A]	1.4	1.8	2.3	2	37.8	41.1	**630[A]**	6.9	4.8	4.5	1.3	1.4	<5	2.9	<0.5	<0.5	<0.5	<0.5
Zirconium	µg/L	n/v	<0.1	<0.1	0.3	0.5	0.6	0.6	0.9	0.6	0.4	0.2	0.2	0.2	<1	<0.5	<0.1	<0.1	<0.1	<0.1

See notes on last page

Table C-4-1
Summary of Groundwater Analytical Results - Groundwater
2023 Fish and Fish Habitat Federal EIS Follow-Up Monitoring Report
Greenstone Project

Sample Location			MWS-14-03 OB2		MWS-14-04		MWS-14-06			MWS-14-07 BR		MWS-14-07 OB			SEEP 10		Field Blank		Trip Blank	
Sample Date			5-Jul-23	10-Aug-23	30-Jun-23	15-Aug-23	6-Jul-23	6-Jul-23	10-Aug-23	5-Jul-23	3-Aug-23	5-Jul-23	3-Aug-23	3-Aug-23	19-Jun-23	13-Aug-23	14-Jun-23	14-Aug-23	5-Jun-23	15-Aug-23
Sample ID			MWS-14-03-OB2	MWS-14-03-OB2	MWS-14-04	MWS-14-04	MWS-14-06	Duplicate 6	MWS14-06	MWS-14-07-BR	MWS-14-07-BR	MWS-14-07-OB	MWS-14-07-OB	DUPLICATE 4	Seep 10	Seep 10	Field Blank1	Field Blank	Trip Blank	Travel Blank
Sampling Company			GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM	GGM
Laboratory			BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV	BV
Laboratory Work Order			C3K1437	C3O7544	C3J8805	C3O9982	C3K2251	C3K2251	C3O7544	C3K1437	C3N6294	C3K1437	C3N6294	C3N6294	C3I2612	C3O7765	C3H7099	C3P0285	C3G5381	C3O9982
Laboratory Sample ID			WIE412	WRX368	WHR236	WSK547	WIJ411	WIJ412	WRX369	WIE418	WPN597	WIE417	WPN596	WPN598	WEH725	WRY348	WDD738	WSL998	WAS213	WSK549
Sample Type	Units	MOE APV						Field Duplicate						Field Duplicate			Field Blank	Field Blank	Trip Blank	Trip Blank
Metals, Total																				
Aluminum	µg/L	n/v	2,470	889	4.8	43.9	4,520	4,960	684	12.4	7.4	31.6	30.5	9.8	1,300	779	10.3	<0.5	3.5	<0.5
Antimony	µg/L	1,600[A]	<0.5	<0.1	0.3	0.3	<0.5	<0.5	<0.5	0.2	0.2	<0.1	<0.1	<0.1	<0.50	<1	<0.1	<0.1	<0.1	<0.1
Arsenic	µg/L	150[A]	7.6	7.5	1.4	2.4	30.3	23.3	20.3	1.4	2.3	1.1	2.1	1.2	**19,000[A]**	**14,600[A]**	<0.1	<0.1	<0.1	<0.1
Barium	µg/L	2,300[A]	59	34.1	139	133	131	116	91	19.3	20	16.2	18.2	17.2	170	166	<0.2	<0.2	<0.2	<0.2
Beryllium	µg/L	5.3[A]	0.28	0.09	<0.05	<0.05	1.11	0.96	<0.25	<0.05	<0.05	<0.05	<0.05	<0.05	<0.40	<0.5	<0.05	<0.05	<0.05	<0.05
Bismuth	µg/L	n/v	<0.5	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<1	<0.1	<0.1	<0.1	<0.1
Boron	µg/L	3,550[A]	26	21	17	16	25	25	47	19	22	4	5	5	99	90	<1	<1	<1	<1
Cadmium	µg/L	0.21[A]	0.069	0.031	<0.005	<0.005	**0.463[A]**	**0.56[A]**	0.053	0.008	0.01	0.008	0.02	0.014	<0.090	0.08	<0.005	<0.005	<0.005	<0.005
Calcium	mg/L	n/v	160	91.4	95.8	91.1	144	135	154	81.8	76.9	85.6	86.4	82.6		398	0.18	<0.02	<0.02	<0.02
Cesium	µg/L	n/v	0.3	0.14	0.26	0.27	1.4	1.7	0.4	0.1	0.12	0.06	0.05	0.05	-	<0.2	<0.02	<0.02	<0.02	<0.02
Chromium	µg/L	64[A]	7	2.9	<0.5	<0.5	16.1	17.1	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	7.1	<5	<0.5	<0.5	<0.5	<0.5
Cobalt	µg/L	5.2[A]	2.44	1.1	0.11	0.11	**25[A]**	**29.1[A]**	**9.41[A]**	0.51	0.78	0.17	0.25	0.1	5.1	3.6	<0.05	<0.05	<0.05	<0.05
Copper	µg/L	6.9[A]	6.8	2.7	0.3	0.5	**120[A]**	**160[A]**	**12.7[A]**	2.7	2.2	2.4	2.5	2.2	**9.8[A]**	**11[A]**	0.3	<0.1	<0.1	<0.1
Iron	µg/L	n/v	4,810	2,200	230	260	18,800	15,400	3,560	562	875	58	78	21	63,000	52,000	6	<5	<5	<5
Lead	µg/L	2[A]	**5.85[A]**	1.85	<0.05	0.17	**27.5[A]**	**28.6[A]**	**4.54[A]**	0.11	0.13	<0.05	0.08	<0.05	**2.3[A]**	**3.4[A]**	<0.05	<0.05	<0.05	<0.05
Lithium	µg/L	n/v	13.8	10	3.8	3.5	9.7	9.3	4.2	2.4	2.5	1.6	1.6	1.6	11	12	<0.5	<0.5	<0.5	<0.5
Magnesium	mg/L	n/v	41.5	27.1	23.2	22.7	26.9	25.5	28.7	17.0	17.4	18.2	18.2	18.0		144	0.010	<0.005	<0.005	<0.005
Manganese	µg/L	n/v	255	150	46.3	49.1	1,450	1,350	1,470	104	142	10.3	42.2	12	2,500	1,670	0.3	<0.2	<0.2	<0.2
Mercury	µg/L	0.77[A]	<0.01	<0.1	<0.01	***<10,000***	<0.1	0.14	<0.1	<0.01	***<10,000***	<0.01	***<10,000***	***<10,000***	<0.1	<0.1	<0.01	***<10,000***	<0.01	***<10,000***
Molybdenum	µg/L	730[A]	1.38	2.54	3.51	2.31	0.59	0.52	1.14	2.39	3.7	0.35	0.48	0.43	<0.50	<0.5	<0.05	0.06	<0.05	<0.05
Nickel	µg/L	39[A]	6.9	3.4	0.6	0.8	**46.8[A]**	**51.5[A]**	7.6	2.8	2.8	2.2	2.2	2	7.6	5	<0.1	<0.1	<0.1	<0.1
Phosphorus	µg/L	n/v	498	226	<5	<5	643	539	108	6	7	<5	6	<5	-	730	<5	<5	<5	<5
Potassium	mg/L	n/v	2.1	1.71	0.87	0.88	2.8	2.6	3.4	1.56	1.67	1.13	1.31	1.18		21.9	<0.02	<0.02	<0.02	<0.02
Rubidium	µg/L	n/v	5.8	3.05	1.5	1.45	10	9.2	5	2.95	2.94	2.77	2.84	2.78	-	7.2	<0.02	<0.02	<0.02	<0.02
Selenium	µg/L	5[A]	<0.25	<0.05	<0.05	0.09	<0.25	<0.25	<0.25	0.09	0.08	0.11	0.12	0.12	<2.0	<0.5	<0.05	<0.05	<0.05	<0.05
Silicon	µg/L	n/v	12,700	9,530	7,330	6,720	13,300	12,200	7,240	5,320	5,240	4,810	4,870	4,580	12,000	9,210	11	<5	<5	<5
Silver	µg/L	0.12[A]	<0.05	<0.01	<0.01	0.01	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.090	<0.1	<0.01	<0.01	<0.01	<0.01
Sodium	mg/L	180[A]	34.6	41.9	5.95	5.72	24.7	23.2	35.0	34.2	43.8	2.14	3.18	2.29		**487[A]**	<0.01	<0.01	<0.01	<0.01
Strontium	µg/L	n/v	247	203	294	274	369	355	400	101	106	72.7	74.5	73.7	2,500	2,420	0.2	<0.1	<0.1	<0.1
Sulfur	µg/L	n/v	1,000	800	6,000	6,600	24,000	20,000	50,000	4,300	4,500	1,900	1,800	1,800	340,000	420,000	<500	<500	<500	<500
Tellurium	µg/L	n/v	<0.5	<0.1	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<1.0	<1	<0.1	<0.1	<0.1	<0.1
Thallium	µg/L	40[A]	0.06	0.025	<0.005	<0.005	0.124	0.105	0.025	<0.005	<0.005	0.005	0.006	0.006	<0.050	<0.05	<0.005	<0.005	<0.005	<0.005
Thorium	µg/L	n/v	2	1.2	-	<0.2	<1	<1	<1	<0.2	<0.2	<0.2	<0.2	<0.2	-	<2	<0.2	<0.2	-	<0.2
Tin	µg/L	n/v	<0.5	<0.1	0.1	0.1	<0.5	<0.5	<0.5	0.1	0.2	<0.1	<0.1	<0.1	<1.0	<1	<0.1	<0.1	<0.1	<0.1
Titanium	µg/L	n/v	101	60	0.7	2.3	61.3	57.4	31	1.1	0.7	2.3	2.2	0.9	49	26	<0.5	<0.5	<0.5	<0.5
Tungsten	µg/L	n/v	<0.5	<0.1	0.5	0.5	<0.5	<0.5	<0.5	1.6	2.3	<0.1	<0.1	<0.1	5.1	3	<0.1	<0.1	<0.1	<0.1
Uranium	µg/L	33[A]	1.89	1.1	2.55	2.4	6.16	4.93	5.79	1.04	1.37	0.38	0.41	0.4	0.17	0.8	<0.01	<0.01	<0.01	<0.01
Vanadium	µg/L	20[A]	6.7	2.67	<0.05	0.12	12.8	13	1.76	0.32	0.36	0.19	0.19	0.12	5.1	4.1	<0.05	<0.05	<0.05	<0.05
Zinc	µg/L	89[A]	14.9	6.9	2.4	3.5	**5,480[A]**	**3,400[A]**	**1,480[A]**	4.4	6.4	4.2	2	1.6	43	42	0.5	<0.5	<0.5	<0.5
Zirconium	µg/L	n/v	0.5	0.5	0.5	1	3.6	4.1	2.6	0.8	0.9	0.2	0.2	0.2	1.3	2	<0.1	<0.1	<0.1	<0.1

Notes:

MOE APV	MOE - Aquatic Protection Values (APV) to Protect Aquatic Biota Exposed to Contaminants from Migration of Contaminated Groundwater to Surface Water.
[A]	Aquatic Toxicity Data Screening - Table 3.1 - Aquatic Protection Values
6.5[A]	Concentration exceeds the indicated standard.
15.2	Measured concentration did not exceed the indicated standard.
<0.50	Laboratory reporting limit was greater than the applicable standard.
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
CD	Detection limits raised due to dilution to bring analyte within the calibrated range.
CYN	SAD Cyanide < Free Cyanide: Both values fall within the method uncertainty for duplicates and are likely equivalent.
DB	Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.
ICB	Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
MI	Detection limits raised due to matrix interference.
MS	Matrix spike outside acceptance limits due to matrix interference.
QA	TKN <NH4: Both values fall within acceptable RPD limits for duplicates and are likely equivalent.

Appendix D
Blast Monitoring Data

Appendix D: Blast Data

Blast ID	Date	Time	Total Charge (Kgs)	Maximum Charge Size Per Delay (Kgs)	Center of Blast (x) Easting	Center of Blast (y) Northing	Elevation at the Center of Blast (z)	FS02 Lake Hydrophone (kPa)	Vibration PPV (mm/s)
P1-10330-005B	10/3/2022	18:00	14,596	213	504,238	5,502,759	335	Monitor not functional	4.8
P1-10330-006A	10/5/2022	18:00	28,450	270	504,167	5,502,786	335	Monitor not functional	2.7
P1-10330-007A	10/7/2022	18:00	10,297	198	504,269	5,502,717	335	Monitor not functional	3.4
P1-10330-007B	10/8/2022	18:00	20,008	201	504,282	5,502,715	335	Monitor not functional	3.7
P1-10330-008	10/13/2022	18:00	34,441	280	504,168	5,502,808	335	Monitor not functional	9.9
P1-10330-009	10/18/2022	18:00	32,000	392	504,170	5,502,833	335	Monitor not functional	7.6
P1-10330-010A	10/22/2022	18:00	20,852	231	504,234	5,502,800	335	Monitor not functional	7.1
P1-10330-010B	10/27/2022	18:00	10,065	239	504,239	5,502,828	335	Monitor not functional	5.3
P1-10330-011	10/27/2022	18:00	22,582	267	504,303	5,502,715	335	Monitor not functional	5.3
P1-10330-012	10/29/2022	18:00	22,525	328	504,171	5,502,857	335	Monitor not functional	5
P1-10330-013	11/2/2022	18:00	36,703	386	504,289	5,502,807	335	Monitor not functional	6.3
P1-10330-014A	11/5/2022	14:00	21,935	287	504,329	5,502,715	335	Monitor not functional	2.9
P1-10330-014B	11/12/2022	14:15	41,380	252	504,372	5,502,711	335	Monitor not functional	missing data
P1-10330-015	11/15/2022	14:15	28,092	357	504,172	5,502,887	335	0.21	3.1
P1-10330-016	11/19/2022	14:15	48,901	306	504,271	5,502,870	335	0.16	6.3
P1-10330-017	11/26/2022	14:15	99,113	335	504,362	5,502,836	335	0.14	12.4
P1-10330-020	12/2/2022	14:15	100,753	400	504,099	5,502,803	335	0.11	0.1
P1-10320-001	12/10/2022	14:15	109,098	330	504,240	5,502,650	335	0.12	5.7
P1-10330-018	12/15/2022	14:15	63,072	245	504,451	5,502,708	335	0.04	4.5
P1-10330-019	12/27/2022	10:15	90,234	325	504,452	5,502,830	335	0.01	4.4
P1-10320-002	12/31/2022	14:15	85,065	300	504,298	5,502,807	325	0.3	3.2
P1-10320-003	1/7/2023	14:15	113,224	343	504,404	5,502,705	325	0.33	0.1

Appendix D: Blast Data

Blast ID	Date	Time	Total Charge (Kgs)	Maximum Charge Size Per Delay (Kgs)	Center of Blast (x) Easting	Center of Blast (y) Northing	Elevation at the Center of Blast (z)	FS02 Lake Hydrophone (kPa)	Vibration PPV (mm/s)
P1-10320-005	1/12/2023	14:15	101,197	362	504,204	5,502,788	325	0.01	2.7
P1-10320-004	1/16/2023	14:15	80,986	320	504,406	5,502,804	325	0.01	3.6
P1-10320-006	1/21/2023	10:15	76,118	299	504,261	5,502,878	325	0.01	3.3
P1-10320-007A	1/25/2023	14:15	68,656	464	504,140	5,502,835	325	0.01	2.2
P1-10320-007B	1/31/2023	14:15	34,816	456	504,095	5,502,847	325	0.01	3
P1-10320-008	1/31/2023	14:15	45,406	380	504,408	5,502,871	325	0.01	3
P1-10320-009	2/7/2023	14:15	51,126	351	504,474	5,502,768	325	0.01	3.80
P1-10335-001	2/13/2023	11:15	59,380	211	504,054	5,502,805	338	0.01	0.10
P1-10310-002	2/16/2023	10:15	55,801	316	504,220	5,502,821	315	0.01	3.04
P1-10310-003	2/18/2023	14:15	47,256	355	504,229	5,502,768	315	0.01	2.80
P1-10310-004	2/25/2023	14:15	67,633	317	504,313	5,502,794	315	0.01	2.60
Pond B1-2-001	3/1/2023	18:30	7,559	45	503,537	5,501,934	328	0.01	0.1
P1-10330-021	3/1/2023	14:15	14,405	237	504,148	5,502,677	335	0.01	1.3
P1-10310-005	3/3/2023	14:15	68,118	355	504,381	5,502,793	315	0.01	2.9
Pond B1-2-002	3/4/2023	18:30	3,386	30	503,398	5,501,901	323	0.01	0.2
P1-10310-006	3/7/2023	14:15	55,613	357	504,347	5,502,719	315	0.01	5.2
Pond B1-2-003	3/8/2023	18:30	7,273	30	503,438	5,501,908	328	0.01	0.2
Pond B1-2-005A	3/13/2023	18:30	1,161	15	503,527	5,501,949	328	0.01	0.1
P1-10320-010	3/14/2023	14:15	83,788	337	504,173	5,502,701	325	0.01	4.5
Pond B1-2-003B/004	3/19/2023	18:30	7,652	51	503,470	5,501,916	328	0.01	0.1
Pond B1-2-006	3/27/2023	18:30	2,111	25	503,510	5,501,901	328	0.01	0.3
Pond B1-2-007	3/27/2023	18:30	3,301	25	503,547	5,501,883	328	0.01	0.3
P1-10310-007	3/30/2023	10:15	90,114	539	504,445	5,502,771	315	0.01	4.5
Pond B1-2-008/7B	4/1/2023	18:30	5,923		503,573	5,501,901	328	0.01	0.8
Pond B1-2-003C-4B-7C	4/3/2023	18:30	3,066	25	503,475	5,501,950	328	0.01	0.2
P1-10310-008	4/5/2023	10:15	64,782	395	504,379	5,502,681	315	0.01	6
P1-10310-009	4/11/2023	10:15	61,823	400	504,230	5,502,708	315	0.01	2.5
P1-10310-010/001	4/18/2023	14:15	120,612	284	504,290	5,502,868	315	0.01	4.2
P1-10310-011	4/24/2023	14:15	67,304	311	504,155	5,502,761	315	0.01	1.6
P1-10300-001	4/29/2023	14:15	94,593	334	504,330	5,502,771	305	0.01	5.5
P1-10300-002	5/6/2023	14:15	95,183	356	504,402	5,502,806	305	0.01	4.1
P1-10310-012-Toe	5/10/2023	14:15	4,819	76	504,197	5,502,819	315	0.01	0.3
P1-10320-011	5/17/2023	14:15	101,560	457	504,548	5,502,682	325	0.01	9.4
P1-10300-003	5/23/2023	10:15	84,329	389	504,273	5,502,802	305	0.01	missing data
P1-10300-004	5/27/2023	14:15	70,592	260	504,344	5,502,864	305	0.01	missing data

Appendix D: Blast Data

Blast ID	Date	Time	Total Charge (Kgs)	Maximum Charge Size Per Delay (Kgs)	Center of Blast (x) Easting	Center of Blast (y) Northing	Elevation at the Center of Blast (z)	FS02 Lake Hydrophone (kPa)	Vibration PPV (mm/s)
P1-10320-012	6/6/2023	18:30	54,158	399	504,671	5,502,666	325	0.06	18.5
P1-10300-006	6/8/2023	10:15	35,300	295	504,397	5,502,670	305	0.03	5.4
Pond B2-001	6/10/2023	18:30	3,301	31	504,540	5,501,840	327	0.1	2.1
P1-10300-005	6/14/2023	14:15	51,965	402	504,275	5,502,730	305	0.04	5.6
Pond B2-001B	6/15/2023	18:30	2,067	30	504,501	5,501,834	327	0.6	1.4
Pond B2-002	6/20/2023	18:30	3,298	27	504,470	5,501,831	331	0.01	2.9
P1-10300-007	6/22/2023	14:15	48,658	330	504,196	5,502,777	305	0.04	2.9
P1-10300-003 TOE	6/22/2023	14:15	3,215	289	504,267	5,502,806	305	0.04	2.9
P1-10300-008	6/27/2023	14:15	38,882	278	504,251	5,502,690	305	0.06	3.6
P1-10320-013	6/29/2023	14:15	45,634	482	504,680	5,502,624	325	0.23	14.7
P1-10330-022	7/1/2023	10:15	33,194	150	504,797	5,502,642	335	0.09	7.5
Pond B2-003	7/3/2023	17:45	2,198	20	504,434	5,501,838	326	0.08	1.4
P1-10330-023	7/6/2023	14:15	19,807	181	504,874	5,502,632	335	0.06	8.6
Pond B2-004	7/8/2023	14:15	1,658	17	504,399	5,501,852	326	0.07	0.9
P1-10330-024	7/10/2023	14:15	29,116	201	504,944	5,502,641	335	0.06	7.4
Pond B2-005	7/11/2023	14:15	1,150	17	504,361	5,501,864	326	1.1	1.4
P1-10300-009	7/13/2023	14:15	54,754	349	504,155	5,502,769	305	0.03	3.2
P1-10330-025	7/15/2023	14:15	31,784	170	504,897	5,502,569	335	0.16	12.1
Pond B2-006	7/18/2023	14:15	1,834	19	504,381	5,501,886	326	0.5	0.9
P1-10290-001	7/20/2023	14:15	59,141	386	504,389	5,502,781	295	0.07	8
Pond B2-007	7/21/2023	14:15	2,299	19	504,464	5,501,867	326	0.7	2.6
P1-10330-026	7/22/2023	14:15	13,445	66	504,729	5,502,575	335	0.01	2
P1-10330-027	7/25/2023	14:15	35,382	250	504,938	5,502,711	335	0.03	6.3
P1-10320-014	7/29/2023	14:15	52,398	360	504,684	5,502,577	325	0.19	17.6
P1-10320-015	8/4/2023	14:15	78,495	333	504,774	5,502,610	325	0.15	missing data
Pond B2-008	8/5/2023	14:15	1,426	20	504,329	5,501,881	326	0.1	missing data
P1-10320-016	8/10/2023	10:15	96,005	342	504,851	5,502,611	325	0.2	missing data
P1-10320-019	8/12/2023	14:15	59,225	353	504,917	5,502,612	325	0.52	13.6
P1-10320-017	8/15/2023	14:15	35,390	261	504,595	5,502,606	325	0.14	9
P1-10320-018	8/18/2023	14:15	64,604	360	504,843	5,502,705	325	0.04	5.9
P1-10320-018 B	8/18/2023	14:15	22,028	243	504,914	5,502,708	325	0.04	5.9
P1-10320-020	8/21/2023	14:15	13,147	80	504,525	5,502,621	325	0.2	missing data
P1-10290-002	8/21/2023	14:15	41,213	305	504,318	5,502,772	295	0.2	missing data
P1-10320-021	8/25/2023	10:15	64,398	374	504,962	5,502,642	325	0.63	missing data
P1-10320-022	8/31/2023	14:15	58,831	351	504,736	5,502,701	325	0.24	missing data

Appendix D: Blast Data

Blast ID	Date	Time	Total Charge (Kgs)	Maximum Charge Size Per Delay (Kgs)	Center of Blast (x) Easting	Center of Blast (y) Northing	Elevation at the Center of Blast (z)	FS02 Lake Hydrophone (kPa)	Vibration PPV (mm/s)
P1-10290-003	9/5/2023	10:15	88,147	398	504,340	5,502,836	295	0.16	missing data
P1-10310-013	9/7/2023	14:15	60,741	368	504,701	5,502,617	315	0.21	missing data
P1-10310-014	9/9/2023	14:15	25,006	245	504,693	5,502,577	315	0.19	missing data
P1-10310-015	9/11/2023	14:15	59,012	360	504,798	5,502,597	315	0.19	missing data
P1-10310-016	9/13/2023	14:15	58,638	354	504,877	5,502,598	315	0.2	missing data
P1-10310-017	9/16/2023	14:15	61,583	369	504,849	5,502,661	315	0.06	8.7
P1-10290-004	9/16/2023	14:15	22,755	242	504,410	5,502,765	295	0.06	8.7
P1-10310-018	9/25/2023	14:15	56,296	358	504,942	5,502,622	315	0.09	11.6
P1-10310-018 PS	9/25/2023	14:15	N/A	N/A	504,953	5,502,602	315	0.09	11.6
P1-10330-028 (REV 1)	9/29/2023	10:15	42,627	327	505,017	5,502,806	335	0.04	4.7

Notes:

[1] Vibration exceedance highlighted.

[2] Blast locations with respect to monitor location are shown in Figure 2-6.

[3] Minimum setback distances are established in a separate sheet for the period of missing data or monitor was not functional.

EQUINOXGOLD
GREENSTONE MINE
AN EQUINOX GOLD / ORION JOINT VENTURE

Appendix E
Morphometric and Catch Summary Data

Appendix E.1 Goldfield Creek Realignment Catch Results

Table E1: Summary of Boat Electrofishing Catch Records from Sampling Areas Between 2018 and 2023

Sampling Area	Year	Total Catch	Species Diversity	Total CPUE (fish/electrofishing minute)	Northern Pike	White Sucker	Blacknose Shiner	Spottail Shiner	Burbot	Yellow Perch	Walleye	Iowa Darter	Lake Chub	Logperch	Mottled Sculpin
Area 5/Southwest Arm	2018	185	7	2.18	9	18	2			133	1	1		21	
	2021	140	4	2.04	8	18	9			105					
	2023	244	6	3.00	1		2	157		82			1	1	
Gambsy Lake/Area 1B	2018	943	8	3.99	52	31	90	269		494	5	1			1
	2019	398	5	3.66	18	26	29	219		106					
	2021	232	4	3.95	50	10	50			122					
	2023	162	6	1.59	3		30	31	1	96				1	
Area 3	2019	178	4	1.68	11	6	79			82					
	2021	133	2	1.84	7					126					
South Magnet Lake	2023	195	5	1.79	1	1	75		1	117					

Appendix E.2 Goldfield Creek Realignment Fish Morphometric Data

Appendix E2: Morphometrics Data for Yellow Perch Used in Whole Body Composites

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-055	6/1/2019	Yellow Perch	7.2	6.7	4.76	whole body composite		SWP3-YLPR-C-10	SWP3-YLPR-C-10D
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-057	6/1/2019	Yellow Perch	7.2	6.7	4.05	whole body composite		SWP3-YLPR-C-10	SWP3-YLPR-C-10D
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-058	6/1/2019	Yellow Perch	6.8	6.3	3.43	whole body composite		SWP3-YLPR-C-10	SWP3-YLPR-C-10D
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-067	6/1/2019	Yellow Perch	7.9	7.5	5.37	whole body composite		SWP3-YLPR-C-10	SWP3-YLPR-C-10D
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-068	6/1/2019	Yellow Perch	8.0	7.7	6.46	whole body composite		SWP3-YLPR-C-10	SWP3-YLPR-C-10D
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-052	6/1/2019	Yellow Perch	7.4	6.8	4.24	whole body composite		SWP3-YLPR-C-09	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-053	6/1/2019	Yellow Perch	7.8	7.3	5.37	whole body composite		SWP3-YLPR-C-09	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-054	6/1/2019	Yellow Perch	7.4	6.9	4.24	whole body composite		SWP3-YLPR-C-09	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-048	6/1/2019	Yellow Perch	7.5	7.0	4.57	whole body composite		SWP3-YLPR-C-08	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-049	6/1/2019	Yellow Perch	7.4	6.8	4.53	whole body composite		SWP3-YLPR-C-08	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-050	6/1/2019	Yellow Perch	7.1	6.7	4.20	whole body composite		SWP3-YLPR-C-08	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-042	6/1/2019	Yellow Perch	7.1	6.7	3.88	whole body composite		SWP3-YLPR-C-07	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-043	6/1/2019	Yellow Perch	6.5	6.0	3.36	whole body composite		SWP3-YLPR-C-07	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-044	6/1/2019	Yellow Perch	6.4	5.9	2.98	whole body composite		SWP3-YLPR-C-07	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-046	6/1/2019	Yellow Perch	7.0	6.6	3.95	whole body composite		SWP3-YLPR-C-07	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-035	6/1/2019	Yellow Perch	6.4	6.0	2.91	whole body composite		SWP3-YLPR-C-06	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-036	6/1/2019	Yellow Perch	6.5	6.1	2.87	whole body composite		SWP3-YLPR-C-06	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-038	6/1/2019	Yellow Perch	6.4	6.0	3.02	whole body composite		SWP3-YLPR-C-06	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-040	6/1/2019	Yellow Perch	6.4	6.0	2.72	whole body composite		SWP3-YLPR-C-06	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-041	6/1/2019	Yellow Perch	7.1	6.7	3.72	whole body composite		SWP3-YLPR-C-06	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-030	6/1/2019	Yellow Perch	6.5	6.1	3.01	whole body composite		SWP3-YLPR-C-05	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-031	6/1/2019	Yellow Perch	6.5	6.2	2.95	whole body composite		SWP3-YLPR-C-05	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-033	6/1/2019	Yellow Perch	6.5	6.1	3.20	whole body composite		SWP3-YLPR-C-05	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-034	6/1/2019	Yellow Perch	6.5	6.1	3.09	whole body composite		SWP3-YLPR-C-05	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-022	6/1/2019	Yellow Perch	5.7	5.3	1.95	whole body composite		SWP3-YLPR-C-04	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-024	6/1/2019	Yellow Perch	5.7	5.4	2.03	whole body composite		SWP3-YLPR-C-04	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-025	6/1/2019	Yellow Perch	5.9	5.5	2.51	whole body composite		SWP3-YLPR-C-04	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-026	6/1/2019	Yellow Perch	6.1	5.8	2.64	whole body composite		SWP3-YLPR-C-04	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-027	6/1/2019	Yellow Perch	6.0	5.6	2.46	whole body composite		SWP3-YLPR-C-04	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-028	6/1/2019	Yellow Perch	6.2	5.8	2.64	whole body composite		SWP3-YLPR-C-04	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-015	6/1/2019	Yellow Perch	5.6	5.3	1.98	whole body composite		SWP3-YLPR-C-03	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-016	6/1/2019	Yellow Perch	6.2	5.8	2.72	whole body composite		SWP3-YLPR-C-03	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-018	6/1/2019	Yellow Perch	6.4	5.9	2.55	whole body composite		SWP3-YLPR-C-03	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-019	6/1/2019	Yellow Perch	5.8	5.4	2.03	whole body composite		SWP3-YLPR-C-03	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-020	6/1/2019	Yellow Perch	6.1	5.7	2.22	whole body composite		SWP3-YLPR-C-03	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-021	6/1/2019	Yellow Perch	6.3	5.8	2.66	whole body composite		SWP3-YLPR-C-03	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-009	6/1/2019	Yellow Perch	6.1	5.8	2.43	whole body composite		SWP3-YLPR-C-02	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-010	6/1/2019	Yellow Perch	5.8	5.5	2.08	whole body composite		SWP3-YLPR-C-02	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-011	6/1/2019	Yellow Perch	6.2	5.8	2.65	whole body composite		SWP3-YLPR-C-02	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-012	6/1/2019	Yellow Perch	6.4	5.8	3.15	whole body composite		SWP3-YLPR-C-02	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-013	6/1/2019	Yellow Perch	5.9	5.6	2.16	whole body composite		SWP3-YLPR-C-02	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-001	6/1/2019	Yellow Perch	5.5	5.2	2.06	whole body composite		SWP3-YLPR-C-01	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-002	6/1/2019	Yellow Perch	5.8	5.5	2.23	whole body composite		SWP3-YLPR-C-01	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-003	6/1/2019	Yellow Perch	5.7	5.4	1.85	whole body composite		SWP3-YLPR-C-01	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-004	6/1/2019	Yellow Perch	5.3	5.0	1.69	whole body composite		SWP3-YLPR-C-01	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-006	6/1/2019	Yellow Perch	5.7	5.3	2.09	whole body composite		SWP3-YLPR-C-01	
Southwest Pond 3	-	SWP3-EF01	SWP3-YLPR-007	6/1/2019	Yellow Perch	6.3	5.8	2.54	whole body composite		SWP3-YLPR-C-01	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-001	6/11/2023	Yellow Perch	5.6	5.2	1.95	whole body		A1B-YLPR-01	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-002	6/11/2023	Yellow Perch	5.8	5.4	2.04	whole body		A1B-YLPR-01	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-003	6/11/2023	Yellow Perch	5.7	5.3	2.00	whole body		A1B-YLPR-01	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-004	6/11/2023	Yellow Perch	5.6	5.3	2.03	whole body		A1B-YLPR-01	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-005	6/11/2023	Yellow Perch	6.2	5.7	2.72	whole body		A1B-YLPR-01	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-006	6/11/2023	Yellow Perch	6.2	5.8	3.02	whole body	13.76	A1B-YLPR-01	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-009	6/11/2023	Yellow Perch	6.3	5.8	2.82	whole body		A1B-YLPR-02	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-010	6/11/2023	Yellow Perch	6.4	6.0	3.29	whole body		A1B-YLPR-02	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-011	6/11/2023	Yellow Perch	6.8	6.4	3.78	whole body		A1B-YLPR-02	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-012	6/11/2023	Yellow Perch	6.9	6.5	3.97	whole body	13.68	A1B-YLPR-02	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-014	6/11/2023	Yellow Perch	5.5	5.1	1.71	whole body		A1B-YLPR-03	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-015	6/11/2023	Yellow Perch	5.6	5.2	1.72	whole body		A1B-YLPR-03	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-016	6/11/2023	Yellow Perch	5.5	5.1	1.96	whole body		A1B-YLPR-03	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-017	6/11/2023	Yellow Perch	5.2	4.9	1.60	whole body		A1B-YLPR-03	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-018	6/11/2023	Yellow Perch	5.6	5.2	1.65	whole body		A1B-YLPR-03	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-019	6/11/2023	Yellow Perch	5.5	5.1	1.86	whole body		A1B-YLPR-03	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-020	6/11/2023	Yellow Perch	5.6	5.2	1.89	whole body	12.39	A1B-YLPR-03	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-023	6/11/2023	Yellow Perch	5.2	4.9	1.50	whole body		A1B-YLPR-04	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-024	6/11/2023	Yellow Perch	5.6	5.2	1.92	whole body		A1B-YLPR-04	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-025	6/11/2023	Yellow Perch	5.6	5.2	2.16	whole body		A1B-YLPR-04	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-026	6/11/2023	Yellow Perch	5.7	5.4	2.29	whole body		A1B-YLPR-04	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-027	6/11/2023	Yellow Perch	5.7	5.4	2.16	whole body		A1B-YLPR-04	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-028	6/11/2023	Yellow Perch	5.7	5.4	2.00	whole body		A1B-YLPR-04	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-030	6/11/2023	Yellow Perch	5.7	5.4	2.01	whole body		A1B-YLPR-05	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-031	6/11/2023	Yellow Perch	5.7	5.4	1.72	whole body		A1B-YLPR-05	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-032	6/11/2023	Yellow Perch	5.9	5.5	2.23	whole body		A1B-YLPR-05	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-033	6/11/2023	Yellow Perch	5.9	5.5	2.16	whole body		A1B-YLPR-05	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-034	6/11/2023	Yellow Perch	5.9	5.5	2.44	whole body		A1B-YLPR-05	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-035	6/11/2023	Yellow Perch	5.9	5.5	2.45	whole body	13.01	A1B-YLPR-05	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-038	6/11/2023	Yellow Perch	6.1	5.7	2.30	whole body		A1B-YLPR-06	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-039	6/11/2023	Yellow Perch	6.0	5.6	2.42	whole body		A1B-YLPR-06	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-040	6/11/2023	Yellow Perch	6.5	6.0	2.90	whole body		A1B-YLPR-06	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-041	6/11/2023	Yellow Perch	6.1	5.7	2.52	whole body		A1B-YLPR-06	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-042	6/11/2023	Yellow Perch	6.1	5.7	2.64	whole body	12.78	A1B-YLPR-06	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-044	6/11/2023	Yellow Perch	6.1	5.8	2.66	whole body		A1B-YLPR-07	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-045	6/11/2023	Yellow Perch	6.3	5.9	2.99	whole body		A1B-YLPR-07	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-046	6/11/2023	Yellow Perch	6.5	6.0	2.86	whole body		A1B-YLPR-07	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-047	6/11/2023	Yellow Perch	6.3	5.9	2.87	whole body	11.38	A1B-YLPR-07	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-049	6/11/2023	Yellow Perch	6.5	6.1	3.39	whole body		A1B-YLPR-08	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-050	6/11/2023	Yellow Perch	6.5	6.1	3.21	whole body		A1B-YLPR-08	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-051	6/11/2023	Yellow Perch	6.6	6.2	3.36	whole body		A1B-YLPR-08	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-052	6/11/2023	Yellow Perch	6.7	6.2	3.68	whole body		A1B-YLPR-08	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-053	6/11/2023	Yellow Perch	6.8	6.3	3.47	whole body		A1B-YLPR-08	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-054	6/11/2023	Yellow Perch	6.8	6.3	3.99	whole body		A1B-YLPR-08	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-055	6/11/2023	Yellow Perch	6.9	6.5	3.78	whole body	24.88	A1B-YLPR-08	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-058	6/11/2023	Yellow Perch	7.5	7.0	4.46	whole body		A1B-YLPR-09	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-059	6/11/2023	Yellow Perch	7.1	6.8	4.15	whole body		A1B-YLPR-09	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-060	6/11/2023	Yellow Perch	7.2	6.8	4.21	whole body	12.82	A1B-YLPR-09	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-062	6/11/2023	Yellow Perch	8.0	7.5	5.63	whole body		A1B-YLPR-10	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-063	6/11/2023	Yellow Perch	7.7	7.3	6.08	whole body		A1B-YLPR-10	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-064	6/11/2023	Yellow Perch	7.6	7.2	5.75	whole body		A1B-YLPR-10	
Unnamed Tributary to Gamsby Lake	A1B	A1B	YLPR-065	6/11/2023	Yellow Perch	8.1	7.7	6.70	whole body	24.16	A1B-YLPR-10	Yes
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-65	6/3/2019	Yellow Perch	7.6	7.1	4.95	whole body composite		GMBY-YLPR-C-10	GMBY-YLPR-C-10 D
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-66	6/3/2019	Yellow Perch	7.1	6.8	4.22	whole body composite		GMBY-YLPR-C-10	GMBY-YLPR-C-10 D
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-67	6/3/2019	Yellow Perch	7.5	7.2	4.96	whole body composite		GMBY-YLPR-C-10	GMBY-YLPR-C-10 D
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-70	6/3/2019	Yellow Perch	7.1	6.7	4.54	whole body composite		GMBY-YLPR-C-10	GMBY-YLPR-C-10 D
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-71	6/3/2019	Yellow Perch	7.1	6.8	4.32	whole body composite		GMBY-YLPR-C-10	GMBY-YLPR-C-10 D
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-73	6/3/2019	Yellow Perch	7.2	6.8	4.26	whole body composite		GMBY-YLPR-C-10	GMBY-YLPR-C-10 D
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-60	6/3/2019	Yellow Perch	6.5	6.1	3.21	whole body composite		GMBY-YLPR-C-09	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-61	6/3/2019	Yellow Perch	6.8	6.4	3.51	whole body composite		GMBY-YLPR-C-09	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-62	6/3/2019	Yellow Perch	6.9	6.5	4.00	whole body composite		GMBY-YLPR-C-09	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-63	6/3/2019	Yellow Perch	6.3	5.9	2.83	whole body composite		GMBY-YLPR-C-09	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-56	6/3/2019	Yellow Perch	6.3	6.0	2.95	whole body composite		GMBY-YLPR-C-08	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-57	6/3/2019	Yellow Perch	6.5	6.3	3.42	whole body composite		GMBY-YLPR-C-08	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-58	6/3/2019	Yellow Perch	6.4	6.1	2.96	whole body composite		GMBY-YLPR-C-08	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-59	6/3/2019	Yellow Perch	6.9	6.5	3.80	whole body composite		GMBY-YLPR-C-08	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-51	6/3/2019	Yellow Perch	6.9	6.6	3.94	whole body composite		GMBY-YLPR-C-07	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-52	6/3/2019	Yellow Perch	6.6	6.2	3.11	whole body composite		GMBY-YLPR-C-07	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-53	6/3/2019	Yellow Perch	6.3	6.0	2.99	whole body composite		GMBY-YLPR-C-07	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-54	6/3/2019	Yellow Perch	6.2	5.8	2.58	whole body composite		GMBY-YLPR-C-07	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-44	6/3/2019	Yellow Perch	6.0	5.6	2.75	whole body composite		GMBY-YLPR-C-06	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-45	6/3/2019	Yellow Perch	6.5	6.2	3.24	whole body composite		GMBY-YLPR-C-06	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-46	6/3/2019	Yellow Perch	6.1	5.7	2.53	whole body composite		GMBY-YLPR-C-06	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-47	6/3/2019	Yellow Perch	6.7	6.3	3.41	whole body composite		GMBY-YLPR-C-06	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-49	6/3/2019	Yellow Perch	7.0	6.6	3.78	whole body composite		GMBY-YLPR-C-06	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-37	6/3/2019	Yellow Perch	6.4	6.0	2.89	whole body composite		GMBY-YLPR-C-05	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-38	6/3/2019	Yellow Perch	5.9	5.5	2.18	whole body composite		GMBY-YLPR-C-05	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-39	6/3/2019	Yellow Perch	5.5	5.3	1.79	whole body composite		GMBY-YLPR-C-05	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-40	6/3/2019	Yellow Perch	5.0	4.8	1.51	whole body composite		GMBY-YLPR-C-05	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-41	6/3/2019	Yellow Perch	6.1	5.7	2.43	whole body composite		GMBY-YLPR-C-05	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-43	6/3/2019	Yellow Perch	6.3	6.0	2.44	whole body composite		GMBY-YLPR-C-05	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-29	6/3/2019	Yellow Perch	5.7	5.5	2.23	whole body composite		GMBY-YLPR-C-04	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-30	6/3/2019	Yellow Perch	5.8	5.5	2.05	whole body composite		GMBY-YLPR-C-04	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-31	6/3/2019	Yellow Perch	5.5	5.2	1.86	whole body composite		GMBY-YLPR-C-04	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-33	6/3/2019	Yellow Perch	5.8	5.5	2.20	whole body composite		GMBY-YLPR-C-04	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-34	6/3/2019	Yellow Perch	6.0	5.6	2.63	whole body composite		GMBY-YLPR-C-04	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-35	6/3/2019	Yellow Perch	5.6	5.3	2.05	whole body composite		GMBY-YLPR-C-04	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-23	6/3/2019	Yellow Perch	5.5	5.3	1.90	whole body composite		GMBY-YLPR-C-03	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-24	6/3/2019	Yellow Perch	6.1	5.7	2.48	whole body composite		GMBY-YLPR-C-03	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-26	6/3/2019	Yellow Perch	6.4	6.0	3.04	whole body composite		GMBY-YLPR-C-03	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-27	6/3/2019	Yellow Perch	6.1	5.7	2.31	whole body composite		GMBY-YLPR-C-03	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-28	6/3/2019	Yellow Perch	6.2	5.9	2.67	whole body composite		GMBY-YLPR-C-03	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-12	6/3/2019	Yellow Perch	5.0	4.7	1.37	whole body composite		GMBY-YLPR-C-02	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-13	6/3/2019	Yellow Perch	5.4	5.1	1.69	whole body composite		GMBY-YLPR-C-02	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-14	6/3/2019	Yellow Perch	5.1	4.8	1.33	whole body composite		GMBY-YLPR-C-02	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-15	6/3/2019	Yellow Perch	5.3	5.0	1.63	whole body composite		GMBY-YLPR-C-02	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-16	6/3/2019	Yellow Perch	5.2	5.0	1.57	whole body composite		GMBY-YLPR-C-02	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-18	6/3/2019	Yellow Perch	5.0	4.8	1.29	whole body composite		GMBY-YLPR-C-02	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-19	6/3/2019	Yellow Perch	5.5	5.2	2.03	whole body composite		GMBY-YLPR-C-02	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-21	6/3/2019	Yellow Perch	5.0	4.7	1.42	whole body composite		GMBY-YLPR-C-02	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-02	6/3/2019	Yellow Perch	5.1	4.7	1.48	whole body composite		GMBY-YLPR-C-01	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-03	6/3/2019	Yellow Perch	5.7	5.4	1.98	whole body composite		GMBY-YLPR-C-01	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-04	6/3/2019	Yellow Perch	5.2	4.9	1.46	whole body composite		GMBY-YLPR-C-01	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-05	6/3/2019	Yellow Perch	5.2	4.9	1.36	whole body composite		GMBY-YLPR-C-01	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-06	6/3/2019	Yellow Perch	4.8	4.5	1.05	whole body composite		GMBY-YLPR-C-01	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-07	6/3/2019	Yellow Perch	4.6	4.3	1.14	whole body composite		GMBY-YLPR-C-01	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-09	6/3/2019	Yellow Perch	5.8	5.5	2.44	whole body composite		GMBY-YLPR-C-01	
Gamsby Lake	-	GMBY-EF01	GMBY-YLPR-10	6/3/2019	Yellow Perch	5.3	5.0	1.72	whole body composite		GMBY-YLPR-C-01	
Gamsby Lake	-	EF-01	YLPR-190	8/23/2018	Yellow Perch	3.9	3.8	0.67	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-191	8/23/2018	Yellow Perch	3.8	3.7	0.60	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-192	8/23/2018	Yellow Perch	4.0	3.8	0.62	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-193	8/23/2018	Yellow Perch	3.6	3.5	0.60	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-194	8/23/2018	Yellow Perch	3.5	3.4	0.41	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-195	8/23/2018	Yellow Perch	3.7	3.6	0.61	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-196	8/23/2018	Yellow Perch	3.2	3.1	0.36	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-197	8/23/2018	Yellow Perch	3.6	3.5	0.48	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-198	8/23/2018	Yellow Perch	3.5	3.4	0.51	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-199	8/23/2018	Yellow Perch	3.6	3.5	0.46	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-200	8/23/2018	Yellow Perch	3.6	3.5	0.51	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-201	8/23/2018	Yellow Perch	3.5	3.4	0.43	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-202	8/23/2018	Yellow Perch	3.7	3.5	0.53	whole body composite	-	YLPR-H-T	-

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Gamsby Lake	-	EF-01	YLPR-203	8/23/2018	Yellow Perch	3.6	3.5	0.50	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-204	8/23/2018	Yellow Perch	3.6	3.5	0.48	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-205	8/23/2018	Yellow Perch	3.8	3.7	0.61	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-206	8/23/2018	Yellow Perch	3.2	3.1	0.31	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-207	8/23/2018	Yellow Perch	3.5	3.4	0.50	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-208	8/23/2018	Yellow Perch	3.8	3.7	0.61	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-209	8/23/2018	Yellow Perch	3.9	3.7	0.52	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-210	8/23/2018	Yellow Perch	3.9	3.8	0.64	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-211	8/23/2018	Yellow Perch	3.9	3.8	0.55	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-212	8/23/2018	Yellow Perch	4.3	4.2	0.85	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-213	8/23/2018	Yellow Perch	3.7	3.6	0.58	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-214	8/23/2018	Yellow Perch	3.6	3.5	0.50	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-215	8/23/2018	Yellow Perch	3.3	3.2	0.32	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-216	8/23/2018	Yellow Perch	3.2	3.1	0.44	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-217	8/23/2018	Yellow Perch	4.3	4.2	0.97	whole body composite	-	YLPR-H-T	-
Gamsby Lake	-	EF-01	YLPR-162	8/23/2018	Yellow Perch	3.8	3.7	0.56	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-163	8/23/2018	Yellow Perch	3.2	3.1	0.40	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-164	8/23/2018	Yellow Perch	3.7	3.6	0.65	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-165	8/23/2018	Yellow Perch	3.7	3.6	0.56	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-166	8/23/2018	Yellow Perch	3.3	3.2	0.38	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-167	8/23/2018	Yellow Perch	3.8	3.7	0.67	whole body composite	-	YLPR-G-T	-

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Gamsby Lake	-	EF-01	YLPR-168	8/23/2018	Yellow Perch	3.6	3.5	0.59	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-169	8/23/2018	Yellow Perch	3.7	3.6	0.61	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-170	8/23/2018	Yellow Perch	3.4	3.3	0.40	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-171	8/23/2018	Yellow Perch	3.4	3.3	0.43	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-172	8/23/2018	Yellow Perch	3.5	3.4	0.60	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-173	8/23/2018	Yellow Perch	3.5	3.4	0.51	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-174	8/23/2018	Yellow Perch	3.8	3.7	0.74	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-175	8/23/2018	Yellow Perch	3.4	3.3	0.39	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-176	8/23/2018	Yellow Perch	4.0	3.9	0.41	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-177	8/23/2018	Yellow Perch	3.7	3.6	0.68	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-178	8/23/2018	Yellow Perch	4.0	3.9	0.62	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-179	8/23/2018	Yellow Perch	3.8	3.7	0.55	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-180	8/23/2018	Yellow Perch	3.8	3.7	0.70	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-181	8/23/2018	Yellow Perch	3.5	3.4	0.51	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-182	8/23/2018	Yellow Perch	3.5	3.4	0.47	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-183	8/23/2018	Yellow Perch	3.6	3.5	0.53	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-184	8/23/2018	Yellow Perch	3.6	3.5	0.55	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-185	8/23/2018	Yellow Perch	3.3	3.2	0.45	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-186	8/23/2018	Yellow Perch	3.3	3.2	0.48	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-187	8/23/2018	Yellow Perch	3.4	3.3	0.49	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-188	8/23/2018	Yellow Perch	3.8	3.7	0.63	whole body composite	-	YLPR-G-T	-

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Gamsby Lake	-	EF-01	YLPR-189	8/23/2018	Yellow Perch	4.1	4.0	0.88	whole body composite	-	YLPR-G-T	-
Gamsby Lake	-	EF-01	YLPR-136	8/23/2018	Yellow Perch	3.8	3.7	0.58	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-137	8/23/2018	Yellow Perch	3.9	3.8	0.50	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-138	8/23/2018	Yellow Perch	3.5	3.4	0.47	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-139	8/23/2018	Yellow Perch	4.2	4.1	0.88	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-140	8/23/2018	Yellow Perch	3.6	3.5	0.54	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-141	8/23/2018	Yellow Perch	4.1	3.9	0.91	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-142	8/23/2018	Yellow Perch	3.5	3.3	0.50	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-143	8/23/2018	Yellow Perch	3.4	3.3	0.43	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-144	8/23/2018	Yellow Perch	4.1	3.9	0.69	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-145	8/23/2018	Yellow Perch	4.0	3.9	0.66	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-146	8/23/2018	Yellow Perch	4.0	3.9	0.69	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-147	8/23/2018	Yellow Perch	4.0	3.9	0.66	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-148	8/23/2018	Yellow Perch	3.6	3.5	0.54	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-149	8/23/2018	Yellow Perch	3.9	3.7	0.61	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-150	8/23/2018	Yellow Perch	4.1	3.9	0.72	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-151	8/23/2018	Yellow Perch	3.9	3.7	0.67	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-152	8/23/2018	Yellow Perch	3.6	3.4	0.48	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-153	8/23/2018	Yellow Perch	3.7	3.6	0.57	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-154	8/23/2018	Yellow Perch	4.0	3.9	0.77	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-155	8/23/2018	Yellow Perch	3.9	3.8	0.61	whole body composite	-	YLPR-F-T	-

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Gamsby Lake	-	EF-01	YLPR-156	8/23/2018	Yellow Perch	3.4	3.3	0.43	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-157	8/23/2018	Yellow Perch	3.3	3.2	0.33	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-158	8/23/2018	Yellow Perch	3.6	3.5	0.46	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-159	8/23/2018	Yellow Perch	3.6	3.5	0.49	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-160	8/23/2018	Yellow Perch	3.5	3.4	0.54	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-161	8/23/2018	Yellow Perch	3.5	3.4	0.54	whole body composite	-	YLPR-F-T	-
Gamsby Lake	-	EF-01	YLPR-110	8/23/2018	Yellow Perch	4.1	3.9	0.81	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-111	8/23/2018	Yellow Perch	4.0	3.9	0.92	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-112	8/23/2018	Yellow Perch	3.8	3.7	0.74	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-113	8/23/2018	Yellow Perch	3.7	3.5	0.56	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-114	8/23/2018	Yellow Perch	4.0	3.8	0.84	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-115	8/23/2018	Yellow Perch	3.6	3.5	0.62	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-116	8/23/2018	Yellow Perch	3.8	3.7	0.54	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-117	8/23/2018	Yellow Perch	3.9	3.7	0.57	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-118	8/23/2018	Yellow Perch	3.9	3.7	0.60	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-119	8/23/2018	Yellow Perch	3.5	3.3	0.49	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-120	8/23/2018	Yellow Perch	3.9	3.7	0.74	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-121	8/23/2018	Yellow Perch	3.9	3.7	0.67	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-122	8/23/2018	Yellow Perch	3.6	3.5	0.55	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-123	8/23/2018	Yellow Perch	4.0	3.8	0.52	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-124	8/23/2018	Yellow Perch	4.0	3.8	0.72	whole body composite	-	YLPR-E-T	-

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Gamsby Lake	-	EF-01	YLPR-125	8/23/2018	Yellow Perch	3.2	3.1	0.40	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-126	8/23/2018	Yellow Perch	4.1	4.0	0.75	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-127	8/23/2018	Yellow Perch	3.9	3.8	0.61	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-128	8/23/2018	Yellow Perch	3.5	3.4	0.53	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-129	8/23/2018	Yellow Perch	3.7	3.6	0.58	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-130	8/23/2018	Yellow Perch	3.2	3.1	0.38	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-131	8/23/2018	Yellow Perch	3.3	3.2	0.49	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-132	8/23/2018	Yellow Perch	3.5	3.3	0.54	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-133	8/23/2018	Yellow Perch	3.6	3.5	0.43	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-134	8/23/2018	Yellow Perch	3.6	3.5	0.56	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-135	8/23/2018	Yellow Perch	3.4	3.3	0.52	whole body composite	-	YLPR-E-T	-
Gamsby Lake	-	EF-01	YLPR-085	8/23/2018	Yellow Perch	4.0	3.8	0.74	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-086	8/23/2018	Yellow Perch	3.7	3.6	0.66	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-087	8/23/2018	Yellow Perch	3.4	3.3	0.52	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-088	8/23/2018	Yellow Perch	4.0	3.8	0.66	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-089	8/23/2018	Yellow Perch	4.0	3.9	0.95	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-090	8/23/2018	Yellow Perch	3.5	3.3	0.60	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-091	8/23/2018	Yellow Perch	3.8	3.7	0.65	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-092	8/23/2018	Yellow Perch	3.9	3.7	0.62	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-093	8/23/2018	Yellow Perch	3.5	3.4	0.52	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-094	8/23/2018	Yellow Perch	3.0	2.7	0.31	whole body composite	-	YLPR-D-T	-

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Gamsby Lake	-	EF-01	YLPR-095	8/23/2018	Yellow Perch	3.7	3.5	0.53	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-096	8/23/2018	Yellow Perch	3.5	3.4	0.44	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-097	8/23/2018	Yellow Perch	3.8	3.7	0.64	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-098	8/23/2018	Yellow Perch	3.8	3.6	0.67	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-099	8/23/2018	Yellow Perch	4.0	3.9	0.52	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-100	8/23/2018	Yellow Perch	4.0	3.9	0.83	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-101	8/23/2018	Yellow Perch	4.0	3.8	0.73	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-102	8/23/2018	Yellow Perch	3.5	3.4	0.50	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-103	8/23/2018	Yellow Perch	3.9	3.7	0.59	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-104	8/23/2018	Yellow Perch	3.7	3.5	0.57	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-105	8/23/2018	Yellow Perch	3.8	3.6	0.62	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-106	8/23/2018	Yellow Perch	3.7	3.6	0.52	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-107	8/23/2018	Yellow Perch	4.0	3.8	0.73	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-108	8/23/2018	Yellow Perch	3.9	3.8	0.62	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-109	8/23/2018	Yellow Perch	3.7	3.5	0.61	whole body composite	-	YLPR-D-T	-
Gamsby Lake	-	EF-01	YLPR-060	8/23/2018	Yellow Perch	3.5	3.3	0.39	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-061	8/23/2018	Yellow Perch	3.8	3.6	0.72	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-062	8/23/2018	Yellow Perch	3.8	3.7	0.64	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-063	8/23/2018	Yellow Perch	4.1	3.9	0.79	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-064	8/23/2018	Yellow Perch	4.0	3.8	0.86	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-065	8/23/2018	Yellow Perch	4.0	3.8	0.74	whole body composite	-	YLPR-C-T	-

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Gamsby Lake	-	EF-01	YLPR-066	8/23/2018	Yellow Perch	3.9	3.7	0.72	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-067	8/23/2018	Yellow Perch	4.0	3.8	0.60	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-068	8/23/2018	Yellow Perch	3.6	3.5	0.48	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-069	8/23/2018	Yellow Perch	3.3	3.2	0.52	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-070	8/23/2018	Yellow Perch	3.7	3.6	0.55	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-071	8/23/2018	Yellow Perch	3.7	3.6	0.70	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-072	8/23/2018	Yellow Perch	4.0	3.9	0.71	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-073	8/23/2018	Yellow Perch	3.7	3.6	0.49	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-074	8/23/2018	Yellow Perch	4.1	3.9	0.77	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-075	8/23/2018	Yellow Perch	3.7	3.6	0.56	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-076	8/23/2018	Yellow Perch	3.9	3.7	0.66	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-077	8/23/2018	Yellow Perch	4.1	3.9	0.82	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-078	8/23/2018	Yellow Perch	3.8	3.6	0.67	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-079	8/23/2018	Yellow Perch	3.7	3.6	0.56	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-080	8/23/2018	Yellow Perch	3.5	3.4	0.51	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-081	8/23/2018	Yellow Perch	3.4	3.3	0.42	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-082	8/23/2018	Yellow Perch	3.4	3.3	0.39	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-083	8/23/2018	Yellow Perch	4.0	3.9	0.91	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-084	8/23/2018	Yellow Perch	3.5	3.3	0.49	whole body composite	-	YLPR-C-T	-
Gamsby Lake	-	EF-01	YLPR-032	8/23/2018	Yellow Perch	3.5	3.4	0.49	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-033	8/23/2018	Yellow Perch	3.6	3.5	0.44	whole body composite	-	YLPR-B-T	-

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Gamsby Lake	-	EF-01	YLPR-034	8/23/2018	Yellow Perch	3.6	3.5	0.49	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-035	8/23/2018	Yellow Perch	3.8	3.6	0.65	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-036	8/23/2018	Yellow Perch	3.7	3.6	0.69	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-037	8/23/2018	Yellow Perch	3.8	3.7	0.55	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-038	8/23/2018	Yellow Perch	3.5	3.3	0.49	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-039	8/23/2018	Yellow Perch	3.8	3.7	0.68	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-040	8/23/2018	Yellow Perch	3.5	3.4	0.55	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-041	8/23/2018	Yellow Perch	3.7	3.6	0.60	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-042	8/23/2018	Yellow Perch	3.6	3.5	0.57	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-043	8/23/2018	Yellow Perch	3.5	3.4	0.51	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-044	8/23/2018	Yellow Perch	3.5	3.4	0.54	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-045	8/23/2018	Yellow Perch	3.6	3.5	0.60	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-046	8/23/2018	Yellow Perch	3.8	3.6	0.52	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-047	8/23/2018	Yellow Perch	3.4	3.3	0.42	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-048	8/23/2018	Yellow Perch	3.6	3.5	0.53	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-049	8/23/2018	Yellow Perch	3.4	3.3	0.51	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-050	8/23/2018	Yellow Perch	3.4	3.3	0.47	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-051	8/23/2018	Yellow Perch	3.7	3.5	0.46	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-052	8/23/2018	Yellow Perch	3.8	3.6	0.79	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-053	8/23/2018	Yellow Perch	3.8	3.7	0.70	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-054	8/23/2018	Yellow Perch	3.4	3.3	0.47	whole body composite	-	YLPR-B-T	-

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Gamsby Lake	-	EF-01	YLPR-055	8/23/2018	Yellow Perch	3.5	3.4	0.42	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-056	8/23/2018	Yellow Perch	3.3	3.2	0.39	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-057	8/23/2018	Yellow Perch	3.5	3.4	0.55	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-058	8/23/2018	Yellow Perch	4.0	3.9	0.90	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-059	8/23/2018	Yellow Perch	3.5	3.4	0.48	whole body composite	-	YLPR-B-T	-
Gamsby Lake	-	EF-01	YLPR-001	8/23/2018	Yellow Perch	3.2	3.0	0.39	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-002	8/23/2018	Yellow Perch	3.1	2.9	0.38	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-003	8/23/2018	Yellow Perch	3.6	3.4	0.48	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-004	8/23/2018	Yellow Perch	3.1	2.9	0.31	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-005	8/23/2018	Yellow Perch	3.2	3.0	0.36	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-006	8/23/2018	Yellow Perch	3.3	3.1	0.46	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-007	8/23/2018	Yellow Perch	3.4	3.3	0.36	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-008	8/23/2018	Yellow Perch	3.4	3.3	0.40	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-009	8/23/2018	Yellow Perch	3.6	3.4	0.49	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-010	8/23/2018	Yellow Perch	3.6	3.4	0.46	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-011	8/23/2018	Yellow Perch	3.6	3.5	0.44	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-012	8/23/2018	Yellow Perch	3.5	3.3	0.49	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-013	8/23/2018	Yellow Perch	3.7	3.5	0.54	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-014	8/23/2018	Yellow Perch	3.6	3.4	0.52	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-015	8/23/2018	Yellow Perch	3.4	3.3	0.44	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-016	8/23/2018	Yellow Perch	3.6	3.5	0.58	whole body composite	-	YLPR-A-T	-

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Gamsby Lake	-	EF-01	YLPR-017	8/23/2018	Yellow Perch	3.5	3.3	0.50	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-018	8/23/2018	Yellow Perch	3.6	3.4	0.56	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-019	8/23/2018	Yellow Perch	3.7	3.5	0.51	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-020	8/23/2018	Yellow Perch	3.6	3.3	0.55	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-021	8/23/2018	Yellow Perch	3.4	3.3	0.40	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-022	8/23/2018	Yellow Perch	3.8	3.6	0.59	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-023	8/23/2018	Yellow Perch	3.6	3.5	0.53	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-024	8/23/2018	Yellow Perch	3.7	3.5	0.57	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-025	8/23/2018	Yellow Perch	3.9	3.7	0.66	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-026	8/23/2018	Yellow Perch	3.5	3.4	0.59	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-027	8/23/2018	Yellow Perch	3.9	3.7	0.66	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-028	8/23/2018	Yellow Perch	3.6	3.5	0.51	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-029	8/23/2018	Yellow Perch	3.3	3.1	0.48	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-030	8/23/2018	Yellow Perch	3.6	3.5	0.63	whole body composite	-	YLPR-A-T	-
Gamsby Lake	-	EF-01	YLPR-031	8/23/2018	Yellow Perch	3.6	3.5	0.55	whole body composite	-	YLPR-A-T	-
Southwest Arm Tributary	A5	SWAT-A5	YLPR-001	6/7/2023	Yellow Perch	5.9	5.5	1.88	whole body		A5-YLPR-01	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-002	6/7/2023	Yellow Perch	6.2	5.8	2.19	whole body		A5-YLPR-01	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Southwest Arm Tributary	A5	SWAT-A5	YLPR-003	6/7/2023	Yellow Perch	5.7	5.4	1.74	whole body		A5-YLPR-01	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-004	6/7/2023	Yellow Perch	5.9	5.5	1.98	whole body		A5-YLPR-01	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-005	6/7/2023	Yellow Perch	6.2	5.8	2.27	whole body		A5-YLPR-01	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-006	6/7/2023	Yellow Perch	5.9	5.5	1.88	whole body	11.94	A5-YLPR-01	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-008	6/7/2023	Yellow Perch	6.6	6.2	2.68	whole body		A5-YLPR-02	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-009	6/7/2023	Yellow Perch	6.4	6.0	2.45	whole body		A5-YLPR-02	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-010	6/7/2023	Yellow Perch	6.0	5.5	2.01	whole body		A5-YLPR-02	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-011	6/7/2023	Yellow Perch	6.3	5.9	2.52	whole body		A5-YLPR-02	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-012	6/7/2023	Yellow Perch	6.2	5.8	2.40	whole body	12.06	A5-YLPR-02	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Southwest Arm Tributary	A5	SWAT-A5	YLPR-014	6/7/2023	Yellow Perch	6.0	5.5	1.79	whole body		A5-YLPR-03	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-015	6/7/2023	Yellow Perch	6.1	5.6	2.14	whole body		A5-YLPR-03	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-016	6/7/2023	Yellow Perch	6.1	5.6	2.38	whole body		A5-YLPR-03	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-017	6/7/2023	Yellow Perch	6.4	5.9	2.69	whole body		A5-YLPR-03	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-018	6/7/2023	Yellow Perch	6.2	5.7	2.13	whole body	11.13	A5-YLPR-03	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-020	6/7/2023	Yellow Perch	6.2	5.6	2.29	whole body		A5-YLPR-04	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-021	6/7/2023	Yellow Perch	5.8	5.4	1.88	whole body		A5-YLPR-04	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-022	6/7/2023	Yellow Perch	6.1	5.7	2.22	whole body		A5-YLPR-04	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-023	6/7/2023	Yellow Perch	6.3	5.9	2.60	whole body		A5-YLPR-04	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Southwest Arm Tributary	A5	SWAT-A5	YLPR-024	6/7/2023	Yellow Perch	6.8	6.3	3.38	whole body	12.37	A5-YLPR-04	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-026	6/7/2023	Yellow Perch	6.3	5.9	2.36	whole body		A5-YLPR-05	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-027	6/7/2023	Yellow Perch	6.3	5.9	2.60	whole body		A5-YLPR-05	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-028	6/7/2023	Yellow Perch	6.8	6.3	3.19	whole body		A5-YLPR-05	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-029	6/7/2023	Yellow Perch	6.9	6.4	3.18	whole body	11.33	A5-YLPR-05	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-031	6/7/2023	Yellow Perch	6.5	6.1	2.57	whole body		A5-YLPR-06	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-032	6/7/2023	Yellow Perch	6.7	6.2	2.61	whole body		A5-YLPR-06	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-033	6/7/2023	Yellow Perch	6.5	6.0	2.60	whole body		A5-YLPR-06	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-034	6/7/2023	Yellow Perch	6.4	6.0	2.21	whole body		A5-YLPR-06	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Southwest Arm Tributary	A5	SWAT-A5	YLPR-035	6/7/2023	Yellow Perch	6.4	6.0	2.66	whole body	12.65	A5-YLPR-06	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-037	6/7/2023	Yellow Perch	6.1	5.7	2.20	whole body		A5-YLPR-07	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-038	6/7/2023	Yellow Perch	6.1	5.7	2.02	whole body		A5-YLPR-07	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-039	6/7/2023	Yellow Perch	6.1	5.7	2.27	whole body		A5-YLPR-07	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-040	6/7/2023	Yellow Perch	6.3	5.9	2.47	whole body		A5-YLPR-07	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-041	6/7/2023	Yellow Perch	6.3	5.9	2.43	whole body	11.39	A5-YLPR-07	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-043	6/7/2023	Yellow Perch	6.2	5.9	2.60	whole body		A5-YLPR-08	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-044	6/7/2023	Yellow Perch	6.4	6.0	3.08	whole body		A5-YLPR-08	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-045	6/7/2023	Yellow Perch	6.5	6.0	2.64	whole body		A5-YLPR-08	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Southwest Arm Tributary	A5	SWAT-A5	YLPR-046	6/7/2023	Yellow Perch	6.8	6.3	3.05	whole body	11.37	A5-YLPR-08	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-048	6/7/2023	Yellow Perch	6.8	6.2	3.31	whole body		A5-YLPR-09	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-049	6/7/2023	Yellow Perch	6.8	6.3	3.08	whole body		A5-YLPR-09	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-050	6/7/2023	Yellow Perch	7.2	6.6	3.47	whole body		A5-YLPR-09	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-051	6/7/2023	Yellow Perch	6.9	6.4	3.07	whole body	12.93	A5-YLPR-09	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-053	6/7/2023	Yellow Perch	6.8	6.3	3.26	whole body		A5-YLPR-10	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-054	6/7/2023	Yellow Perch	7.2	6.6	3.71	whole body		A5-YLPR-10	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-055	6/7/2023	Yellow Perch	7.1	6.6	4.17	whole body		A5-YLPR-10	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-056	6/7/2023	Yellow Perch	7.8	7.3	4.76	whole body		A5-YLPR-10	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Southwest Arm Tributary	A5	SWAT-A5	YLPR-057	6/7/2023	Yellow Perch	7.8	7.2	4.87	whole body		A5-YLPR-10	
Southwest Arm Tributary	A5	SWAT-A5	YLPR-058	6/7/2023	Yellow Perch	6.6	6.4	2.99	whole body	23.76	A5-YLPR-10	Yes
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-001	6/16/2021	Yellow Perch	6.6	6.3	3.04			A5-02	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-003	6/16/2021	Yellow Perch	6.5	6.2	2.98	Whole Body		A5-01	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-004	6/16/2021	Yellow Perch	6.8	6.4	3.40	Whole Body		A5-03	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-007	6/16/2021	Yellow Perch	7.2	6.9	4.55	Whole Body		A5-05	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-008	6/16/2021	Yellow Perch	7.2	6.8	4.91	Whole Body		A5-05	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-010	6/16/2021	Yellow Perch	7.4	6.9	4.51	Whole Body		A5-06	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-011	6/16/2021	Yellow Perch	7.7	7.4	6.21	Whole Body		A5-07	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-012	6/16/2021	Yellow Perch	6.8	6.5	3.29	Whole Body		A5-03	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-013	6/16/2021	Yellow Perch	6.6	6.3	2.96	Whole Body		A5-02	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-014	6/16/2021	Yellow Perch	6.7	6.4	3.55	Whole Body		A5-03	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-016	6/16/2021	Yellow Perch	7.2	6.9	4.98	Whole Body		A5-05	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-017	6/16/2021	Yellow Perch	7.6	7.3	5.40	Whole Body		A5-07	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-019	6/16/2021	Yellow Perch	7.6	7.4	5.13	Whole Body		A5-07	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-020	6/16/2021	Yellow Perch	7.2	6.8	4.63	Whole Body		A5-05	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-022	6/16/2021	Yellow Perch	6.6	6.4	3.34	Whole Body		A5-02	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-025	6/16/2021	Yellow Perch	6.7	6.4	3.12	Whole Body		A5-03	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-029	6/16/2021	Yellow Perch	7.4	7.0	4.53	Whole Body		A5-06	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-031	6/16/2021	Yellow Perch	6.5	6.2	2.82	Whole Body		A5-01	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-033	6/16/2021	Yellow Perch	6.7	6.3	3.29	Whole Body		A5-03	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-034	6/16/2021	Yellow Perch	6.9	6.6	3.84	Whole Body		A5-04	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-039	6/16/2021	Yellow Perch	6.5	6.3	3.10	Whole Body		A5-01	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-043	6/16/2021	Yellow Perch	6.9	6.6	2.93	Whole Body		A5-04	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-045	6/16/2021	Yellow Perch	6.5	6.2	2.99	Whole Body		A5-01	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-047	6/16/2021	Yellow Perch	6.5	6.2	3.15	Whole Body		A5-01	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-054	6/16/2021	Yellow Perch	7.5	7.2	5.04	Whole Body		A5-07	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-059	6/16/2021	Yellow Perch	6.9	6.6	3.84	Whole Body		A5-04	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-067	6/16/2021	Yellow Perch	6.5	6.2	2.80	Whole Body		A5-02	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-069	6/16/2021	Yellow Perch	7.3	7.0	3.87	Whole Body		A5-06	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-070	6/16/2021	Yellow Perch	7.3	6.9	4.84	Whole Body		A5-06	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-074	6/16/2021	Yellow Perch	7.6	7.3	5.64	Whole Body		A5-07	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-075	6/16/2021	Yellow Perch	6.5	6.2	3.15	Whole Body		A5-02	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-076	6/16/2021	Yellow Perch	7.1	6.8	4.38	Whole Body		A5-05	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-077	6/16/2021	Yellow Perch	6.9	6.6	4.07	Whole Body		A5-04	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-078	6/16/2021	Yellow Perch	7.3	6.9	4.50	Whole Body		A5-06	
Southwest Arm Tributary	A5	SWAT-A5	A5-YLPR-081	6/16/2021	Yellow Perch	6.9	6.5	3.30	Whole Body		A5-04	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-003	6/19/2021	Yellow Perch	6.9	6.5	3.33	Whole Body		A3-03	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-004	6/19/2021	Yellow Perch	7.9	7.5	5.56	Whole Body		A3-07	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-006	6/19/2021	Yellow Perch	6.9	6.5	3.18	Whole Body		A3-03	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-008	6/19/2021	Yellow Perch	7.5	7.0	5.06	Whole Body		A3-06	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Southwest Pond 3	SWP3	SWP3	A3-YLPR-012	6/19/2021	Yellow Perch	7.4	7.0	4.20	Whole Body		A3-06	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-013	6/19/2021	Yellow Perch	6.5	6.2	2.68	Whole Body		A3-01	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-014	6/19/2021	Yellow Perch	7.5	7.1	4.92	Whole Body		A3-06	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-015	6/19/2021	Yellow Perch	6.4	6.0	2.75	Whole Body		A3-01	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-016	6/19/2021	Yellow Perch	6.7	6.3	2.95	Whole Body		A3-02	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-017	6/19/2021	Yellow Perch	6.4	6.0	2.95	Whole Body		A3-01	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-018	6/19/2021	Yellow Perch	7.2	6.8	4.48	Whole Body		A3-05	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-019	6/19/2021	Yellow Perch	7.9	7.4	5.53	Whole Body		A3-07	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-021	6/19/2021	Yellow Perch	6.4	6.0	2.77	Whole Body		A3-01	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-023	6/19/2021	Yellow Perch	7.0	6.6	3.95	Whole Body		A3-04	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-027	6/19/2021	Yellow Perch	7.0	6.5	3.59	Whole Body		A3-04	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-029	6/19/2021	Yellow Perch	7.0	6.6	3.44	Whole Body		A3-04	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-030	6/19/2021	Yellow Perch	7.2	6.8	3.98	Whole Body		A3-05	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-031	6/19/2021	Yellow Perch	7.5	7.0	5.06	Whole Body		A3-06	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Southwest Pond 3	SWP3	SWP3	A3-YLPR-032	6/19/2021	Yellow Perch	7.8	7.4	5.73	Whole Body		A3-07	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-033	6/19/2021	Yellow Perch	7.9	7.4	4.70	Whole Body		A3-07	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-034	6/19/2021	Yellow Perch	7.9	7.5	6.31	Whole Body		A3-07	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-036	6/19/2021	Yellow Perch	6.9	6.5	3.78	Whole Body		A3-03	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-037	6/19/2021	Yellow Perch	7.0	6.5	3.32	Whole Body		A3-04	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-045	6/19/2021	Yellow Perch	6.6	6.2	3.00	Whole Body		A3-02	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-047	6/19/2021	Yellow Perch	7.0	6.5	3.97	Whole Body		A3-04	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-055	6/19/2021	Yellow Perch	6.8	6.4	3.71	Whole Body		A3-03	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-056	6/19/2021	Yellow Perch	6.7	6.3	2.86	Whole Body		A3-02	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-060	6/19/2021	Yellow Perch	6.5	6.0	2.77	Whole Body		A3-02	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-067	6/19/2021	Yellow Perch	6.6	6.1	3.28	Whole Body		A3-02	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-068	6/19/2021	Yellow Perch	6.8	6.4	3.03	Whole Body		A3-03	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-069	6/19/2021	Yellow Perch	7.1	6.6	3.95	Whole Body		A3-05	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-071	6/19/2021	Yellow Perch	7.1	6.7	4.16	Whole Body		A3-05	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Southwest Pond 3	SWP3	SWP3	A3-YLPR-074	6/19/2021	Yellow Perch	7.4	6.9	4.37	Whole Body		A3-06	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-079	6/19/2021	Yellow Perch	6.3	5.9	2.83	Whole Body		A3-01	
Southwest Pond 3	SWP3	SWP3	A3-YLPR-080	6/19/2021	Yellow Perch	7.1	6.7	3.33	Whole Body		A3-05	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-002	6/20/2021	Yellow Perch	7.8	7.3	5.33	Whole Body		A1B-07	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-004	6/20/2021	Yellow Perch	6.3	5.9	2.77	Whole Body		A1B-01	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-005	6/20/2021	Yellow Perch	6.6	6.3	3.33	Whole Body		A1B-02	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-009	6/20/2021	Yellow Perch	7.8	7.3	5.72	Whole Body		A1B-07	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-010	6/20/2021	Yellow Perch	6.6	6.2	3.62	Whole Body		A1B-02	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-016	6/20/2021	Yellow Perch	7.1	6.6	4.53	Whole Body		A1B-04	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-017	6/20/2021	Yellow Perch	7.1	6.6	4.61	Whole Body		A1B-04	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-018	6/20/2021	Yellow Perch	6.6	6.2	3.34	Whole Body		A1B-02	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-020	6/20/2021	Yellow Perch	7.8	7.4	6.21	Whole Body		A1B-07	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-022	6/20/2021	Yellow Perch	7.0	6.6	4.35	Whole Body		A1B-04	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-025	6/20/2021	Yellow Perch	7.6	7.1	5.40	Whole Body		A1B-06	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-028	6/20/2021	Yellow Perch	7.0	6.6	4.18	Whole Body		A1B-04	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-029	6/20/2021	Yellow Perch	6.4	6.0	3.05	Whole Body		A1B-01	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-030	6/20/2021	Yellow Perch	7.8	7.3	5.78	Whole Body		A1B-07	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-031	6/20/2021	Yellow Perch	7.3	6.8	4.73	Whole Body		A1B-05	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-033	6/20/2021	Yellow Perch	7.6	7.2	5.53	Whole Body		A1B-06	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-035	6/20/2021	Yellow Perch	7.6	7.1	5.05	Whole Body		A1B-06	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-036	6/20/2021	Yellow Perch	7.4	6.8	5.38	Whole Body		A1B-05	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-037	6/20/2021	Yellow Perch	6.3	5.9	2.98	Whole Body		A1B-01	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-043	6/20/2021	Yellow Perch	7.4	6.9	4.46	Whole Body		A1B-05	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-045	6/20/2021	Yellow Perch	6.8	6.3	3.60	Whole Body		A1B-03	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-046	6/20/2021	Yellow Perch	7.5	7.0	5.00	Whole Body		A1B-06	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-047	6/20/2021	Yellow Perch	6.3	5.9	2.97	Whole Body		A1B-01	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-048	6/20/2021	Yellow Perch	6.7	6.4	3.36	Whole Body		A1B-03	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-049	6/20/2021	Yellow Perch	6.7	6.3	3.68	Whole Body		A1B-03	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-052	6/20/2021	Yellow Perch	7.5	7.0	5.17	Whole Body		A1B-06	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-054	6/20/2021	Yellow Perch	6.5	6.1	3.13	Whole Body		A1B-02	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-055	6/20/2021	Yellow Perch	6.5	6.0	3.18	Whole Body		A1B-02	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-057	6/20/2021	Yellow Perch	6.7	6.2	3.80	Whole Body		A1B-03	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-060	6/20/2021	Yellow Perch	7.8	7.3	6.02	Whole Body		A1B-07	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-061	6/20/2021	Yellow Perch	7.0	6.6	4.50	Whole Body		A1B-04	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-064	6/20/2021	Yellow Perch	7.3	6.8	4.44	Whole Body		A1B-05	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-065	6/20/2021	Yellow Perch	6.3	5.9	3.44	Whole Body		A1B-01	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-066	6/20/2021	Yellow Perch	6.7	6.3	3.38	Whole Body		A1B-03	
Unnamed Tributary to Gamsby Lake	UTGA	UTGA	UTGA-YLPR-067	6/20/2021	Yellow Perch	7.4	6.9	5.65	Whole Body		A1B-05	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-500	8/30/2018	Yellow Perch	5.8	5.5	2.08	-	-	KLSW-YLPR-Comp8	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-503	8/30/2018	Yellow Perch	5.9	5.6	2.06	-	-	KLSW-YLPR-Comp7	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-505	8/30/2018	Yellow Perch	6.0	5.7	2.2	-	-	KLSW-YLPR-Comp4	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-507	8/30/2018	Yellow Perch	6.1	5.7	2.38	-	-	KLSW-YLPR-Comp5	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-509	8/30/2018	Yellow Perch	5.6	5.3	1.81	-	-	KLSW-YLPR-Comp8	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-510	8/30/2018	Yellow Perch	5.9	5.6	2.12	-	-	KLSW-YLPR-Comp1	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-513	8/30/2018	Yellow Perch	5.2	4.8	1.44	-	-	KLSW-YLPR-Comp2	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-516	8/30/2018	Yellow Perch	5.2	4.8	1.59	-	-	KLSW-YLPR-Comp4	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-519	8/30/2018	Yellow Perch	5.0	4.7	1.4	-	-	KLSW-YLPR-Comp1	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-520	8/30/2018	Yellow Perch	6.1	5.8	2.44	-	-	KLSW-YLPR-Comp2	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-522	8/30/2018	Yellow Perch	5.9	5.5	2.42	-	-	KLSW-YLPR-Comp8	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-523	8/30/2018	Yellow Perch	5.8	5.4	2.06	-	-	KLSW-YLPR-Comp6	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-525	8/30/2018	Yellow Perch	6.0	5.6	2.02	-	-	KLSW-YLPR-Comp5	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-526	8/30/2018	Yellow Perch	5.8	5.6	1.95	-	-	KLSW-YLPR-Comp4	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-527	8/30/2018	Yellow Perch	5.4	5.2	1.63	-	-	KLSW-YLPR-Comp5	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-528	8/30/2018	Yellow Perch	6.0	5.6	2.19	-	-	KLSW-YLPR-Comp3	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-535	8/30/2018	Yellow Perch	5.6	5.3	1.75	-	-	KLSW-YLPR-Comp6	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-537	8/30/2018	Yellow Perch	5.9	5.5	2.23	-	-	KLSW-YLPR-Comp6	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-542	8/30/2018	Yellow Perch	5.2	4.9	1.54	-	-	KLSW-YLPR-Comp3	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-543	8/30/2018	Yellow Perch	5.5	5.1	1.76	-	-	KLSW-YLPR-Comp7	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-547	8/30/2018	Yellow Perch	6.0	5.6	2.21	-	-	KLSW-YLPR-Comp5	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-548	8/30/2018	Yellow Perch	6.2	5.8	2.56	-	-	KLSW-YLPR-Comp6	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-549	8/30/2018	Yellow Perch	5.9	5.5	2.23	-	-	KLSW-YLPR-Comp7	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-552	8/30/2018	Yellow Perch	6.1	5.7	2.26	-	-	KLSW-YLPR-Comp1	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-554	8/30/2018	Yellow Perch	6.3	5.9	2.44	-	-	KLSW-YLPR-Comp3	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-559	8/30/2018	Yellow Perch	5.9	5.5	1.89	-	-	KLSW-YLPR-Comp2	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-565	8/30/2018	Yellow Perch	6.4	6.0	2.65	-	-	KLSW-YLPR-Comp2	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-567	8/30/2018	Yellow Perch	6.0	5.5	2.24	-	-	KLSW-YLPR-Comp8	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-573	8/30/2018	Yellow Perch	5.8	5.5	1.92	-	-	KLSW-YLPR-Comp3	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-580	8/30/2018	Yellow Perch	6.1	5.7	2.27	-	-	KLSW-YLPR-Comp2	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-582	8/30/2018	Yellow Perch	6.0	5.7	2.39	-	-	KLSW-YLPR-Comp6	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-584	8/30/2018	Yellow Perch	6.3	6.0	2.92	-	-	KLSW-YLPR-Comp7	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-589	8/30/2018	Yellow Perch	6.1	5.7	2.42	-	-	KLSW-YLPR-Comp1	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-590	8/30/2018	Yellow Perch	6.3	5.9	2.7	-	-	KLSW-YLPR-Comp4	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-591	8/30/2018	Yellow Perch	6.3	6.0	2.58	-	-	KLSW-YLPR-Comp7	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-593	8/30/2018	Yellow Perch	6.6	6.3	3.3	-	-	KLSW-YLPR-Comp5	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-594	8/30/2018	Yellow Perch	6.6	6.3	3	-	-	KLSW-YLPR-Comp1	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-596	8/30/2018	Yellow Perch	6.0	5.7	2.41	-	-	KLSW-YLPR-Comp7	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-599	8/30/2018	Yellow Perch	6.3	6.0	2.66	-	-	KLSW-YLPR-Comp3	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-601	8/30/2018	Yellow Perch	6.5	6.2	2.95	-	-	KLSW-YLPR-Comp8	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-602	8/30/2018	Yellow Perch	6.2	5.9	2.54	-	-	KLSW-YLPR-Comp5	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-604	8/30/2018	Yellow Perch	6.5	6.1	3.05	-	-	KLSW-YLPR-Comp2	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-605	8/30/2018	Yellow Perch	6.5	6.1	3.18	-	-	KLSW-YLPR-Comp3	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-607	8/30/2018	Yellow Perch	6.0	5.7	2.61	-	-	KLSW-YLPR-Comp1	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-612	8/30/2018	Yellow Perch	6.1	5.7	2.34	-	-	KLSW-YLPR-Comp4	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-620	8/30/2018	Yellow Perch	6.5	6.2	3.21	-	-	KLSW-YLPR-Comp4	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-622	8/30/2018	Yellow Perch	6.5	6.1	2.87	-	-	KLSW-YLPR-Comp6	
Kenogamisis Lake	KLSW	EF-01	KLSW-YLPR-626	8/30/2018	Yellow Perch	6.1	5.9	2.6	-	-	KLSW-YLPR-Comp8	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-001	6/13/2023	Yellow Perch	5.6	5.3	1.62	whole body		SMLK-YLPR-01	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-002	6/13/2023	Yellow Perch	5.6	5.3	1.1	whole body		SMLK-YLPR-01	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-003	6/13/2023	Yellow Perch	5.7	5.3	1.6	whole body		SMLK-YLPR-01	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-004	6/13/2023	Yellow Perch	5.8	5.5	2.05	whole body		SMLK-YLPR-01	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-005	6/13/2023	Yellow Perch	5.9	5.5	2.08	whole body		SMLK-YLPR-01	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-006	6/13/2023	Yellow Perch	6.1	5.8	2.21	whole body		SMLK-YLPR-01	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-007	6/13/2023	Yellow Perch	5.6	5.3	1.91	whole body	12.57	SMLK-YLPR-01	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-010	6/13/2023	Yellow Perch	5.8	5.4	1.85	whole body		SMLK-YLPR-02	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-011	6/13/2023	Yellow Perch	5.9	5.5	2.17	whole body		SMLK-YLPR-02	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-012	6/13/2023	Yellow Perch	5.6	5.3	1.61	whole body		SMLK-YLPR-02	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-013	6/13/2023	Yellow Perch	5.7	5.3	1.73	whole body		SMLK-YLPR-02	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-014	6/13/2023	Yellow Perch	5.6	5.3	1.79	whole body		SMLK-YLPR-02	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-015	6/13/2023	Yellow Perch	5.9	5.5	2.21	whole body	11.36	SMLK-YLPR-02	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-018	6/13/2023	Yellow Perch	5.7	5.3	1.85	whole body		SMLK-YLPR-03	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-019	6/13/2023	Yellow Perch	5.5	5.1	1.55	whole body		SMLK-YLPR-03	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-020	6/13/2023	Yellow Perch	5.7	5.3	1.73	whole body		SMLK-YLPR-03	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-021	6/13/2023	Yellow Perch	5.4	5.0	1.42	whole body		SMLK-YLPR-03	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-022	6/13/2023	Yellow Perch	5.4	5.0	1.34	whole body		SMLK-YLPR-03	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-023	6/13/2023	Yellow Perch	5.6	5.2	1.6	whole body		SMLK-YLPR-03	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-024	6/13/2023	Yellow Perch	5.8	5.4	1.65	whole body	11.14	SMLK-YLPR-03	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-027	6/13/2023	Yellow Perch	5.9	5.5	1.96	whole body		SMLK-YLPR-04	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-028	6/13/2023	Yellow Perch	6.2	5.8	2.25	whole body		SMLK-YLPR-04	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-029	6/13/2023	Yellow Perch	5.8	5.5	1.93	whole body		SMLK-YLPR-04	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-030	6/13/2023	Yellow Perch	5.7	5.4	1.83	whole body		SMLK-YLPR-04	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-031	6/13/2023	Yellow Perch	6.3	5.9	2.25	whole body		SMLK-YLPR-04	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-032	6/13/2023	Yellow Perch	5.7	5.4	2.03	whole body	12.25	SMLK-YLPR-04	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-033	6/13/2023	Yellow Perch	6.1	5.7	2.53	whole body		SMLK-YLPR-05	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-034	6/13/2023	Yellow Perch	6.2	5.8	2.45	whole body		SMLK-YLPR-05	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-035	6/13/2023	Yellow Perch	5.8	5.5	1.86	whole body		SMLK-YLPR-05	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-036	6/13/2023	Yellow Perch	6.1	5.7	2.74	whole body		SMLK-YLPR-05	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-037	6/13/2023	Yellow Perch	6.2	5.8	2.71	whole body	12.29	SMLK-YLPR-05	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-040	6/13/2023	Yellow Perch	5.9	5.6	2.01	whole body		SMLK-YLPR-06	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-041	6/13/2023	Yellow Perch	5.7	5.4	1.76	whole body		SMLK-YLPR-06	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-042	6/13/2023	Yellow Perch	5.7	5.4	1.84	whole body		SMLK-YLPR-06	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-043	6/13/2023	Yellow Perch	5.9	5.6	1.94	whole body		SMLK-YLPR-06	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-044	6/13/2023	Yellow Perch	6.1	5.7	2.17	whole body		SMLK-YLPR-06	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-045	6/13/2023	Yellow Perch	5.9	5.5	1.93	whole body	11.65	SMLK-YLPR-06	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-046	6/13/2023	Yellow Perch	6.0	5.6	2.13	whole body		SMLK-YLPR-07	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-047	6/13/2023	Yellow Perch	6.0	5.7	2.18	whole body		SMLK-YLPR-07	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-048	6/13/2023	Yellow Perch	6.0	5.7	2.2	whole body		SMLK-YLPR-07	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-049	6/13/2023	Yellow Perch	6.0	5.6	1.93	whole body		SMLK-YLPR-07	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-050	6/13/2023	Yellow Perch	6.1	5.7	2.24	whole body		SMLK-YLPR-07	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-051	6/13/2023	Yellow Perch	6.1	5.7	2.29	whole body	12.97	SMLK-YLPR-07	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-053	6/13/2023	Yellow Perch	6.4	6.0	2.48	whole body		SMLK-YLPR-08	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-054	6/13/2023	Yellow Perch	6.6	6.2	2.78	whole body		SMLK-YLPR-08	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-055	6/13/2023	Yellow Perch	6.2	5.9	2.19	whole body		SMLK-YLPR-08	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-056	6/13/2023	Yellow Perch	6.4	6.0	2.54	whole body		SMLK-YLPR-08	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-057	6/13/2023	Yellow Perch	6.7	6.3	2.82	whole body	12.81	SMLK-YLPR-08	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-059	6/13/2023	Yellow Perch	6.6	6.1	3.19	whole body		SMLK-YLPR-09	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-060	6/13/2023	Yellow Perch	6.4	6.0	3.05	whole body		SMLK-YLPR-09	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-061	6/13/2023	Yellow Perch	6.6	6.1	3.25	whole body		SMLK-YLPR-09	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-062	6/13/2023	Yellow Perch	6.5	6.1	3.46	whole body		SMLK-YLPR-09	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-063	6/13/2023	Yellow Perch	6.4	6.0	3.14	whole body		SMLK-YLPR-09	

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Species	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Type of Tissue Sample	Tissue Sample Weight (g)	Tissue Sample ID	Tissue Sample Duplicate
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-064	6/13/2023	Yellow Perch	6.6	6.2	3.02	whole body		SMLK-YLPR-09	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-065	6/13/2023	Yellow Perch	6.6	6.2	2.85	whole body		SMLK-YLPR-09	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-066	6/13/2023	Yellow Perch	6.4	6.0	2.88	whole body	24.84	SMLK-YLPR-09	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-068	6/13/2023	Yellow Perch	7.0	6.5	3.6	whole body		SMLK-YLPR-10	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-069	6/13/2023	Yellow Perch	7.0	6.5	3.2	whole body		SMLK-YLPR-10	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-070	6/13/2023	Yellow Perch	6.8	6.4	3.59	whole body		SMLK-YLPR-10	
South Magnet Lake (SMLK)	SMLK	SMLK	YLPR-071	6/13/2023	Yellow Perch	6.9	6.4	3.58	whole body	13.97	SMLK-YLPR-10	

Appendix E.3 Goldfield Creek Realignment Fish Tissue Laboratory Data

Greenstone Gold Mines GP INC.
ATTN: Mike Johns
1-70 Southgate Drive
Guelph ON N1G 4P5

Date Received: 01-OCT-18
Report Date: 10-JAN-19 13:08 (MT)
Version: FINAL

Client Phone: 519-780-8145

Certificate of Analysis

Lab Work Order #: L2173416

Project P.O. #: 17-00229
Job Reference: 160961254
C of C Numbers:
Legal Site Desc:

<original signed by>

Christine Paradis
Project Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-1 Tissue 21-AUG-18 09:00 GMBY-LKWH-001-T	L2173416-2 Tissue 21-AUG-18 09:00 GMBY-LKWH-002-T	L2173416-4 Tissue 21-AUG-18 09:00 GMBY-LKWH-004-T	L2173416-6 Tissue 21-AUG-18 09:00 GMBY-LKWH-006-T	L2173416-8 Tissue 22-AUG-18 09:00 GMBY-LKWH-008-T
TISSUE						
Physical Tests	% Moisture (%)	75.8	74.8	77.0	80.7	72.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.43	0.42	<0.40	<0.40	0.72
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.115	0.0541	0.0993	0.0816	0.0755
	Barium (Ba)-Total (mg/kg wwt)	0.013	0.016	<0.010	<0.010	0.018
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	325	510	180	56.5	205
	Cesium (Cs)-Total (mg/kg wwt)	0.0259	0.0153	0.0366	0.0216	0.0132
	Chromium (Cr)-Total (mg/kg wwt)	0.025	0.077	0.015	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.136	0.123	0.125	0.124	0.095
	Iron (Fe)-Total (mg/kg wwt)	2.26	2.09	2.18	1.76	1.97
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.237	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	346	334	293	284	287
	Manganese (Mn)-Total (mg/kg wwt)	0.166	0.170	0.126	0.077	0.154
	Mercury (Hg)-Total (mg/kg wwt)	0.0861	0.120	0.103	0.0867	0.113
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0048	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2730	2720	2390	2220	2250
	Potassium (K)-Total (mg/kg wwt)	4420	4370	4010	3990	3790
	Rubidium (Rb)-Total (mg/kg wwt)	9.01	6.59	8.05	6.43	6.11
	Selenium (Se)-Total (mg/kg wwt)	0.258	0.240	0.289	0.234	0.181
	Sodium (Na)-Total (mg/kg wwt)	235	406	430	382	433
	Strontium (Sr)-Total (mg/kg wwt)	0.096	0.172	0.045	0.011	0.050
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00300	0.00169	0.00209	0.00098	0.00256
	Tin (Sn)-Total (mg/kg wwt)	0.140	0.085	0.488	0.070	0.138
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.25	3.64	3.22	2.65	2.53
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	1.1	1.1	0.9	<0.5	6.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-9 Tissue 23-AUG-18 09:00 GMBY-LKWH-009-TB	L2173416-10 Tissue 22-AUG-18 09:00 GMBY-LKWH-009-T	L2173416-11 Tissue 22-AUG-18 09:00 GMBY-LKWH-010-T	L2173416-12 Tissue 24-AUG-18 09:00 GMBY-LKWH-011-T	L2173416-13 Tissue 21-AUG-18 09:00 GMBY-NRPK-001-T
TISSUE						
Physical Tests	% Moisture (%)	78.1	79.3	78.2	75.2	78.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	0.61	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0873	0.0503	0.0337	0.225	0.0361
	Barium (Ba)-Total (mg/kg wwt)	0.015	<0.010	0.012	<0.010	0.011
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	575	195	139	362	337
	Cesium (Cs)-Total (mg/kg wwt)	0.0206	0.0133	0.0136	0.0483	0.0372
	Chromium (Cr)-Total (mg/kg wwt)	0.017	<0.010	0.015	<0.010	0.013
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.160	0.101	0.116	0.141	0.100
	Iron (Fe)-Total (mg/kg wwt)	2.26	2.11	2.01	2.59	1.07
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0046	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	320	287	304	293	353
	Manganese (Mn)-Total (mg/kg wwt)	0.222	0.144	0.111	0.162	0.212
	Mercury (Hg)-Total (mg/kg wwt)	0.0424	0.123	0.109	0.0821	0.283
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2710	2280	2310	2420	2440
	Potassium (K)-Total (mg/kg wwt)	4470	3880	4130	4160	4220
	Rubidium (Rb)-Total (mg/kg wwt)	7.10	6.28	5.69	8.30	12.3
	Selenium (Se)-Total (mg/kg wwt)	0.240	0.178	0.204	0.221	0.180
	Sodium (Na)-Total (mg/kg wwt)	203	401	307	300	333
	Strontium (Sr)-Total (mg/kg wwt)	0.179	0.051	0.280	0.107	0.040
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00211	0.00227	0.00418	0.00220	0.00471
	Tin (Sn)-Total (mg/kg wwt)	0.195	0.237	0.221	0.058	0.117
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.11	3.05	3.19	3.12	3.52
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					0.215
Aggregate Organics	Lipid Content (% wwt)	1.3	1.2	0.5	2.1	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	Sample ID: L2173416-14 Description: Tissue Sampled Date: 21-AUG-18 Sampled Time: 09:00 Client ID: GMBY-NRPK-002-T	L2173416-15 Tissue 21-AUG-18 09:00 GMBY-NRPK-003-T	L2173416-16 Tissue 21-AUG-18 09:00 GMBY-NRPK-004-T	L2173416-17 Tissue 21-AUG-18 09:00 GMBY-NRPK-005-T	L2173416-19 Tissue 21-AUG-18 09:00 GMBY-NRPK-007-T
TISSUE						
Physical Tests	% Moisture (%)	79.9	79.3	78.3	77.0	79.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0312	0.0251	0.0384	0.0281	0.0296
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.015	0.012	<0.010	0.026
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	202	500	361	96.3	643
	Cesium (Cs)-Total (mg/kg wwt)	0.0399	0.0279	0.0526	0.0525	0.0289
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.010	0.013	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.101	0.113	0.107	0.173	0.100
	Iron (Fe)-Total (mg/kg wwt)	1.41	0.91	1.24	1.63	1.37
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0047	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	348	317	344	322	333
	Manganese (Mn)-Total (mg/kg wwt)	0.185	0.317	0.236	0.106	0.467
	Mercury (Hg)-Total (mg/kg wwt)	0.162	0.150	0.407	0.908	0.129
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2360	2400	2550	2420	2500
	Potassium (K)-Total (mg/kg wwt)	4350	4080	4490	4220	4040
	Rubidium (Rb)-Total (mg/kg wwt)	12.2	9.62	13.8	8.76	10.1
	Selenium (Se)-Total (mg/kg wwt)	0.189	0.157	0.177	0.169	0.181
	Sodium (Na)-Total (mg/kg wwt)	373	294	330	383	352
	Strontium (Sr)-Total (mg/kg wwt)	0.019	0.061	0.038	<0.010	0.086
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00599	0.00363	0.00544	0.00307	0.00555
	Tin (Sn)-Total (mg/kg wwt)	0.055	0.089	0.280	0.129	0.252
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.65	3.49	3.46	6.12	4.13
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.127	0.125	0.316	1.13	0.0988
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	0.6	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-20 Tissue 21-AUG-18 09:00 GMBY-NRPK-008-T	L2173416-21 Tissue 21-AUG-18 09:00 GMBY-NRPK-009-T	L2173416-22 Tissue 21-AUG-18 09:00 GMBY-NRPK-010-T	L2173416-24 Tissue 22-AUG-18 09:00 GMBY-NRPK-012-T	L2173416-26 Tissue 22-AUG-18 09:00 GMBY-NRPK-014-T
TISSUE						
Physical Tests	% Moisture (%)	80.8	82.1	78.8	78.5	80.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.41	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0254	0.0206	0.0263	0.0507	0.0286
	Barium (Ba)-Total (mg/kg wwt)	0.017	0.012	<0.010	0.034	0.034
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	421	264	210	543	756
	Cesium (Cs)-Total (mg/kg wwt)	0.0297	0.0235	0.0426	0.0355	0.0312
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.017	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.100	0.103	0.109	0.089	0.088
	Iron (Fe)-Total (mg/kg wwt)	1.65	1.21	0.99	1.81	1.51
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	319	292	327	329	314
	Manganese (Mn)-Total (mg/kg wwt)	0.291	0.235	0.149	0.496	0.360
	Mercury (Hg)-Total (mg/kg wwt)	0.0972	0.0758	0.193	0.270	0.206
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2290	2110	2320	2440	2430
	Potassium (K)-Total (mg/kg wwt)	3960	3860	4290	4280	3750
	Rubidium (Rb)-Total (mg/kg wwt)	11.4	10.9	12.2	9.63	8.93
	Selenium (Se)-Total (mg/kg wwt)	0.166	0.143	0.185	0.158	0.142
	Sodium (Na)-Total (mg/kg wwt)	253	115	274	296	376
	Strontium (Sr)-Total (mg/kg wwt)	0.060	0.036	0.020	0.085	0.109
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00462	0.00585	0.00472	0.00623	0.00422
	Tin (Sn)-Total (mg/kg wwt)	0.131	0.394	0.117	0.331	0.131
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.44	3.19	3.38	3.95	3.60
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0773	0.0670	0.174	0.211	0.172
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-28 Tissue 22-AUG-18 09:00 GMBY-NRPK-016-T	L2173416-29 Tissue 22-AUG-18 09:00 GMBY-NRPK-017-T	L2173416-30 Tissue 22-AUG-18 09:00 GMBY-NRPK-018-T	L2173416-31 Tissue 22-AUG-18 09:00 GMBY-NRPK-019-T	L2173416-33 Tissue 22-AUG-18 09:00 GMBY-NRPK-021-T
TISSUE						
Physical Tests	% Moisture (%)	79.2	80.1	80.1	79.8	76.3
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0317	0.0376	0.0383	0.0274	0.0362
	Barium (Ba)-Total (mg/kg wwt)	0.037	0.030	0.015	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	469	469	343	200	272
	Cesium (Cs)-Total (mg/kg wwt)	0.0338	0.0411	0.0361	0.0316	0.0391
	Chromium (Cr)-Total (mg/kg wwt)	0.018	<0.010	0.011	<0.010	0.033
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.120	0.093	0.093	0.105	0.088
	Iron (Fe)-Total (mg/kg wwt)	1.65	1.44	1.60	1.03	0.70
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	337	335	315	336	340
	Manganese (Mn)-Total (mg/kg wwt)	0.331	0.259	0.304	0.171	0.144
	Mercury (Hg)-Total (mg/kg wwt)	0.259	0.143	0.288	0.224	1.23
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2420	2380	2270	2280	2330
	Potassium (K)-Total (mg/kg wwt)	4190	4170	4040	4050	4190
	Rubidium (Rb)-Total (mg/kg wwt)	10.5	11.9	10.2	9.57	7.87
	Selenium (Se)-Total (mg/kg wwt)	0.166	0.188	0.185	0.158	0.160
	Sodium (Na)-Total (mg/kg wwt)	212	137	391	255	313
	Strontium (Sr)-Total (mg/kg wwt)	0.075	0.064	0.042	0.025	0.029
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00526	0.00577	0.00530	0.00357	0.00168
	Tin (Sn)-Total (mg/kg wwt)	0.225	0.127	0.323	0.075	0.048
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	6.58	3.50	3.48	3.97	3.95
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.228	0.101	0.270	0.201	1.71
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-35 Tissue 21-AUG-18 09:00 GMBY-WALL-001-G	L2173416-36 Tissue 21-AUG-18 09:00 GMBY-WALL-001-L	L2173416-37 Tissue 21-AUG-18 09:00 GMBY-WALL-001-T	L2173416-38 Tissue 21-AUG-18 09:00 GMBY-WALL-001-WB	L2173416-39 Tissue 21-AUG-18 09:00 GMBY-WALL-001-WBLD
TISSUE						
Physical Tests	% Moisture (%)	76.0	76.1	76.9	73.8	72.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	<1.0	1.0	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0233	0.0264	0.0316	0.0297	0.0301
	Barium (Ba)-Total (mg/kg wwt)	0.032	0.013	<0.010	0.333	0.321
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0062	0.0982	<0.0010	0.0028	0.0029
	Calcium (Ca)-Total (mg/kg wwt)	549	141	93.6	12500	11400
	Cesium (Cs)-Total (mg/kg wwt)	0.0845	0.0460	0.0795	0.0546	0.0561
	Chromium (Cr)-Total (mg/kg wwt)	<0.040	<0.040	0.011	0.028	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0750	0.0799	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	1.14	2.46	0.116	0.280	0.292
	Iron (Fe)-Total (mg/kg wwt)	68.4	191	1.67	8.07	9.69
	Lead (Pb)-Total (mg/kg wwt)	<0.010	<0.010	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	284	173	318	455	422
	Manganese (Mn)-Total (mg/kg wwt)	2.02	0.924	0.084	0.932	0.603
	Mercury (Hg)-Total (mg/kg wwt)	0.0533	0.177	0.436	0.199	0.252
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0085	0.0769	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	0.061	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	3560	2700	2360	8470	7850
	Potassium (K)-Total (mg/kg wwt)	4360	2850	4720	3260	3320
	Rubidium (Rb)-Total (mg/kg wwt)	26.0	21.5	27.6	17.0	17.5
	Selenium (Se)-Total (mg/kg wwt)	0.670	0.768	0.186	0.247	0.265
	Sodium (Na)-Total (mg/kg wwt)	1150	1140	240	1070	1140
	Strontium (Sr)-Total (mg/kg wwt)	0.085	0.028	<0.010	2.22	2.02
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.0128	0.0192	0.00710	0.00634	0.00567
	Tin (Sn)-Total (mg/kg wwt)	0.070	0.070	0.094	0.024	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00072	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	69.2	19.6	2.96	18.7	16.7
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)			0.440	0.153	0.186
Aggregate Organics	Lipid Content (% wwt)	4.4	4.3	<0.5	2.6	3.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-40 Tissue 21-AUG-18 09:00 GMBY-WALL-002-G	L2173416-41 Tissue 21-AUG-18 09:00 GMBY-WALL-002-L	L2173416-42 Tissue 21-AUG-18 09:00 GMBY-WALL-002-T	L2173416-43 Tissue 21-AUG-18 09:00 GMBY-WALL-002-WB	L2173416-44 Tissue 21-AUG-18 09:00 GMBY-WALL-002-WBLD
TISSUE						
Physical Tests	% Moisture (%)	73.1	72.0	81.5	74.7	75.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<1.0	2.8	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0264	0.0752	0.0362	0.0332	0.0332
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.036	<0.010	0.582	0.728
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0029	0.265	<0.0010	0.0016	0.0015
	Calcium (Ca)-Total (mg/kg wwt)	291	1200	89.0	22300	29500
	Cesium (Cs)-Total (mg/kg wwt)	0.0516	0.0351	0.0490	0.0327	0.0329
	Chromium (Cr)-Total (mg/kg wwt)	<0.040	<0.040	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.119	0.685	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.970	3.06	0.099	0.245	0.244
	Iron (Fe)-Total (mg/kg wwt)	31.8	198	1.35	5.80	5.62
	Lead (Pb)-Total (mg/kg wwt)	<0.010	<0.010	<0.0040	0.0185	0.0217
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	0.15	0.18
	Magnesium (Mg)-Total (mg/kg wwt)	373	273	302	628	761
	Manganese (Mn)-Total (mg/kg wwt)	1.62	2.10	0.064	1.45	1.91
	Mercury (Hg)-Total (mg/kg wwt)	0.0434	0.234	0.242	0.139	0.150
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0157	0.256	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	5810	5020	2220	14100	18100
	Potassium (K)-Total (mg/kg wwt)	4640	2940	4440	3040	3120
	Rubidium (Rb)-Total (mg/kg wwt)	21.8	14.2	18.8	12.3	12.6
	Selenium (Se)-Total (mg/kg wwt)	0.923	1.26	0.193	0.247	0.245
	Sodium (Na)-Total (mg/kg wwt)	655	1280	236	1140	1190
	Strontium (Sr)-Total (mg/kg wwt)	0.024	0.186	<0.010	2.88	3.88
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.0167	0.0165	0.00513	0.00501	0.00613
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00126	<0.00040	0.00108	0.00123
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.039	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	172	30.6	3.14	20.1	21.9
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)			0.221	0.0969	0.102
Aggregate Organics	Lipid Content (% wwt)		4.1	<0.5	2.3	2.7

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-45 Tissue 21-AUG-18 09:00 GMBY-WALL-003-G	L2173416-46 Tissue 21-AUG-18 09:00 GMBY-WALL-003-L	L2173416-47 Tissue 21-AUG-18 09:00 GMBY-WALL-003-T	L2173416-48 Tissue 21-AUG-18 09:00 GMBY-WALL-003-WB	L2173416-49 Tissue 21-AUG-18 09:00 GMBY-WALL-004-G
TISSUE						
Physical Tests	% Moisture (%)	76.5		78.3	68.3	79.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<1.0	1.1	<0.40	0.47	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0173	0.0314	0.0298	0.0273	0.0064
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.011	<0.010	0.587	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0037	0.249	<0.0010	0.0033	0.0018
	Calcium (Ca)-Total (mg/kg wwt)	258	70.7	107	25100	268
	Cesium (Cs)-Total (mg/kg wwt)	0.0555	0.0303	0.0567	0.0389	0.0914
	Chromium (Cr)-Total (mg/kg wwt)	<0.040	<0.040	<0.010	<0.010	0.012
	Cobalt (Co)-Total (mg/kg wwt)	0.0809	0.234	<0.0040	<0.0040	0.0559
	Copper (Cu)-Total (mg/kg wwt)	0.979	1.73	0.111	0.260	0.892
	Iron (Fe)-Total (mg/kg wwt)	36.2	125	1.24	6.34	42.6
	Lead (Pb)-Total (mg/kg wwt)	<0.010	<0.010	<0.0040	0.0161	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	0.13	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	328	142	328	694	230
	Manganese (Mn)-Total (mg/kg wwt)	2.47	1.32	0.072	2.34	1.23
	Mercury (Hg)-Total (mg/kg wwt)	0.0333	0.137	0.263	0.153	0.0598
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0145	0.159	<0.0040	0.0042	0.0060
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	4650	2340	2500	15600	2300
	Potassium (K)-Total (mg/kg wwt)	4580	2190	4890	3350	3530
	Rubidium (Rb)-Total (mg/kg wwt)	22.6	11.7	23.1	14.2	24.8
	Selenium (Se)-Total (mg/kg wwt)	0.693	0.681	0.227	0.278	0.459
	Sodium (Na)-Total (mg/kg wwt)	883	1090	244	1220	1100
	Strontium (Sr)-Total (mg/kg wwt)	<0.020	<0.020	<0.010	3.24	0.018
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.0132	0.0144	0.00555	0.00631	0.0111
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.029	<0.020	<0.020	0.073
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00079	<0.00040	0.00125	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	105	16.8	3.07	19.5	32.6
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)			0.235	0.110	
Aggregate Organics	Lipid Content (% wwt)		2.4	<0.5	2.8	5.0

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-50 Tissue 21-AUG-18 09:00 GMBY-WALL-004-L	L2173416-51 Tissue 21-AUG-18 09:00 GMBY-WALL-004-T	L2173416-52 Tissue 21-AUG-18 09:00 GMBY-WALL-004-WB	L2173416-53 Tissue 21-AUG-18 09:00 GMBY-WALL-005-L	L2173416-54 Tissue 21-AUG-18 09:00 GMBY-WALL-005-T
TISSUE						
Physical Tests	% Moisture (%)	72.6	77.4	71.0	80.7	80.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.59	<0.40	1.00	9.4	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0117	0.0185	0.0184	0.104	0.0480
	Barium (Ba)-Total (mg/kg wwt)	0.042	<0.010	0.228	0.011	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0594	<0.0010	0.0019	1.12	0.0011
	Calcium (Ca)-Total (mg/kg wwt)	58.0	105	8270	89.2	74.0
	Cesium (Cs)-Total (mg/kg wwt)	0.0488	0.106	0.0725	0.0093	0.0415
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.011	<0.010	<0.040	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0768	<0.0040	<0.0040	0.715	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	2.11	0.102	0.246	2.28	0.130
	Iron (Fe)-Total (mg/kg wwt)	61.2	1.53	7.28	55.5	1.80
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0058	0.013	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	125	335	366	130	310
	Manganese (Mn)-Total (mg/kg wwt)	0.883	0.082	0.552	1.64	0.078
	Mercury (Hg)-Total (mg/kg wwt)	0.215	0.608	0.389	0.258	0.361
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0853	<0.0040	<0.0040	0.218	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	1960	2420	6180	2280	2190
	Potassium (K)-Total (mg/kg wwt)	2310	4440	3070	2150	4250
	Rubidium (Rb)-Total (mg/kg wwt)	17.3	31.8	18.8	7.15	12.8
	Selenium (Se)-Total (mg/kg wwt)	0.643	0.200	0.236	0.805	0.213
	Sodium (Na)-Total (mg/kg wwt)	1120	283	973	1160	288
	Strontium (Sr)-Total (mg/kg wwt)	0.011	<0.010	1.07	<0.020	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.0138	0.00601	0.00470	0.00948	0.00476
	Tin (Sn)-Total (mg/kg wwt)	0.051	0.025	0.036	0.152	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	0.00379	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	0.131	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	16.0	3.94	16.2	18.5	2.78
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)		0.796	0.433		0.363
Aggregate Organics	Lipid Content (% wwt)	8.7	0.6	4.7	1.7	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-55 Tissue 21-AUG-18 09:00 GMBY-WALL-005-WB	L2173416-56 Tissue 21-AUG-18 09:00 GMBY-WALL-006-G	L2173416-57 Tissue 21-AUG-18 09:00 GMBY-WALL-006-L	L2173416-58 Tissue 21-AUG-18 09:00 GMBY-WALL-006-T	L2173416-59 Tissue 21-AUG-18 09:00 GMBY-WALL-006-WB
TISSUE						
Physical Tests	% Moisture (%)	73.8			80.2	73.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	1.17	<1.0	2.6	<0.40	0.49
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0830	0.0243	0.0951	0.0381	0.0353
	Barium (Ba)-Total (mg/kg wwt)	0.803	0.018	0.013	<0.010	0.520
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0099	0.0065	0.524	<0.0010	0.0047
	Calcium (Ca)-Total (mg/kg wwt)	20000	221	169	124	22700
	Cesium (Cs)-Total (mg/kg wwt)	0.0254	0.0488	0.0234	0.0522	0.0362
	Chromium (Cr)-Total (mg/kg wwt)	0.015	<0.040	<0.040	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0651	0.611	<0.0040	0.0042
	Copper (Cu)-Total (mg/kg wwt)	0.387	0.924	2.77	0.115	0.269
	Iron (Fe)-Total (mg/kg wwt)	9.24	47.7	62.6	1.44	6.11
	Lead (Pb)-Total (mg/kg wwt)	0.0387	<0.010	<0.010	<0.0040	0.0108
	Lithium (Li)-Total (mg/kg wwt)	0.15	<0.10	<0.10	<0.10	0.18
	Magnesium (Mg)-Total (mg/kg wwt)	557	255	191	319	636
	Manganese (Mn)-Total (mg/kg wwt)	2.23	2.52	2.44	0.056	1.26
	Mercury (Hg)-Total (mg/kg wwt)	0.256	0.0360	0.255	0.286	0.232
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0059	0.0180	0.274	<0.0040	0.0046
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	12500	3610	3580	2330	14200
	Potassium (K)-Total (mg/kg wwt)	3150	3990	2490	4590	3550
	Rubidium (Rb)-Total (mg/kg wwt)	9.09	19.5	12.5	19.5	14.8
	Selenium (Se)-Total (mg/kg wwt)	0.276	0.718	1.07	0.213	0.236
	Sodium (Na)-Total (mg/kg wwt)	1350	755	1050	382	1150
	Strontium (Sr)-Total (mg/kg wwt)	2.60	<0.020	0.030	0.011	2.71
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00472	0.0131	0.0157	0.00462	0.00559
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	0.020	0.090	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00222	<0.00040	0.00200	<0.00040	0.00107
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	0.053	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	23.1	78.7	24.2	3.23	14.6
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.251			0.259	0.136
Aggregate Organics	Lipid Content (% wwt)	1.5		3.5	<0.5	2.1

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-60 Tissue 21-AUG-18 09:00 GMBY-WALL-007-T	L2173416-62 Tissue 21-AUG-18 09:00 GMBY-WALL-009-L	L2173416-63 Tissue 21-AUG-18 09:00 GMBY-WALL-009-T	L2173416-64 Tissue 21-AUG-18 09:00 GMBY-WALL-009-WB	L2173416-65 Tissue 21-AUG-18 09:00 GMBY-WALL-010-T
TISSUE						
Physical Tests	% Moisture (%)	78.8		78.2	67.6	78.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	<1.0	<1.0	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0311	0.0245	0.0304	0.0296	0.0367
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.331	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0020	0.0588	<0.0010	0.0011	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	91.2	85.1	91.0	14300	145
	Cesium (Cs)-Total (mg/kg wwt)	0.0609	0.0265	0.0664	0.0457	0.0580
	Chromium (Cr)-Total (mg/kg wwt)	<0.040	<0.040	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.323	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.112	2.14	0.128	0.306	0.107
	Iron (Fe)-Total (mg/kg wwt)	1.6	149	1.23	6.89	1.20
	Lead (Pb)-Total (mg/kg wwt)	<0.010	<0.010	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	297	122	338	513	311
	Manganese (Mn)-Total (mg/kg wwt)	0.069	0.981	0.087	0.883	0.063
	Mercury (Hg)-Total (mg/kg wwt)	0.340	0.133	0.301	0.179	0.290
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0080	0.126	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2430	2140	2490	10100	2220
	Potassium (K)-Total (mg/kg wwt)	4610	2200	4940	3400	4430
	Rubidium (Rb)-Total (mg/kg wwt)	21.5	11.1	23.5	15.3	19.7
	Selenium (Se)-Total (mg/kg wwt)	0.199	0.697	0.183	0.233	0.215
	Sodium (Na)-Total (mg/kg wwt)	305	1060	292	1040	408
	Strontium (Sr)-Total (mg/kg wwt)	<0.020	<0.020	<0.010	2.05	0.013
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00519	0.0103	0.00554	0.00532	0.00415
	Tin (Sn)-Total (mg/kg wwt)	0.247	<0.020	0.024	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	2.90	18.5	3.57	19.0	3.12
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.281		0.269	0.0925	0.265
Aggregate Organics	Lipid Content (% wwt)	<0.5	6.3	<0.5	2.8	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-67 Tissue 21-AUG-18 09:00 GMBY-WALL-012-T	L2173416-69 Tissue 21-AUG-18 09:00 GMBY-WALL-014-T	L2173416-71 Tissue 21-AUG-18 09:00 GMBY-WALL-016-T	L2173416-73 Tissue 21-AUG-18 09:00 GMBY-WALL-018-T	L2173416-75 Tissue 21-AUG-18 09:00 GMBY-WALL-020-L
TISSUE						
Physical Tests	% Moisture (%)	80.9	78.5	80.0	79.5	
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	3.0
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0358	0.0357	0.0226	0.0374	0.0607
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.021
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	0.297
	Calcium (Ca)-Total (mg/kg wwt)	109	124	129	173	135
	Cesium (Cs)-Total (mg/kg wwt)	0.0640	0.0621	0.0540	0.0524	0.0273
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.052	<0.010	<0.040
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.466
	Copper (Cu)-Total (mg/kg wwt)	0.098	0.110	0.095	0.108	1.79
	Iron (Fe)-Total (mg/kg wwt)	0.91	3.27	1.24	1.49	137
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.010
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	302	330	308	317	141
	Manganese (Mn)-Total (mg/kg wwt)	0.057	0.066	0.064	0.064	1.38
	Mercury (Hg)-Total (mg/kg wwt)	0.347	0.273	0.294	0.341	0.188
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.173
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2140	2370	2250	2210	2540
	Potassium (K)-Total (mg/kg wwt)	4090	4550	4390	4230	2260
	Rubidium (Rb)-Total (mg/kg wwt)	21.2	23.1	20.6	19.0	11.9
	Selenium (Se)-Total (mg/kg wwt)	0.182	0.209	0.212	0.191	0.842
	Sodium (Na)-Total (mg/kg wwt)	393	411	282	446	1160
	Strontium (Sr)-Total (mg/kg wwt)	<0.010	0.011	0.011	0.019	0.030
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00500	0.00525	0.00466	0.00399	0.0134
	Tin (Sn)-Total (mg/kg wwt)	0.025	0.163	0.023	0.130	1.11
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	0.00139
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.030
	Zinc (Zn)-Total (mg/kg wwt)	2.70	3.63	2.78	2.80	19.0
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	0.042	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.288	0.200	0.266	0.261	
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	3.9

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-76 Tissue 21-AUG-18 09:00 GMBY-WALL-020-T	L2173416-77 Tissue 21-AUG-18 09:00 GMBY-WALL-020-WB	L2173416-78 Tissue 21-AUG-18 09:00 GMBY-WALL-021-L	L2173416-79 Tissue 21-AUG-18 09:00 GMBY-WALL-021-T	L2173416-80 Tissue 21-AUG-18 09:00 GMBY-WALL-021-WB
TISSUE						
Physical Tests	% Moisture (%)	78.3	71.2		78.5	67.2
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	0.54	1.4	<0.40	2.57
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0359	0.0352	0.0414	0.0484	0.0427
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.482	<0.010	<0.010	0.574
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0031	0.214	<0.0010	0.0033
	Calcium (Ca)-Total (mg/kg wwt)	94.7	14500	114	107	15600
	Cesium (Cs)-Total (mg/kg wwt)	0.0611	0.0446	0.0251	0.0478	0.0329
	Chromium (Cr)-Total (mg/kg wwt)	0.011	0.027	<0.040	0.013	0.012
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.358	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.132	0.379	1.47	0.111	0.270
	Iron (Fe)-Total (mg/kg wwt)	1.50	9.09	199	1.50	11.2
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0066	<0.010	<0.0040	0.0089
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	0.12
	Magnesium (Mg)-Total (mg/kg wwt)	332	496	132	321	513
	Manganese (Mn)-Total (mg/kg wwt)	0.069	1.35	1.13	0.054	1.44
	Mercury (Hg)-Total (mg/kg wwt)	0.316	0.191	0.129	0.319	0.181
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	0.148	<0.0040	0.0052
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2390	10200	2180	2340	10600
	Potassium (K)-Total (mg/kg wwt)	4630	3430	2410	4500	3230
	Rubidium (Rb)-Total (mg/kg wwt)	21.1	14.0	8.72	13.6	9.75
	Selenium (Se)-Total (mg/kg wwt)	0.210	0.284	0.709	0.223	0.261
	Sodium (Na)-Total (mg/kg wwt)	383	1110	1130	380	997
	Strontium (Sr)-Total (mg/kg wwt)	<0.010	2.15	0.021	0.011	2.29
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00578	0.00533	0.00894	0.00444	0.00447
	Tin (Sn)-Total (mg/kg wwt)	0.094	<0.020	0.161	0.374	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00091	0.00092	<0.00040	0.00148
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	0.032	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.20	15.6	15.0	3.26	16.9
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.241	0.127		0.173	0.164
Aggregate Organics	Lipid Content (% wwt)	0.6	4.1	1.4	<0.5	3.3

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-81 Tissue 21-AUG-18 09:00 GMBY-WALL-022-L	L2173416-82 Tissue 21-AUG-18 09:00 GMBY-WALL-022-T	L2173416-83 Tissue 21-AUG-18 09:00 GMBY-WALL-022-WB	L2173416-84 Tissue 21-AUG-18 09:00 GMBY-WALL-023-T	L2173416-86 Tissue 21-AUG-18 09:00 GMBY-WALL-025-T
TISSUE						
Physical Tests	% Moisture (%)	78.9	69.4	79.0	80.3	
Metals	Aluminum (Al)-Total (mg/kg wwt)	2.0	<0.40	0.79	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0440	0.0436	0.0360	0.0318	0.0349
	Barium (Ba)-Total (mg/kg wwt)	0.011	<0.010	0.684	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.300	<0.0010	0.0042	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	95.4	93.4	21200	135	74.2
	Cesium (Cs)-Total (mg/kg wwt)	0.0212	0.0575	0.0412	0.0594	0.0576
	Chromium (Cr)-Total (mg/kg wwt)	0.058	<0.010	0.013	0.014	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.202	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	1.50	0.119	0.299	0.127	0.086
	Iron (Fe)-Total (mg/kg wwt)	324	1.59	9.32	1.51	1.16
	Lead (Pb)-Total (mg/kg wwt)	<0.010	<0.0040	0.0086	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	0.15	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	143	341	613	308	288
	Manganese (Mn)-Total (mg/kg wwt)	1.40	0.073	1.34	0.059	0.052
	Mercury (Hg)-Total (mg/kg wwt)	0.168	0.297	0.181	0.240	0.293
	Molybdenum (Mo)-Total (mg/kg wwt)	0.171	<0.0040	0.0044	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2410	2440	13500	2300	2120
	Potassium (K)-Total (mg/kg wwt)	2500	4850	3440	4420	4350
	Rubidium (Rb)-Total (mg/kg wwt)	9.64	18.8	13.1	21.9	21.8
	Selenium (Se)-Total (mg/kg wwt)	0.930	0.237	0.298	0.225	0.206
	Sodium (Na)-Total (mg/kg wwt)	1160	317	1250	404	200
	Strontium (Sr)-Total (mg/kg wwt)	<0.020	<0.010	2.98	0.013	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.0113	0.00468	0.00520	0.00572	0.00520
	Tin (Sn)-Total (mg/kg wwt)	0.268	0.155	<0.020	0.411	0.294
	Uranium (U)-Total (mg/kg wwt)	0.00114	<0.00040	0.00097	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	0.036	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	19.0	3.45	21.2	3.14	3.22
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.284	0.101	0.239	0.274	
Aggregate Organics	Lipid Content (% wwt)	2.8	<0.5	4.1	0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-88 Tissue 21-AUG-18 09:00 GMBY-WALL-027-T	L2173416-90 Tissue 22-AUG-18 09:00 GMBY-WALL-029-T	L2173416-92 Tissue 22-AUG-18 09:00 GMBY-WALL-031-T	L2173416-94 Tissue 22-AUG-18 09:00 GMBY-WALL-033-T	L2173416-95 Tissue 22-AUG-18 09:00 GMBY-WALL-034-T
TISSUE						
Physical Tests	% Moisture (%)	79.0	78.4	79.0	77.5	78.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0293	0.0295	0.0260	0.0662	0.0345
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	86.2	80.9	205	156	88.7
	Cesium (Cs)-Total (mg/kg wwt)	0.0622	0.0754	0.0655	0.0806	0.0665
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.016	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.104	0.105	0.113	0.136	0.110
	Iron (Fe)-Total (mg/kg wwt)	1.93	1.07	1.73	1.28	1.35
	Lead (Pb)-Total (mg/kg wwt)	0.0113	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	317	312	346	341	316
	Manganese (Mn)-Total (mg/kg wwt)	0.063	0.063	0.064	0.075	0.069
	Mercury (Hg)-Total (mg/kg wwt)	0.252	0.293	0.392	0.376	0.349
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2290	2350	2510	2500	2340
	Potassium (K)-Total (mg/kg wwt)	4450	4540	4840	4660	4580
	Rubidium (Rb)-Total (mg/kg wwt)	23.2	23.1	25.2	23.5	22.3
	Selenium (Se)-Total (mg/kg wwt)	0.184	0.199	0.193	0.212	0.216
	Sodium (Na)-Total (mg/kg wwt)	384	231	304	299	325
	Strontium (Sr)-Total (mg/kg wwt)	<0.010	<0.010	0.024	0.018	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00562	0.00552	0.00748	0.00563	0.00490
	Tin (Sn)-Total (mg/kg wwt)	0.696	0.452	0.251	0.179	0.125
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.03	3.19	3.12	3.68	3.27
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.180	0.288	0.266	0.217	0.304
Aggregate Organics	Lipid Content (% wwt)	<0.5	0.5	0.5	0.7	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-96 Tissue 22-AUG-18 09:00 GMBY-WALL-035-T	L2173416-99 Tissue 22-AUG-18 09:00 GMBY-WALL-038-T	L2173416-101 Tissue 22-AUG-18 09:00 GMBY-WALL-040-T	L2173416-102 Tissue 22-AUG-18 09:00 GMBY-WALL-041-T	L2173416-104 Tissue 22-AUG-18 09:00 GMBY-WALL-043-T
TISSUE						
Physical Tests	% Moisture (%)	78.7	78.4	79.2	78.1	79.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0226	0.0266	0.0367	0.0442	0.0317
	Barium (Ba)-Total (mg/kg wwt)	0.010	<0.010	0.018	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	307	93.4	176	90.1	134
	Cesium (Cs)-Total (mg/kg wwt)	0.0601	0.0669	0.0540	0.0587	0.0566
	Chromium (Cr)-Total (mg/kg wwt)	0.011	<0.010	<0.010	<0.010	0.029
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.108	0.139	0.146	0.118	0.116
	Iron (Fe)-Total (mg/kg wwt)	1.51	1.72	1.96	1.74	1.70
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	319	331	300	312	324
	Manganese (Mn)-Total (mg/kg wwt)	0.079	0.071	0.077	0.077	0.084
	Mercury (Hg)-Total (mg/kg wwt)	0.314	0.336	0.237	0.344	0.181
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2400	2320	2340	2290	2340
	Potassium (K)-Total (mg/kg wwt)	4460	4470	4460	4550	4580
	Rubidium (Rb)-Total (mg/kg wwt)	19.8	20.5	19.9	22.0	23.5
	Selenium (Se)-Total (mg/kg wwt)	0.249	0.219	0.227	0.233	0.203
	Sodium (Na)-Total (mg/kg wwt)	286	344	354	289	243
	Strontium (Sr)-Total (mg/kg wwt)	0.034	<0.010	0.018	<0.010	0.011
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00399	0.00530	0.00436	0.00540	0.00559
	Tin (Sn)-Total (mg/kg wwt)	0.075	0.242	0.101	0.192	0.424
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.32	3.27	3.90	3.19	3.96
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.181	0.388	0.283	0.463	0.216
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-105 Tissue 22-AUG-18 09:00 GMBY-WALL-045-T	L2173416-107 Tissue 22-AUG-18 09:00 GMBY-WALL-047-T	L2173416-109 Tissue 21-AUG-18 09:00 GMBY-WHSC-001-T	L2173416-110 Tissue 21-AUG-18 09:00 GMBY-WHSC-001-WB	L2173416-111 Tissue 21-AUG-18 09:00 GMBY-WHSC-002-T
TISSUE						
Physical Tests	% Moisture (%)	78.9	78.5	80.1	71.6	79.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	8.69	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	0.0026	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0613	0.0383	0.0255	0.0530	0.0439
	Barium (Ba)-Total (mg/kg wwt)	0.012	0.019	0.032	0.643	0.019
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	0.0144	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	211	138	112	16400	89.2
	Cesium (Cs)-Total (mg/kg wwt)	0.0565	0.0531	0.0212	0.0136	0.0219
	Chromium (Cr)-Total (mg/kg wwt)	0.014	<0.010	0.091	0.069	0.015
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0142	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.152	0.110	0.211	0.685	0.261
	Iron (Fe)-Total (mg/kg wwt)	4.60	1.75	2.92	24.2	6.35
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0282	0.191	0.0052
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	309	312	337	536	311
	Manganese (Mn)-Total (mg/kg wwt)	0.059	0.079	0.125	5.34	0.107
	Mercury (Hg)-Total (mg/kg wwt)	0.400	0.268	0.297	0.159	0.251
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0193	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2370	2330	2170	10700	2260
	Potassium (K)-Total (mg/kg wwt)	4350	4590	4050	2740	4110
	Rubidium (Rb)-Total (mg/kg wwt)	15.2	16.4	6.22	4.15	7.34
	Selenium (Se)-Total (mg/kg wwt)	0.264	0.251	0.181	0.236	0.191
	Sodium (Na)-Total (mg/kg wwt)	357	272	312	1160	334
	Strontium (Sr)-Total (mg/kg wwt)	0.026	0.012	0.018	4.34	0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00466	0.00437	0.00042	0.00072	0.00061
	Tin (Sn)-Total (mg/kg wwt)	0.202	0.158	0.127	<0.020	0.407
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	0.00552	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	0.051	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.36	3.02	3.56	21.9	3.11
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.533	0.324			
Aggregate Organics	Lipid Content (% wwt)	0.6	0.5	0.7	3.0	1.1

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-112 Tissue 21-AUG-18 09:00 GMBY-WHSC-002-WB	L2173416-113 Tissue 21-AUG-18 09:00 GMBY-WHSC-003-T	L2173416-114 Tissue 21-AUG-18 09:00 GMBY-WHSC-003-WB	L2173416-115 Tissue 21-AUG-18 09:00 GMBY-WHSC-004-T	L2173416-116 Tissue 21-AUG-18 09:00 GMBY-WHSC-004-WB
TISSUE						
Physical Tests	% Moisture (%)	74.1	79.1	70.6	78.9	79.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.98	<0.40	3.35	0.43	2.89
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0445	0.0406	0.0378	0.0792	0.0712
	Barium (Ba)-Total (mg/kg wwt)	0.448	0.028	0.661	0.027	0.710
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0148	<0.0010	0.0080	<0.0010	0.0054
	Calcium (Ca)-Total (mg/kg wwt)	6990	156	16200	414	20900
	Cesium (Cs)-Total (mg/kg wwt)	0.0153	0.0264	0.0151	0.0193	0.0118
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.018	<0.010	0.014
	Cobalt (Co)-Total (mg/kg wwt)	0.0087	0.0043	0.0086	<0.0040	0.0078
	Copper (Cu)-Total (mg/kg wwt)	0.578	0.288	0.606	0.242	0.647
	Iron (Fe)-Total (mg/kg wwt)	22.9	4.91	18.7	4.49	27.5
	Lead (Pb)-Total (mg/kg wwt)	0.0161	<0.0040	0.0455	<0.0040	0.0181
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	339	356	541	365	590
	Manganese (Mn)-Total (mg/kg wwt)	3.07	0.218	6.66	0.381	7.46
	Mercury (Hg)-Total (mg/kg wwt)	0.159	0.228	0.116	0.0879	0.0510
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0129	<0.0040	0.0152	0.0043	0.0323
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	5540	2640	11000	2650	13200
	Potassium (K)-Total (mg/kg wwt)	2960	4670	3000	4540	3170
	Rubidium (Rb)-Total (mg/kg wwt)	5.21	7.40	4.77	6.51	4.41
	Selenium (Se)-Total (mg/kg wwt)	0.241	0.221	0.247	0.221	0.232
	Sodium (Na)-Total (mg/kg wwt)	856	459	1060	399	1080
	Strontium (Sr)-Total (mg/kg wwt)	1.59	0.026	3.60	0.091	5.01
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00080	0.00074	0.00103	0.00129	0.00178
	Tin (Sn)-Total (mg/kg wwt)	0.037	0.097	<0.020	0.111	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00206	<0.00040	0.00328	<0.00040	0.00370
	Vanadium (V)-Total (mg/kg wwt)	0.021	<0.020	0.049	<0.020	0.068
	Zinc (Zn)-Total (mg/kg wwt)	13.8	3.97	18.2	3.43	13.9
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	5.2	1.0	4.2	0.8	4.0

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2173416-117	L2173416-118	L2173416-119	L2173416-120	L2173416-121
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	21-AUG-18	21-AUG-18	21-AUG-18	21-AUG-18	21-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	GMBY-WHSC-005-T	GMBY-WHSC-005-WB	GMBY-WHSC-006-T	GMBY-WHSC-006-WB	GMBY-WHSC-007-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	78.1	73.8	80.6	71.6	79.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.43	2.23	0.54	7.73	0.55
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.106	0.132	0.0658	0.113	0.0260
	Barium (Ba)-Total (mg/kg wwt)	0.017	0.443	0.029	0.483	0.017
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0068	<0.0010	0.0078	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	107	11900	154	14400	83.7
	Cesium (Cs)-Total (mg/kg wwt)	0.0223	0.0149	0.0193	0.0136	0.0256
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.011	0.021	0.016
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0095	<0.0040	0.0127	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.215	0.793	0.202	0.681	0.232
	Iron (Fe)-Total (mg/kg wwt)	3.99	18.3	4.31	25.9	4.34
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0146	<0.0040	0.0248	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	298	503	298	622	309
	Manganese (Mn)-Total (mg/kg wwt)	0.162	4.03	0.169	5.40	0.132
	Mercury (Hg)-Total (mg/kg wwt)	0.139	0.0654	0.0959	0.0628	0.229
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0150	<0.0040	0.0137	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2140	8450	2280	9480	2220
	Potassium (K)-Total (mg/kg wwt)	4010	3030	4370	2930	4360
	Rubidium (Rb)-Total (mg/kg wwt)	5.50	4.27	6.13	4.18	6.25
	Selenium (Se)-Total (mg/kg wwt)	0.172	0.223	0.149	0.205	0.167
	Sodium (Na)-Total (mg/kg wwt)	249	904	209	894	148
	Strontium (Sr)-Total (mg/kg wwt)	0.018	3.90	0.025	3.74	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00121	0.00170	0.00067	0.00123	0.00043
	Tin (Sn)-Total (mg/kg wwt)	0.104	<0.020	0.052	<0.020	0.210
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00185	<0.00040	0.00377	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.030	<0.020	0.043	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.07	18.9	4.03	18.1	3.36
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	1.0	6.2	1.2	4.3	1.2

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-122 Tissue 21-AUG-18 09:00 GMBY-WHSC-007-WB	L2173416-123 Tissue 21-AUG-18 09:00 GMBY-WHSC-008-T	L2173416-124 Tissue 21-AUG-18 09:00 GMBY-WHSC-009-T	L2173416-125 Tissue 21-AUG-18 09:00 GMBY-WHSC-010-T	L2173416-126 Tissue 21-AUG-18 09:00 GMBY-WHSC-010-WB
TISSUE						
Physical Tests	% Moisture (%)	74.1	79.0	78.0	79.9	75.2
Metals	Aluminum (Al)-Total (mg/kg wwt)	2.59	0.65	0.99	1.36	11.9
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0278	0.0394	0.0992	0.0627	0.0982
	Barium (Ba)-Total (mg/kg wwt)	0.306	0.018	0.014	0.018	0.457
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0060	<0.0010	<0.0010	<0.0010	0.0164
	Calcium (Ca)-Total (mg/kg wwt)	11200	130	110	148	11200
	Cesium (Cs)-Total (mg/kg wwt)	0.0156	0.0200	0.0257	0.0175	0.0134
	Chromium (Cr)-Total (mg/kg wwt)	0.011	0.011	<0.010	0.012	0.035
	Cobalt (Co)-Total (mg/kg wwt)	0.0057	<0.0040	<0.0040	<0.0040	0.0138
	Copper (Cu)-Total (mg/kg wwt)	0.617	0.240	0.337	0.227	0.761
	Iron (Fe)-Total (mg/kg wwt)	15.2	4.49	5.35	4.65	34.0
	Lead (Pb)-Total (mg/kg wwt)	0.0134	<0.0040	<0.0040	0.0045	0.0315
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	443	334	347	328	482
	Manganese (Mn)-Total (mg/kg wwt)	2.92	0.142	0.152	0.223	5.04
	Mercury (Hg)-Total (mg/kg wwt)	0.132	0.305	0.151	0.137	0.0800
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0139	<0.0040	<0.0040	<0.0040	0.0185
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	7790	2280	2470	2390	7770
	Potassium (K)-Total (mg/kg wwt)	2790	4130	4630	4410	3200
	Rubidium (Rb)-Total (mg/kg wwt)	4.07	5.81	6.81	6.05	4.32
	Selenium (Se)-Total (mg/kg wwt)	0.216	0.195	0.220	0.213	0.286
	Sodium (Na)-Total (mg/kg wwt)	833	295	223	298	991
	Strontium (Sr)-Total (mg/kg wwt)	2.26	0.020	0.014	0.024	3.07
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00057	0.00074	0.00092	0.00085	0.00118
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.060	0.080	0.175	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00212	<0.00040	<0.00040	<0.00040	0.00385
	Vanadium (V)-Total (mg/kg wwt)	0.025	<0.020	<0.020	<0.020	0.055
	Zinc (Zn)-Total (mg/kg wwt)	13.9	3.25	3.74	3.43	12.5
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	4.4	1.0	1.0	<0.5	3.0

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-127 Tissue 21-AUG-18 09:00 GMBY-WHSC-011-T	L2173416-128 Tissue 21-AUG-18 09:00 GMBY-WHSC-011-WB	L2173416-129 Tissue 21-AUG-18 09:00 GMBY-WHSC-012-T	L2173416-130 Tissue 21-AUG-18 09:00 GMBY-WHSC-012-WB	L2173416-131 Tissue 21-AUG-18 09:00 GMBY-WHSC-013-T
TISSUE						
Physical Tests	% Moisture (%)	80.3	76.4	80.1	79.6	78.8
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.87	5.84	0.80	3.85	0.78
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0241	0.0426	0.0341	0.0469	0.0405
	Barium (Ba)-Total (mg/kg wwt)	0.019	0.497	0.017	0.482	0.019
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0211	0.0011	0.0252	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	167	9180	139	14400	116
	Cesium (Cs)-Total (mg/kg wwt)	0.0164	0.0113	0.0276	0.0155	0.0216
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.014	<0.010	0.013	0.018
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0093	<0.0040	0.0095	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.193	0.754	0.212	0.674	0.187
	Iron (Fe)-Total (mg/kg wwt)	3.38	23.6	4.00	18.7	7.32
	Lead (Pb)-Total (mg/kg wwt)	0.0045	0.0308	<0.0040	0.0402	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	318	406	297	432	328
	Manganese (Mn)-Total (mg/kg wwt)	0.209	3.32	0.189	4.29	0.200
	Mercury (Hg)-Total (mg/kg wwt)	0.450	0.270	0.301	0.140	0.158
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0191	<0.0040	0.0230	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2360	6910	2230	9020	2410
	Potassium (K)-Total (mg/kg wwt)	4350	2910	4070	2720	4530
	Rubidium (Rb)-Total (mg/kg wwt)	6.34	4.38	6.32	4.34	8.13
	Selenium (Se)-Total (mg/kg wwt)	0.174	0.245	0.197	0.256	0.189
	Sodium (Na)-Total (mg/kg wwt)	263	1000	346	1270	280
	Strontium (Sr)-Total (mg/kg wwt)	0.028	2.28	0.023	2.84	0.015
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00064	0.00089	0.00111	0.00156	0.00048
	Tin (Sn)-Total (mg/kg wwt)	0.067	<0.020	0.168	<0.020	0.164
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00464	<0.00040	0.00476	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.047	<0.020	0.044	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.08	15.5	2.88	15.0	3.33
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.7	4.8	0.6	2.6	0.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-132 Tissue 21-AUG-18 09:00 GMBY-WHSC-014-T	L2173416-133 Tissue 21-AUG-18 09:00 GMBY-WHSC-015-T	L2173416-134 Tissue 21-AUG-18 09:00 GMBY-WHSC-016-T	L2173416-135 Tissue 21-AUG-18 09:00 GMBY-WHSC-017-T	L2173416-136 Tissue 21-AUG-18 09:00 GMBY-WHSC-019-T
TISSUE						
Physical Tests	% Moisture (%)	79.2	79.1	79.7	77.5	78.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.96	0.48	0.50	0.48	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0460	0.0532	0.0423	0.0605	0.0413
	Barium (Ba)-Total (mg/kg wwt)	0.016	0.043	0.015	0.024	0.022
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	138	191	119	132	197
	Cesium (Cs)-Total (mg/kg wwt)	0.0177	0.0142	0.0172	0.0157	0.0194
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.012	0.010	0.020
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.211	0.176	0.189	0.201	0.307
	Iron (Fe)-Total (mg/kg wwt)	4.15	2.83	3.67	2.66	3.40
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	320	353	326	343	305
	Manganese (Mn)-Total (mg/kg wwt)	0.213	0.205	0.175	0.178	0.260
	Mercury (Hg)-Total (mg/kg wwt)	0.203	0.163	0.130	0.169	0.184
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2230	2410	2340	2370	2170
	Potassium (K)-Total (mg/kg wwt)	4220	4670	4530	4410	4030
	Rubidium (Rb)-Total (mg/kg wwt)	6.98	6.04	6.22	6.79	6.33
	Selenium (Se)-Total (mg/kg wwt)	0.180	0.202	0.160	0.203	0.197
	Sodium (Na)-Total (mg/kg wwt)	290	187	230	247	326
	Strontium (Sr)-Total (mg/kg wwt)	0.023	0.033	0.016	0.019	0.034
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00117	0.00070	0.00146	0.00096	0.00100
	Tin (Sn)-Total (mg/kg wwt)	0.068	0.183	0.208	0.106	0.064
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.49	4.25	3.31	3.92	3.84
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.8	0.9	79.4	0.6	1.0

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2173416-137	L2173416-138	L2173416-141	L2173416-142	L2173416-143
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	21-AUG-18	21-AUG-18	29-AUG-18	29-AUG-18	29-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	GMBY-WHSC-021-T	GMBY-WHSC-024-T	GMBY-YLPR-COMP1	GMBY-YLPR-COMP2	GMBY-YLPR-COMP3
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	79.4	76.9	76.3	79.4	75.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	2.91	2.0	2.1	1.7
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0332	0.0781	0.0496	0.0507	0.0422
	Barium (Ba)-Total (mg/kg wwt)	0.011	0.017	0.481	0.373	0.514
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	0.0047	0.0059	0.0045
	Calcium (Ca)-Total (mg/kg wwt)	116	289	12500	10400	14000
	Cesium (Cs)-Total (mg/kg wwt)	0.0232	0.0193	0.0155	0.0100	0.0153
	Chromium (Cr)-Total (mg/kg wwt)	0.110	0.021	<0.040	<0.040	<0.040
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0055	0.0054	0.0059
	Copper (Cu)-Total (mg/kg wwt)	0.281	0.266	0.601	0.476	0.671
	Iron (Fe)-Total (mg/kg wwt)	4.58	3.16	14.4	15.2	12.8
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0102	<0.010	<0.010	<0.010
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	0.12	<0.10	0.12
	Magnesium (Mg)-Total (mg/kg wwt)	327	316	425	417	485
	Manganese (Mn)-Total (mg/kg wwt)	0.118	0.225	5.84	7.67	5.57
	Mercury (Hg)-Total (mg/kg wwt)	0.351	0.180	0.0302	0.0250	0.0264
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0191	0.0158	0.0171
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2400	2340	9360	8560	10900
	Potassium (K)-Total (mg/kg wwt)	4470	4120	3590	3100	3680
	Rubidium (Rb)-Total (mg/kg wwt)	7.18	6.11	8.25	6.35	9.17
	Selenium (Se)-Total (mg/kg wwt)	0.210	0.251	0.243	0.218	0.229
	Sodium (Na)-Total (mg/kg wwt)	295	312	962	780	1010
	Strontium (Sr)-Total (mg/kg wwt)	0.014	0.074	2.40	1.78	2.80
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00078	0.00120	0.00506	0.00483	0.00572
	Tin (Sn)-Total (mg/kg wwt)	0.043	0.987	0.157	0.180	0.224
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	0.00108	0.00103	0.00139
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.47	5.35	21.8	19.4	25.1
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)			0.0313	0.0197	0.0300
Aggregate Organics	Lipid Content (% wwt)	1.2	1.0	2.1	2.1	1.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-144 Tissue 29-AUG-18 09:00 GMBY-YLPR-COMP4	L2173416-145 Tissue 29-AUG-18 09:00 GMBY-YLPR-COMP5	L2173416-146 Tissue 29-AUG-18 09:00 GMBY-YLPR-COMP6	L2173416-147 Tissue 29-AUG-18 09:00 GMBY-YLPR-COMP7	L2173416-148 Tissue 29-AUG-18 09:00 GMBY-YLPR-COMP8
TISSUE						
Physical Tests	% Moisture (%)	77.9	77.3	76.2	78.1	78.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	1.3	2.7	3.9	1.4	3.21
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0466	0.0475	0.0506	0.0453	0.0456
	Barium (Ba)-Total (mg/kg wwt)	0.383	0.416	0.471	0.425	0.471
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0051	0.0062	0.0050	0.0041	0.0047
	Calcium (Ca)-Total (mg/kg wwt)	9980	11200	13700	12700	11000
	Cesium (Cs)-Total (mg/kg wwt)	0.0120	0.0126	0.0119	0.0135	0.0129
	Chromium (Cr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	0.014
	Cobalt (Co)-Total (mg/kg wwt)	0.0048	0.0057	0.0064	0.0049	0.0051
	Copper (Cu)-Total (mg/kg wwt)	0.496	0.540	0.512	0.532	0.522
	Iron (Fe)-Total (mg/kg wwt)	10.3	15.5	16.4	9.7	16.7
	Lead (Pb)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.0064
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	0.11	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	380	445	454	412	396
	Manganese (Mn)-Total (mg/kg wwt)	5.18	11.3	13.9	7.41	7.86
	Mercury (Hg)-Total (mg/kg wwt)	0.0267	0.0283	0.0306	0.0267	0.0177
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0168	0.0198	0.0164	0.0163	0.0180
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	7980	9140	9620	8390	8610
	Potassium (K)-Total (mg/kg wwt)	3350	3670	3480	3020	3460
	Rubidium (Rb)-Total (mg/kg wwt)	7.56	7.89	7.77	6.81	8.31
	Selenium (Se)-Total (mg/kg wwt)	0.220	0.227	0.245	0.214	0.197
	Sodium (Na)-Total (mg/kg wwt)	874	871	896	823	872
	Strontium (Sr)-Total (mg/kg wwt)	1.74	1.91	2.30	2.45	2.07
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00385	0.00501	0.00501	0.00418	0.00516
	Tin (Sn)-Total (mg/kg wwt)	0.244	0.226	0.216	0.264	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00163	0.00144	0.00129	0.00108	0.00176
	Vanadium (V)-Total (mg/kg wwt)	0.022	<0.020	0.021	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	18.4	22.9	22.3	19.2	22.4
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0273	0.0328	0.0354	0.0348	0.0233
Aggregate Organics	Lipid Content (% wwt)	2.0	2.1	2.1	2.1	2.1

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-149 Tissue 21-AUG-18 09:00 GMBY-YLPR-001-T	L2173416-150 Tissue 21-AUG-18 09:00 GMBY-YLPR-002-T	L2173416-151 Tissue 21-AUG-18 09:00 GMBY-YLPR-003-T	L2173416-152 Tissue 21-AUG-18 09:00 GMBY-YLPR-004-T	L2173416-153 Tissue 21-AUG-18 09:00 GMBY-YLPR-005-T
TISSUE						
Physical Tests	% Moisture (%)	78.7	77.1	77.8	78.0	77.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<1.0	<1.0	<0.40	0.41	<1.0
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0138	0.0166	0.0176	0.0217	0.0216
	Barium (Ba)-Total (mg/kg wwt)	0.011	0.050	0.020	0.020	0.046
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0010	<0.0010	<0.0020
	Calcium (Ca)-Total (mg/kg wwt)	188	1180	597	410	975
	Cesium (Cs)-Total (mg/kg wwt)	0.0236	0.0299	0.0201	0.0160	0.0178
	Chromium (Cr)-Total (mg/kg wwt)	<0.040	<0.040	0.079	0.012	<0.040
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.085	0.129	0.111	0.157	0.167
	Iron (Fe)-Total (mg/kg wwt)	1.5	2.0	3.33	2.18	2.4
	Lead (Pb)-Total (mg/kg wwt)	<0.010	<0.010	<0.0040	0.0044	<0.010
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	262	338	348	345	282
	Manganese (Mn)-Total (mg/kg wwt)	0.118	0.378	0.292	0.343	0.347
	Mercury (Hg)-Total (mg/kg wwt)	0.135	0.168	0.0774	0.0391	0.0491
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0080	<0.0080	<0.0040	<0.0040	<0.0080
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	0.046	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2030	3050	2600	2440	2390
	Potassium (K)-Total (mg/kg wwt)	3600	4380	4360	4260	3550
	Rubidium (Rb)-Total (mg/kg wwt)	7.47	9.57	7.98	7.90	7.72
	Selenium (Se)-Total (mg/kg wwt)	0.258	0.306	0.303	0.317	0.271
	Sodium (Na)-Total (mg/kg wwt)	202	465	459	616	674
	Strontium (Sr)-Total (mg/kg wwt)	0.028	0.159	0.069	0.050	0.173
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00142	0.00265	0.00526	0.00376	0.00317
	Tin (Sn)-Total (mg/kg wwt)	0.327	0.336	0.159	0.173	0.534
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.23	4.23	4.13	4.68	4.93
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.142	0.169	0.0859	0.0347	0.0437
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-154 Tissue 21-AUG-18 09:00 GMBY-YLPR-006-T	L2173416-155 Tissue 21-AUG-18 09:00 GMBY-YLPR-007-T	L2173416-156 Tissue 21-AUG-18 09:00 GMBY-YLPR-008-T	L2173416-157 Tissue 21-AUG-18 09:00 GMBY-YLPR-009-T	L2173416-158 Tissue 21-AUG-18 09:00 GMBY-YLPR-010-T
TISSUE						
Physical Tests	% Moisture (%)	79.6	78.1	79.5	79.7	77.2
Metals	Aluminum (Al)-Total (mg/kg wwt)	<1.0	<1.0	<1.0	<1.0	2.4
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0117	0.0240	0.0274	0.0140	0.0175
	Barium (Ba)-Total (mg/kg wwt)	0.038	0.025	0.043	0.033	0.022
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Calcium (Ca)-Total (mg/kg wwt)	554	445	802	520	330
	Cesium (Cs)-Total (mg/kg wwt)	0.0207	0.0171	0.0167	0.0209	0.0175
	Chromium (Cr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	0.046	<0.040
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.161	0.246	0.167	0.125	0.184
	Iron (Fe)-Total (mg/kg wwt)	3.8	3.4	2.8	3.7	3.8
	Lead (Pb)-Total (mg/kg wwt)	0.011	<0.010	<0.010	0.017	<0.010
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	238	293	231	289	215
	Manganese (Mn)-Total (mg/kg wwt)	0.354	0.464	0.514	0.271	0.478
	Mercury (Hg)-Total (mg/kg wwt)	0.0585	0.0364	0.0433	0.0461	0.0448
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	1980	2320	1910	2120	1700
	Potassium (K)-Total (mg/kg wwt)	3450	3860	2920	3810	3080
	Rubidium (Rb)-Total (mg/kg wwt)	10.1	8.05	6.87	10.2	9.33
	Selenium (Se)-Total (mg/kg wwt)	0.216	0.288	0.179	0.224	0.210
	Sodium (Na)-Total (mg/kg wwt)	623	706	473	233	552
	Strontium (Sr)-Total (mg/kg wwt)	0.071	0.061	0.118	0.066	0.044
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00236	0.00290	0.00246	0.00276	0.00358
	Tin (Sn)-Total (mg/kg wwt)	0.765	1.04	0.604	0.957	1.28
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.67	5.36	4.41	3.96	4.81
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0679	0.0343	0.0479	0.0614	0.0512
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-159 Tissue 21-AUG-18 09:00 GMBY-YLPR-011-T	L2173416-161 Tissue 21-AUG-18 09:00 GMBY-YLPR-013-T	L2173416-162 Tissue 21-AUG-18 09:00 GMBY-YLPR-014-T	L2173416-165 Tissue 21-AUG-18 09:00 GMBY-YLPR-017-T	L2173416-166 Tissue 21-AUG-18 09:00 GMBY-YLPR-018-T
TISSUE						
Physical Tests	% Moisture (%)	77.6	78.1	78.3	80.3	80.2
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	31.0	<1.0	<0.40	1.7
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	0.0033	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0249	0.0488	0.0232	0.0144	0.0126
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.011	0.052	0.011	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	0.28	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0020	<0.0020	<0.0010	<0.0020
	Calcium (Ca)-Total (mg/kg wwt)	219	119	570	296	107
	Cesium (Cs)-Total (mg/kg wwt)	0.0240	0.0197	0.0236	0.0176	0.0160
	Chromium (Cr)-Total (mg/kg wwt)	0.015	0.108	0.067	0.012	<0.040
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.116	0.125	0.126	0.129	0.136
	Iron (Fe)-Total (mg/kg wwt)	1.31	1.6	2.9	1.65	1.4
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.055	0.039	<0.0040	<0.010
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	373	286	348	322	267
	Manganese (Mn)-Total (mg/kg wwt)	0.214	0.185	0.393	0.257	0.158
	Mercury (Hg)-Total (mg/kg wwt)	0.112	0.0528	0.0580	0.0636	0.0379
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0090	<0.0080	<0.0040	<0.0080
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2780	2240	2740	2390	2090
	Potassium (K)-Total (mg/kg wwt)	5000	4140	4630	4370	3770
	Rubidium (Rb)-Total (mg/kg wwt)	8.74	7.52	10.7	8.64	8.07
	Selenium (Se)-Total (mg/kg wwt)	0.297	0.405	0.329	0.233	0.203
	Sodium (Na)-Total (mg/kg wwt)	334	607	318	263	379
	Strontium (Sr)-Total (mg/kg wwt)	0.022	0.152	0.083	0.035	<0.020
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00514	0.00402	0.00597	0.00320	0.00234
	Tin (Sn)-Total (mg/kg wwt)	0.497	7.07	1.40	0.345	0.918
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.18	17.2	4.70	3.72	4.23
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.133	0.0612	0.0680	0.0725	0.0459
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2173416-168	L2173416-169	L2173416-170	L2173416-171	L2173416-172
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	21-AUG-18	21-AUG-18	21-AUG-18	21-AUG-18	21-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	GMBY-YLPR-020-T	GMBY-YLPR-021-T	GMBY-YLPR-022-T	GMBY-YLPR-023-T	GMBY-YLPR-024-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	78.4	79.0	78.9	79.1	77.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	1.37	<1.0	<1.0	<1.0	<1.0
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0236	0.0211	0.0132	0.0115	0.0185
	Barium (Ba)-Total (mg/kg wwt)	0.014	0.035	0.027	0.017	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0020	<0.0020	<0.0020	<0.0020
	Calcium (Ca)-Total (mg/kg wwt)	395	822	640	303	142
	Cesium (Cs)-Total (mg/kg wwt)	0.0212	0.0260	0.0130	0.0132	0.0193
	Chromium (Cr)-Total (mg/kg wwt)	0.055	<0.040	<0.040	<0.040	<0.040
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.169	0.189	0.171	0.132	0.251
	Iron (Fe)-Total (mg/kg wwt)	2.87	3.3	2.2	1.5	2.2
	Lead (Pb)-Total (mg/kg wwt)	0.0068	<0.010	<0.010	<0.010	<0.010
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	341	294	239	220	270
	Manganese (Mn)-Total (mg/kg wwt)	0.229	0.455	0.268	0.216	0.168
	Mercury (Hg)-Total (mg/kg wwt)	0.0595	0.0593	0.0338	0.0377	0.0535
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0080	<0.0080	<0.0080	<0.0080
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2490	2220	1770	1680	2230
	Potassium (K)-Total (mg/kg wwt)	4220	3240	2830	3040	4090
	Rubidium (Rb)-Total (mg/kg wwt)	8.76	10.2	5.98	5.74	7.95
	Selenium (Se)-Total (mg/kg wwt)	0.308	0.260	0.263	0.208	0.270
	Sodium (Na)-Total (mg/kg wwt)	461	591	556	374	368
	Strontium (Sr)-Total (mg/kg wwt)	0.052	0.117	0.101	0.042	<0.020
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00296	0.00355	0.00219	0.00482	0.00455
	Tin (Sn)-Total (mg/kg wwt)	1.06	0.270	0.317	0.257	0.205
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.50	5.64	4.14	3.18	4.10
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0658	0.0533	0.0437	0.0527	0.0590
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-173 Tissue 30-AUG-18 09:00 KLBB-LKWH-001-T	L2173416-174 Tissue 30-AUG-18 09:00 KLBB-LKWH-002-T	L2173416-175 Tissue 30-AUG-18 09:00 KLBB-LKWH-003-T	L2173416-176 Tissue 01-SEP-18 09:00 KLBB-LKWH-004-T	L2173416-177 Tissue 01-SEP-18 09:00 KLBB-LKWH-005-T
TISSUE						
Physical Tests	% Moisture (%)	76.1	77.0	76.1	76.2	74.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.105	0.209	0.147	0.158	0.120
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.023	0.012	<0.010	0.013
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	204	938	393	172	108
	Cesium (Cs)-Total (mg/kg wwt)	0.0146	0.0190	0.0136	0.0179	0.0142
	Chromium (Cr)-Total (mg/kg wwt)	0.012	0.015	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0045	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.200	0.138	0.223	0.271	0.219
	Iron (Fe)-Total (mg/kg wwt)	3.85	4.24	4.28	6.06	2.65
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0052	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	303	323	309	310	331
	Manganese (Mn)-Total (mg/kg wwt)	0.143	0.217	0.182	0.078	0.150
	Mercury (Hg)-Total (mg/kg wwt)	0.126	0.112	0.149	0.192	0.112
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2510	3020	2470	2810	2650
	Potassium (K)-Total (mg/kg wwt)	3970	4370	3800	4350	4480
	Rubidium (Rb)-Total (mg/kg wwt)	4.51	4.88	4.61	4.46	5.98
	Selenium (Se)-Total (mg/kg wwt)	0.248	0.258	0.213	0.264	0.202
	Sodium (Na)-Total (mg/kg wwt)	348	388	495	413	278
	Strontium (Sr)-Total (mg/kg wwt)	0.079	0.470	0.144	0.058	0.037
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00094	0.00057	0.00195	0.00134	0.00131
	Tin (Sn)-Total (mg/kg wwt)	0.077	0.223	0.050	0.111	0.061
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.47	3.56	3.75	3.69	3.62
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	3.0	1.9	2.3	1.1	1.4

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-178 Tissue 01-SEP-18 09:00 KLBB-NRPK-001-T	L2173416-179 Tissue 02-SEP-18 09:00 KLBB-NRPK-002-T	L2173416-180 Tissue 01-SEP-18 09:00 KLBB-NRPK-003-T	L2173416-181 Tissue 30-AUG-18 09:00 KLBB-WALL-001-T	L2173416-182 Tissue 30-AUG-18 09:00 KLBB-WALL-002-T
TISSUE						
Physical Tests	% Moisture (%)	78.7	77.7	77.2	79.5	79.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	0.77	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.442	0.171	0.354	0.0661	0.328
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.016	0.014	<0.010	0.024
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	391	606	372	225	557
	Cesium (Cs)-Total (mg/kg wwt)	0.0624	0.0554	0.0509	0.0601	0.0990
	Chromium (Cr)-Total (mg/kg wwt)	0.010	<0.010	0.010	0.104	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.141	0.135	0.149	0.149	0.162
	Iron (Fe)-Total (mg/kg wwt)	1.60	1.17	2.01	2.44	2.23
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0046
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	329	387	361	326	319
	Manganese (Mn)-Total (mg/kg wwt)	0.228	0.317	0.259	0.088	0.146
	Mercury (Hg)-Total (mg/kg wwt)	0.188	0.255	0.156	0.379	0.522
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	0.053	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2540	2880	2650	2500	2440
	Potassium (K)-Total (mg/kg wwt)	4380	4710	4480	4480	4180
	Rubidium (Rb)-Total (mg/kg wwt)	9.24	11.7	9.57	12.7	11.6
	Selenium (Se)-Total (mg/kg wwt)	0.174	0.180	0.170	0.183	0.200
	Sodium (Na)-Total (mg/kg wwt)	323	358	339	283	411
	Strontium (Sr)-Total (mg/kg wwt)	0.075	0.102	0.082	0.039	0.122
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00628	0.00677	0.00594	0.00509	0.00312
	Tin (Sn)-Total (mg/kg wwt)	0.086	0.035	0.148	0.025	0.023
	Uranium (U)-Total (mg/kg wwt)	0.00087	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.46	5.28	4.09	3.51	4.31
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.174	0.282	0.210	0.432	0.658
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	0.7

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-183 Tissue 30-AUG-18 09:00 KLBB-WALL-003-T	L2173416-184 Tissue 30-AUG-18 09:00 KLBB-WALL-004-T	L2173416-185 Tissue 01-SEP-18 09:00 KLBB-WALL-005-T	L2173416-186 Tissue 01-SEP-18 09:00 KLBB-WALL-006-T	L2173416-187 Tissue 01-SEP-18 09:00 KLBB-WALL-006-WB
TISSUE						
Physical Tests	% Moisture (%)	79.1	78.7	78.5	78.9	70.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	0.41	<0.40	<0.40	0.74
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.239	0.176	0.103	0.0794	0.134
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.465
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	0.0025
	Calcium (Ca)-Total (mg/kg wwt)	178	183	122	117	25000
	Cesium (Cs)-Total (mg/kg wwt)	0.119	0.138	0.110	0.108	0.0656
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.013
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0082
	Copper (Cu)-Total (mg/kg wwt)	0.158	0.153	0.131	0.184	0.348
	Iron (Fe)-Total (mg/kg wwt)	1.62	1.89	1.20	1.51	8.22
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0045
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	305	330	358	327	655
	Manganese (Mn)-Total (mg/kg wwt)	0.078	0.109	0.066	0.081	1.53
	Mercury (Hg)-Total (mg/kg wwt)	0.514	0.380	0.384	0.293	0.161
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0043
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2340	2520	2570	2630	15500
	Potassium (K)-Total (mg/kg wwt)	4400	4780	4910	5030	3220
	Rubidium (Rb)-Total (mg/kg wwt)	13.4	16.2	22.8	17.1	10.6
	Selenium (Se)-Total (mg/kg wwt)	0.160	0.177	0.177	0.167	0.228
	Sodium (Na)-Total (mg/kg wwt)	327	356	276	253	1460
	Strontium (Sr)-Total (mg/kg wwt)	0.035	0.032	0.015	0.014	4.89
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00388	0.00677	0.00650	0.00976	0.00950
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.55	3.98	3.97	3.68	22.0
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.585	0.440	0.403	0.390	
Aggregate Organics	Lipid Content (% wwt)	0.6	<0.5	0.5	0.6	3.1

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-188 Tissue 01-SEP-18 09:00 KLBB-WALL-010-T	L2173416-189 Tissue 01-SEP-18 09:00 KLBB-WALL-010-WB	L2173416-190 Tissue 02-SEP-18 09:00 KLBB-WALL-014-G	L2173416-191 Tissue 02-SEP-18 09:00 KLBB-WALL-014-L	L2173416-192 Tissue 02-SEP-18 09:00 KLBB-WALL-014-T
TISSUE						
Physical Tests	% Moisture (%)	78.0	65.1	75.5	65.5	76.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	6.67	<1.0	<1.0	0.44
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.129	0.378	0.0414	0.0519	0.130
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.552	0.040	0.021	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0049	0.0036	0.0985	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	111	22600	322	82.1	116
	Cesium (Cs)-Total (mg/kg wwt)	0.0692	0.0492	0.108	0.0634	0.118
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.139	<0.040	<0.040	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0126	0.0761	0.0784	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.189	0.412	0.898	1.46	0.128
	Iron (Fe)-Total (mg/kg wwt)	1.66	21.5	31.0	46.6	1.56
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0124	<0.010	<0.010	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	333	658	315	198	333
	Manganese (Mn)-Total (mg/kg wwt)	0.059	1.99	2.78	1.75	0.064
	Mercury (Hg)-Total (mg/kg wwt)	0.417	0.250	0.0771	0.341	0.738
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0087	<0.0080	0.152	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	0.062	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2500	14300	3500	3130	2480
	Potassium (K)-Total (mg/kg wwt)	4790	3590	3900	2900	4650
	Rubidium (Rb)-Total (mg/kg wwt)	19.3	13.4	20.8	19.4	23.5
	Selenium (Se)-Total (mg/kg wwt)	0.187	0.283	0.729	0.757	0.193
	Sodium (Na)-Total (mg/kg wwt)	241	1410	1120	968	219
	Strontium (Sr)-Total (mg/kg wwt)	0.014	3.97	0.048	0.036	0.016
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00523	0.00579	0.0111	0.0306	0.00489
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	0.062	0.215	0.056
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00067	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.021	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.09	22.2	58.1	19.1	3.30
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.598			0.343	0.687
Aggregate Organics	Lipid Content (% wwt)	<0.5	3.9	6.9	14.0	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-193 Tissue 01-SEP-18 09:00 KLBB-WALL-014-WB	L2173416-194 Tissue 03-SEP-18 09:00 KLBB-WALL-020-T	L2173416-195 Tissue 03-SEP-18 09:00 KLBB-WALL-022-T	L2173416-196 Tissue 03-SEP-18 09:00 KLBB-WALL-023-T	L2173416-198 Tissue 30-AUG-18 09:00 KLBB-WHSC-001-T
TISSUE						
Physical Tests	% Moisture (%)	68.7	77.0	79.0	77.6	82.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.47	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.121	0.0875	0.128	0.125	0.202
	Barium (Ba)-Total (mg/kg wwt)	0.287	<0.010	<0.010	<0.010	0.016
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0023	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	16200	356	161	128	148
	Cesium (Cs)-Total (mg/kg wwt)	0.0824	0.135	0.0741	0.100	0.0304
	Chromium (Cr)-Total (mg/kg wwt)	0.013	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.317	0.142	0.147	0.195	0.188
	Iron (Fe)-Total (mg/kg wwt)	9.60	1.45	1.64	2.26	2.74
	Lead (Pb)-Total (mg/kg wwt)	0.0064	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	523	318	318	333	265
	Manganese (Mn)-Total (mg/kg wwt)	0.899	0.093	0.058	0.060	0.150
	Mercury (Hg)-Total (mg/kg wwt)	0.432	0.438	0.548	0.451	0.199
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	11100	2470	2330	2550	2120
	Potassium (K)-Total (mg/kg wwt)	3400	4390	4430	4920	4000
	Rubidium (Rb)-Total (mg/kg wwt)	15.9	20.2	15.8	19.6	5.22
	Selenium (Se)-Total (mg/kg wwt)	0.260	0.171	0.195	0.204	0.197
	Sodium (Na)-Total (mg/kg wwt)	1210	292	295	275	293
	Strontium (Sr)-Total (mg/kg wwt)	3.56	0.065	0.025	0.017	0.036
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00522	0.00508	0.00546	0.00594	0.00065
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.024
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	17.8	4.37	3.67	4.36	3.41
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)		0.398	0.495	0.376	
Aggregate Organics	Lipid Content (% wwt)	3.6	0.5	0.6	0.6	0.7

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-199 Tissue 30-AUG-18 09:00 KLBB-WHSC-002-T	L2173416-200 Tissue 30-AUG-18 09:00 KLBB-WHSC-003-T	L2173416-201 Tissue 30-AUG-18 09:00 KLBB-WHSC-004-T	L2173416-202 Tissue 30-AUG-18 09:00 KLBB-WHSC-004-WB	L2173416-203 Tissue 30-AUG-18 09:00 KLBB-WHSC-005-T
TISSUE						
Physical Tests	% Moisture (%)	81.2	82.1	80.7	74.8	81.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	32.5	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	0.0063	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.330	0.116	0.307	1.52	0.234
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.016	0.020	0.497	0.015
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	0.0116	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	177	179	198	7420	210
	Cesium (Cs)-Total (mg/kg wwt)	0.0265	0.0229	0.0283	0.0205	0.0140
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.130	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0381	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.186	0.190	0.266	0.896	0.304
	Iron (Fe)-Total (mg/kg wwt)	2.42	3.12	4.21	91.7	5.22
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0429	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	335	303	288	360	266
	Manganese (Mn)-Total (mg/kg wwt)	0.143	0.167	0.183	4.43	0.210
	Mercury (Hg)-Total (mg/kg wwt)	0.172	0.216	0.143	0.0669	0.168
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0206	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	0.087	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2150	2080	2170	6100	1870
	Potassium (K)-Total (mg/kg wwt)	4170	4020	3980	2910	3390
	Rubidium (Rb)-Total (mg/kg wwt)	5.50	4.21	4.54	3.29	4.92
	Selenium (Se)-Total (mg/kg wwt)	0.175	0.250	0.245	0.247	0.218
	Sodium (Na)-Total (mg/kg wwt)	227	271	313	1010	555
	Strontium (Sr)-Total (mg/kg wwt)	0.038	0.035	0.052	2.34	0.051
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00124	0.00063	0.00104	0.00137	0.00067
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.022
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	0.00373	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	0.122	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.48	3.85	3.41	13.5	3.95
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	0.063	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.7	<0.5	1.1	3.6	0.9

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-204 Tissue 30-AUG-18 09:00 KLBB-WHSC-005-WB	L2173416-205 Tissue 30-AUG-18 09:00 KLBB-WHSC-006-T	L2173416-206 Tissue 30-AUG-18 09:00 KLBB-WHSC-007-T	L2173416-207 Tissue 30-AUG-18 09:00 KLBB-WHSC-008-T	L2173416-208 Tissue 30-AUG-18 09:00 KLBB-WHSC-010-T
TISSUE						
Physical Tests	% Moisture (%)	74.2	82.6	79.2	80.0	78.2
Metals	Aluminum (Al)-Total (mg/kg wwt)	17.0	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	0.0034	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.999	0.102	0.300	0.308	0.268
	Barium (Ba)-Total (mg/kg wwt)	0.542	0.021	0.016	0.038	0.013
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0118	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	11900	261	135	449	175
	Cesium (Cs)-Total (mg/kg wwt)	0.0114	0.0193	0.0267	0.0212	0.0325
	Chromium (Cr)-Total (mg/kg wwt)	0.070	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0219	0.0043	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.917	0.258	0.297	0.209	0.208
	Iron (Fe)-Total (mg/kg wwt)	58.9	3.53	3.56	3.17	3.51
	Lead (Pb)-Total (mg/kg wwt)	0.0374	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	433	260	331	341	313
	Manganese (Mn)-Total (mg/kg wwt)	7.14	0.185	0.179	0.206	0.142
	Mercury (Hg)-Total (mg/kg wwt)	0.0820	0.127	0.0990	0.137	0.177
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0155	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	0.050	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	8400	2110	2220	2380	2360
	Potassium (K)-Total (mg/kg wwt)	2800	3760	4040	4200	4490
	Rubidium (Rb)-Total (mg/kg wwt)	3.83	3.09	4.37	7.20	5.08
	Selenium (Se)-Total (mg/kg wwt)	0.216	0.120	0.220	0.205	0.215
	Sodium (Na)-Total (mg/kg wwt)	937	332	279	262	348
	Strontium (Sr)-Total (mg/kg wwt)	3.23	0.088	0.030	0.099	0.044
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00092	<0.00040	0.00119	0.00082	0.00098
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.028	0.021	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00420	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	0.077	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	18.8	3.87	4.40	3.80	3.78
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	2.7	0.5	2.7	1.2	0.9

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-209 Tissue 30-AUG-18 09:00 KLBB-WHSC-010-WB	L2173416-210 Tissue 30-AUG-18 09:00 KLBB-WHSC-013-T	L2173416-211 Tissue 01-SEP-18 09:00 KLBB-WHSC-013-WB	L2173416-212 Tissue 01-SEP-18 09:00 KLBB-YLPR 010-T	L2173416-213 Tissue 01-SEP-18 09:00 KLBB-YLPR 011-T
TISSUE						
Physical Tests	% Moisture (%)	80.4	80.5	74.6	77.9	78.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	25.7	<0.40	4.47	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	0.0054	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	1.35	0.211	0.443	0.118	0.130
	Barium (Ba)-Total (mg/kg wwt)	0.567	0.031	0.254	0.039	0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0085	<0.0010	0.0051	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	21800	316	5450	465	264
	Cesium (Cs)-Total (mg/kg wwt)	0.0192	0.0432	0.0262	0.0407	0.0706
	Chromium (Cr)-Total (mg/kg wwt)	0.100	<0.010	0.016	0.017	0.018
	Cobalt (Co)-Total (mg/kg wwt)	0.0339	<0.0040	0.0171	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.820	0.211	0.694	0.151	0.147
	Iron (Fe)-Total (mg/kg wwt)	73.1	2.51	19.3	1.97	2.45
	Lead (Pb)-Total (mg/kg wwt)	0.0446	<0.0040	0.0077	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	625	334	345	318	316
	Manganese (Mn)-Total (mg/kg wwt)	5.59	0.264	2.63	0.272	0.139
	Mercury (Hg)-Total (mg/kg wwt)	0.0768	0.0711	0.0424	0.0945	0.287
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0297	<0.0040	0.0216	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	0.063	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	14100	2290	4880	2460	2450
	Potassium (K)-Total (mg/kg wwt)	2810	4140	3190	4400	4270
	Rubidium (Rb)-Total (mg/kg wwt)	3.20	5.22	3.94	8.00	9.55
	Selenium (Se)-Total (mg/kg wwt)	0.234	0.161	0.228	0.327	0.339
	Sodium (Na)-Total (mg/kg wwt)	1410	272	972	266	295
	Strontium (Sr)-Total (mg/kg wwt)	7.36	0.106	2.09	0.131	0.059
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00128	0.00078	0.00087	0.00360	0.00226
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	0.041	0.028
	Uranium (U)-Total (mg/kg wwt)	0.00328	<0.00040	0.00075	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	0.123	<0.020	0.026	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	19.7	3.67	14.4	4.11	4.13
	Zirconium (Zr)-Total (mg/kg wwt)	0.052	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	3.6	0.6	3.9	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-214 Tissue 30-AUG-18 09:00 KLBB-YLPR-012-T	L2173416-215 Tissue 30-AUG-18 09:00 KLBB-YLPR-001-T	L2173416-216 Tissue 30-AUG-18 09:00 KLBB-YLPR-002-T	L2173416-217 Tissue 30-AUG-18 09:00 KLBB-YLPR-003-T	L2173416-218 Tissue 30-AUG-18 09:00 KLBB-YLPR-004-T
TISSUE						
Physical Tests	% Moisture (%)	77.7	79.9	78.5	78.1	81.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0868	0.158	0.186	0.264	0.254
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.011	0.012	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	215	238	443	332	171
	Cesium (Cs)-Total (mg/kg wwt)	0.0497	0.0505	0.122	0.0700	0.0222
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.124	0.116	0.161	0.138	0.134
	Iron (Fe)-Total (mg/kg wwt)	1.63	1.33	1.80	1.73	1.51
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	331	329	311	346	307
	Manganese (Mn)-Total (mg/kg wwt)	0.152	0.172	0.214	0.183	0.208
	Mercury (Hg)-Total (mg/kg wwt)	0.118	0.165	0.206	0.145	0.0475
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2400	2380	2340	2520	2120
	Potassium (K)-Total (mg/kg wwt)	4440	4290	3920	4590	4060
	Rubidium (Rb)-Total (mg/kg wwt)	9.38	8.45	9.00	9.77	6.43
	Selenium (Se)-Total (mg/kg wwt)	0.305	0.263	0.304	0.355	0.235
	Sodium (Na)-Total (mg/kg wwt)	269	263	477	239	241
	Strontium (Sr)-Total (mg/kg wwt)	0.041	0.066	0.142	0.090	0.035
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00255	0.00226	0.00348	0.00266	0.00242
	Tin (Sn)-Total (mg/kg wwt)	0.058	0.042	0.043	0.033	0.042
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.83	3.55	4.45	3.97	4.18
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-219 Tissue 30-AUG-18 09:00 KLBB-YLPR-005-T	L2173416-220 Tissue 30-AUG-18 09:00 KLBB-YLPR-006-T	L2173416-221 Tissue 30-AUG-18 09:00 KLBB-YLPR-007-T	L2173416-222 Tissue 30-AUG-18 09:00 KLBB-YLPR-008-T	L2173416-223 Tissue 30-AUG-18 09:00 KLBB-YLPR-009-T
TISSUE						
Physical Tests	% Moisture (%)	78.2	78.6	78.9	78.4	78.2
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.183	0.308	0.256	0.182	0.190
	Barium (Ba)-Total (mg/kg wwt)	0.021	0.063	0.044	0.029	0.046
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0012	<0.0010	<0.0010	0.0010
	Calcium (Ca)-Total (mg/kg wwt)	554	898	1210	633	612
	Cesium (Cs)-Total (mg/kg wwt)	0.0164	0.0193	0.0185	0.0221	0.0150
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.011	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.160	0.180	0.155	0.143	0.162
	Iron (Fe)-Total (mg/kg wwt)	1.52	2.05	1.85	1.50	1.96
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	334	344	328	352	357
	Manganese (Mn)-Total (mg/kg wwt)	0.421	0.733	0.799	0.456	0.525
	Mercury (Hg)-Total (mg/kg wwt)	0.0628	0.0555	0.0506	0.0734	0.0531
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2450	2620	2680	2470	2620
	Potassium (K)-Total (mg/kg wwt)	4230	4200	3860	4290	4490
	Rubidium (Rb)-Total (mg/kg wwt)	7.96	7.70	7.35	8.28	7.62
	Selenium (Se)-Total (mg/kg wwt)	0.275	0.358	0.345	0.294	0.295
	Sodium (Na)-Total (mg/kg wwt)	580	605	560	236	354
	Strontium (Sr)-Total (mg/kg wwt)	0.121	0.348	0.286	0.123	0.185
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00227	0.00211	0.00218	0.00236	0.00231
	Tin (Sn)-Total (mg/kg wwt)	0.025	0.041	0.032	0.035	0.038
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.51	4.85	4.58	4.29	4.69
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	<0.5	0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-224 Tissue 30-AUG-18 09:00 KLCB-LKWH-001-T	L2173416-225 Tissue 30-AUG-18 09:00 KLCB-LKWH-002-T	L2173416-226 Tissue 30-AUG-18 09:00 KLCB-LKWH-003-T	L2173416-227 Tissue 30-AUG-18 09:00 KLCB-LKWH-004-T	L2173416-230 Tissue 28-AUG-18 09:00 KLCB-LKWH-007-T
TISSUE						
Physical Tests	% Moisture (%)	79.0	80.4	77.2	77.5	80.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	1.93
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.202	0.127	0.110	0.140	0.158
	Barium (Ba)-Total (mg/kg wwt)	0.020	0.012	<0.010	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	493	376	63.3	108	227
	Cesium (Cs)-Total (mg/kg wwt)	0.0156	0.0271	0.0231	0.0160	0.0249
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0042	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.271	0.183	0.429	0.330	0.126
	Iron (Fe)-Total (mg/kg wwt)	4.37	3.73	6.51	4.37	3.04
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	310	308	295	302	295
	Manganese (Mn)-Total (mg/kg wwt)	0.245	0.140	0.103	0.113	0.122
	Mercury (Hg)-Total (mg/kg wwt)	0.123	0.173	0.156	0.118	0.221
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2450	2590	2390	2430	2660
	Potassium (K)-Total (mg/kg wwt)	4040	4360	4030	4200	4840
	Rubidium (Rb)-Total (mg/kg wwt)	6.01	5.33	4.33	4.42	5.19
	Selenium (Se)-Total (mg/kg wwt)	0.216	0.233	0.214	0.228	0.204
	Sodium (Na)-Total (mg/kg wwt)	367	433	415	308	352
	Strontium (Sr)-Total (mg/kg wwt)	0.140	0.162	0.019	0.043	0.082
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00181	0.00097	0.00145	0.00140	0.00079
	Tin (Sn)-Total (mg/kg wwt)	0.034	0.035	0.031	0.025	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	5.33	3.41	3.37	3.17	2.83
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.8	1.0	2.3	2.1	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-231 Tissue 28-AUG-18 09:00 KLCB-NRPK-001-T	L2173416-232 Tissue 31-AUG-18 09:00 KLCB-NRPK-002-T	L2173416-233 Tissue 31-AUG-18 09:00 KLCB-NRPK-003-T	L2173416-234 Tissue 31-AUG-18 09:00 KLCB-NRPK-004-T	L2173416-235 Tissue 28-AUG-18 09:00 KLCB-NRPK-005-T
TISSUE						
Physical Tests	% Moisture (%)	82.0	79.4	77.4	77.1	76.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0880	0.178	0.242	0.380	0.418
	Barium (Ba)-Total (mg/kg wwt)	0.011	0.011	0.011	0.016	0.017
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	381	298	321	328	633
	Cesium (Cs)-Total (mg/kg wwt)	0.0309	0.0349	0.0427	0.0417	0.0618
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.015
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.147	0.122	0.163	0.147	0.121
	Iron (Fe)-Total (mg/kg wwt)	0.89	1.10	2.00	1.76	1.33
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	340	317	360	349	373
	Manganese (Mn)-Total (mg/kg wwt)	0.243	0.234	0.340	0.373	0.319
	Mercury (Hg)-Total (mg/kg wwt)	0.259	0.181	0.206	0.234	0.199
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2570	2360	2790	2570	2950
	Potassium (K)-Total (mg/kg wwt)	4590	4300	4830	4500	4860
	Rubidium (Rb)-Total (mg/kg wwt)	8.68	8.90	10.8	9.37	9.05
	Selenium (Se)-Total (mg/kg wwt)	0.196	0.177	0.177	0.170	0.173
	Sodium (Na)-Total (mg/kg wwt)	332	350	293	260	306
	Strontium (Sr)-Total (mg/kg wwt)	0.057	0.047	0.045	0.054	0.124
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00493	0.00479	0.00530	0.00471	0.00288
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.021
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.14	3.08	4.57	4.39	3.90
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.289	0.250	0.304	0.283	0.216
Aggregate Organics	Lipid Content (% wwt)	0.7	<0.5	0.6	0.8	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-236 Tissue 28-AUG-18 09:00 KLCB-WALL-001-T	L2173416-237 Tissue 28-AUG-18 09:00 KLCB-WALL-001-WB	L2173416-238 Tissue 28-AUG-18 09:00 KLCB-WALL-002-T	L2173416-239 Tissue 28-AUG-18 09:00 KLCB-WALL-003-T	L2173416-240 Tissue 28-AUG-18 09:00 KLCB-WALL-004-T
TISSUE						
Physical Tests	% Moisture (%)	78.5	74.6	78.3	78.7	78.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	0.44	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.100	0.0737	0.0849	0.0686	0.0590
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.511	0.020	0.020	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0093	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	116	13300	752	361	78.4
	Cesium (Cs)-Total (mg/kg wwt)	0.0844	0.0553	0.0971	0.0531	0.0922
	Chromium (Cr)-Total (mg/kg wwt)	0.027	<0.010	<0.010	0.011	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0066	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.126	0.336	0.109	0.127	0.117
	Iron (Fe)-Total (mg/kg wwt)	2.33	13.5	1.37	2.68	1.08
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0112	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	316	448	340	299	332
	Manganese (Mn)-Total (mg/kg wwt)	0.061	1.03	0.099	0.089	0.046
	Mercury (Hg)-Total (mg/kg wwt)	1.40	0.752	0.536	1.32	1.41
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2520	9340	2820	2530	2440
	Potassium (K)-Total (mg/kg wwt)	5060	3030	4930	4680	4720
	Rubidium (Rb)-Total (mg/kg wwt)	19.4	11.6	23.2	12.8	21.1
	Selenium (Se)-Total (mg/kg wwt)	0.225	0.270	0.173	0.217	0.236
	Sodium (Na)-Total (mg/kg wwt)	251	1130	325	347	271
	Strontium (Sr)-Total (mg/kg wwt)	0.014	2.19	0.119	0.052	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00441	0.00390	0.00747	0.00471	0.00705
	Tin (Sn)-Total (mg/kg wwt)	0.022	<0.020	0.029	0.024	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00098	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.01	15.7	3.88	3.22	3.32
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	1.66		0.641	1.32	0.443
Aggregate Organics	Lipid Content (% wwt)	<0.5	3.0	0.7	<0.5	0.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-241 Tissue 28-AUG-18 09:00 KLCB-WALL-005-T	L2173416-242 Tissue 28-AUG-18 09:00 KLCB-WALL-005-WB	L2173416-243 Tissue 28-AUG-18 09:00 KLCB-WALL-006-T	L2173416-244 Tissue 28-AUG-18 09:00 KLCB-WALL-007-T	L2173416-245 Tissue 28-AUG-18 09:00 KLCB-WALL-008-T
TISSUE						
Physical Tests	% Moisture (%)	78.2	71.8	78.8	79.5	78.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0694	0.0672	0.0987	0.0609	0.123
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.505	0.016	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0030	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	141	17400	380	79.7	115
	Cesium (Cs)-Total (mg/kg wwt)	0.0566	0.0416	0.0784	0.0684	0.0703
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0065	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.127	0.296	0.156	0.120	0.157
	Iron (Fe)-Total (mg/kg wwt)	1.34	6.51	2.21	1.00	1.56
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0062	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	331	532	314	315	337
	Manganese (Mn)-Total (mg/kg wwt)	0.094	1.16	0.106	0.052	0.064
	Mercury (Hg)-Total (mg/kg wwt)	0.567	0.336	0.585	0.905	0.666
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2550	11800	2500	2370	2520
	Potassium (K)-Total (mg/kg wwt)	4810	3320	4530	4670	4810
	Rubidium (Rb)-Total (mg/kg wwt)	18.5	12.5	19.3	19.8	20.8
	Selenium (Se)-Total (mg/kg wwt)	0.218	0.287	0.179	0.199	0.190
	Sodium (Na)-Total (mg/kg wwt)	248	1130	341	316	308
	Strontium (Sr)-Total (mg/kg wwt)	0.015	2.93	0.056	<0.010	0.013
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00751	0.00774	0.00506	0.00590	0.00662
	Tin (Sn)-Total (mg/kg wwt)	0.023	<0.020	<0.020	0.021	0.022
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00045	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.35	17.3	4.08	2.97	3.77
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.331		0.309	0.812	0.597
Aggregate Organics	Lipid Content (% wwt)	<0.5	4.7	1.0	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-246 Tissue 28-AUG-18 09:00 KLCB-WALL-009-T	L2173416-247 Tissue 28-AUG-18 09:00 KLCB-WALL-009-WB	L2173416-248 Tissue 28-AUG-18 09:00 KLCB-WALL-010-T	L2173416-249 Tissue 28-AUG-18 09:00 KLCB-WALL-011-G	L2173416-250 Tissue 28-AUG-18 09:00 KLCB-WALL-011-L
TISSUE						
Physical Tests	% Moisture (%)	78.5	70.0	79.1	79.9	75.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	0.71	<0.40	<1.0	1.3
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	0.0082
	Arsenic (As)-Total (mg/kg wwt)	0.0490	0.0689	0.0518	0.0160	0.137
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.308	<0.010	0.011	0.013
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0029	<0.0010	0.0073	0.340
	Calcium (Ca)-Total (mg/kg wwt)	123	11900	119	285	96.7
	Cesium (Cs)-Total (mg/kg wwt)	0.0624	0.0447	0.0502	0.0532	0.0282
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.014	<0.010	<0.040	<0.040
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0046	<0.0040	0.0668	0.591
	Copper (Cu)-Total (mg/kg wwt)	0.124	0.552	0.156	0.872	1.62
	Iron (Fe)-Total (mg/kg wwt)	1.14	8.12	1.50	12.1	31.2
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0048	<0.0040	<0.010	<0.010
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	324	435	319	215	166
	Manganese (Mn)-Total (mg/kg wwt)	0.058	0.782	0.068	1.22	1.64
	Mercury (Hg)-Total (mg/kg wwt)	0.676	0.361	0.641	0.294	1.75
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0043	<0.0040	0.0101	0.253
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2450	8810	2390	3050	2990
	Potassium (K)-Total (mg/kg wwt)	4660	3250	4550	4040	2520
	Rubidium (Rb)-Total (mg/kg wwt)	17.3	11.4	13.9	15.7	10.1
	Selenium (Se)-Total (mg/kg wwt)	0.239	0.307	0.211	0.590	1.39
	Sodium (Na)-Total (mg/kg wwt)	327	1180	272	1260	1270
	Strontium (Sr)-Total (mg/kg wwt)	0.012	1.99	0.012	0.030	0.024
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0121
	Thallium (Tl)-Total (mg/kg wwt)	0.00762	0.00672	0.00692	0.0132	0.0165
	Tin (Sn)-Total (mg/kg wwt)	0.021	<0.020	<0.020	0.030	0.105
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	0.00112
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.080
	Zinc (Zn)-Total (mg/kg wwt)	3.43	16.1	3.56	67.1	20.9
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	0.093	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.622		0.575		
Aggregate Organics	Lipid Content (% wwt)	1.0	4.2	<0.5	2.4	5.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-251 Tissue 28-AUG-18 09:00 KLCB-WALL-011-T	L2173416-252 Tissue 28-AUG-18 09:00 KLCB-WALL-011-WB	L2173416-253 Tissue 30-AUG-18 09:00 KLCB-WALL-012-T	L2173416-254 Tissue 30-AUG-18 09:00 KLCB-WALL-018-T	L2173416-255 Tissue 28-AUG-18 09:00 KLCB-WALL-023-T
TISSUE						
Physical Tests	% Moisture (%)	80.2	74.7	78.4	78.6	77.8
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	0.68	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0531	0.0493	0.0737	0.0617	0.311
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.683	<0.010	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0023	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	68.1	26100	112	96.0	119
	Cesium (Cs)-Total (mg/kg wwt)	0.0621	0.0438	0.0650	0.0482	0.139
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.014	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.150	0.285	0.151	0.121	0.118
	Iron (Fe)-Total (mg/kg wwt)	0.95	5.21	1.54	1.26	1.41
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0170	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	285	657	329	309	318
	Manganese (Mn)-Total (mg/kg wwt)	0.043	1.09	0.065	0.061	0.061
	Mercury (Hg)-Total (mg/kg wwt)	1.44	0.747	0.635	1.14	1.45
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2290	16500	2450	2290	2420
	Potassium (K)-Total (mg/kg wwt)	4230	2950	4790	4380	4610
	Rubidium (Rb)-Total (mg/kg wwt)	14.4	10.0	17.9	13.3	22.4
	Selenium (Se)-Total (mg/kg wwt)	0.246	0.279	0.237	0.235	0.204
	Sodium (Na)-Total (mg/kg wwt)	286	1420	296	292	238
	Strontium (Sr)-Total (mg/kg wwt)	<0.010	4.53	<0.010	<0.010	0.016
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00616	0.00708	0.00784	0.00569	0.00387
	Tin (Sn)-Total (mg/kg wwt)	0.032	<0.020	0.039	0.027	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00053	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.26	15.8	3.49	3.25	3.72
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	1.37		0.709	1.04	1.25
Aggregate Organics	Lipid Content (% wwt)	<0.5	2.4	0.6	<0.5	1.2

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2173416-257	L2173416-258	L2173416-259	L2173416-261	L2173416-262
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	28-AUG-18	28-AUG-18	28-AUG-18	28-AUG-18	28-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLCB-WHSC-001-T	KLCB-WHSC-001-WB	KLCB-WHSC-002-T	KLCB-WHSC-003-T	KLCB-WHSC-004-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	82.0	74.1	82.2	80.0	80.8
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	10.5	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.136	0.377	0.104	0.149	0.229
	Barium (Ba)-Total (mg/kg wwt)	0.014	0.460	0.027	0.025	0.029
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0061	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	119	10200	259	116	312
	Cesium (Cs)-Total (mg/kg wwt)	0.0149	0.0122	0.0176	0.0168	0.0161
	Chromium (Cr)-Total (mg/kg wwt)	0.021	0.030	0.011	<0.010	0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0138	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.241	0.768	0.172	0.184	0.180
	Iron (Fe)-Total (mg/kg wwt)	3.87	37.3	2.17	2.81	2.06
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0260	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	314	464	310	309	337
	Manganese (Mn)-Total (mg/kg wwt)	0.156	6.99	0.171	0.103	0.290
	Mercury (Hg)-Total (mg/kg wwt)	0.0805	0.0409	0.279	0.188	0.126
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0174	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	0.089	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2120	7870	2320	2190	2390
	Potassium (K)-Total (mg/kg wwt)	4020	2930	4370	4260	4450
	Rubidium (Rb)-Total (mg/kg wwt)	5.41	3.99	5.02	5.38	5.92
	Selenium (Se)-Total (mg/kg wwt)	0.180	0.238	0.226	0.224	0.210
	Sodium (Na)-Total (mg/kg wwt)	312	820	334	307	190
	Strontium (Sr)-Total (mg/kg wwt)	0.020	2.67	0.050	0.022	0.068
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00139	0.00179	<0.00040	<0.00040	<0.00040
	Tin (Sn)-Total (mg/kg wwt)	0.035	<0.020	0.040	0.029	0.044
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00341	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.051	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.26	12.8	3.31	4.00	4.06
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.9	3.4	0.5	<0.5	0.9

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-263 Tissue 28-AUG-18 09:00 KLCB-WHSC-005-T	L2173416-264 Tissue 28-AUG-18 09:00 KLCB-WHSC-006-T	L2173416-265 Tissue 30-AUG-18 09:00 KLCB-WHSC-007-T	L2173416-266 Tissue 30-AUG-18 09:00 KLCB-WHSC-007-WB	L2173416-267 Tissue 30-AUG-18 09:00 KLCB-WHSC-007-WBLD
TISSUE						
Physical Tests	% Moisture (%)	81.3	81.3	80.5	78.7	78.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	3.30	3.25
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.175	0.184	0.118	0.285	0.282
	Barium (Ba)-Total (mg/kg wwt)	0.020	0.020	0.015	0.520	0.598
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	0.0182	0.0191
	Calcium (Ca)-Total (mg/kg wwt)	217	236	98.1	11900	14500
	Cesium (Cs)-Total (mg/kg wwt)	0.0180	0.0302	0.0153	0.0103	0.0099
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.011	0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0112	0.0095
	Copper (Cu)-Total (mg/kg wwt)	0.163	0.167	0.230	0.878	0.860
	Iron (Fe)-Total (mg/kg wwt)	1.80	1.67	2.71	23.9	23.1
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0340	0.0365
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	305	316	309	433	479
	Manganese (Mn)-Total (mg/kg wwt)	0.235	0.242	0.089	7.17	9.03
	Mercury (Hg)-Total (mg/kg wwt)	0.182	0.181	0.189	0.0770	0.0717
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0217	0.0219
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	0.123	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2330	2270	2190	8620	10100
	Potassium (K)-Total (mg/kg wwt)	4340	4340	4110	3080	2910
	Rubidium (Rb)-Total (mg/kg wwt)	5.00	5.32	5.11	3.80	3.67
	Selenium (Se)-Total (mg/kg wwt)	0.177	0.212	0.181	0.224	0.216
	Sodium (Na)-Total (mg/kg wwt)	168	300	229	908	938
	Strontium (Sr)-Total (mg/kg wwt)	0.043	0.052	0.014	3.15	3.87
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00109	0.00134	0.00071	0.00091	0.00097
	Tin (Sn)-Total (mg/kg wwt)	0.036	<0.020	0.026	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	0.00262	0.00385
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	0.049	0.061
	Zinc (Zn)-Total (mg/kg wwt)	3.14	3.21	3.24	16.6	17.9
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.6	<0.5	1.4	4.3	4.4

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2173416-268	L2173416-269			
	Description	Tissue	Tissue			
	Sampled Date	30-AUG-18	30-AUG-18			
	Sampled Time	09:00	09:00			
	Client ID	KLCB-WHSC-008-T	KLCB-WHSC-0009-T			
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	81.0	79.1			
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40			
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020			
	Arsenic (As)-Total (mg/kg wwt)	0.246	0.347			
	Barium (Ba)-Total (mg/kg wwt)	0.036	0.036			
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020			
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020			
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20			
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010			
	Calcium (Ca)-Total (mg/kg wwt)	263	131			
	Cesium (Cs)-Total (mg/kg wwt)	0.0281	0.0260			
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010			
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040			
	Copper (Cu)-Total (mg/kg wwt)	0.298	0.187			
	Iron (Fe)-Total (mg/kg wwt)	4.36	2.87			
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040			
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10			
	Magnesium (Mg)-Total (mg/kg wwt)	317	367			
	Manganese (Mn)-Total (mg/kg wwt)	0.331	0.111			
	Mercury (Hg)-Total (mg/kg wwt)	0.265	0.256			
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040			
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040			
	Phosphorus (P)-Total (mg/kg wwt)	2310	2560			
	Potassium (K)-Total (mg/kg wwt)	4290	4790			
	Rubidium (Rb)-Total (mg/kg wwt)	5.08	6.57			
	Selenium (Se)-Total (mg/kg wwt)	0.204	0.166			
	Sodium (Na)-Total (mg/kg wwt)	289	286			
	Strontium (Sr)-Total (mg/kg wwt)	0.060	0.021			
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040			
	Thallium (Tl)-Total (mg/kg wwt)	0.00045	0.00172			
	Tin (Sn)-Total (mg/kg wwt)	0.037	0.029			
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040			
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020			
	Zinc (Zn)-Total (mg/kg wwt)	4.09	4.21			
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040			
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.5	0.7			

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Method Blank	Aluminum (Al)-Total	B	L2173416-246, -248, -251, -253, -254, -255, -259, -261, -262, -263, -264, -265, -268, -269
Duplicate	Aluminum (Al)-Total	DUP-H	L2173416-101, -102, -104, -105, -107, -109, -111, -113, -115, -79, -82, -84, -86, -88, -90, -92, -94, -95, -96, -99
Duplicate	Calcium (Ca)-Total	DUP-H	L2173416-117, -119, -121, -123, -124, -125, -127, -129, -131, -132, -133, -134, -135, -136, -137, -138, -151, -152, -159, -165
Duplicate	Chromium (Cr)-Total	DUP-H	L2173416-117, -187, -257, -59
Duplicate	Iron (Fe)-Total	DUP-H	L2173416-198, -199, -200, -201, -203, -205, -206, -207, -208, -210, -212, -213, -214, -215, -216, -217, -218, -219, -220, -221
Duplicate	Lead (Pb)-Total	DUP-H	L2173416-101, -102, -104, -105, -107, -109, -111, -113, -115, -79, -82, -84, -86, -88, -90, -92, -94, -95, -96, -99
Duplicate	Strontium (Sr)-Total	DUP-H	L2173416-117, -119, -121, -123, -124, -125, -127, -129, -131, -132, -133, -134, -135, -136, -137, -138, -151, -152, -159, -165
Duplicate	Tin (Sn)-Total	DUP-H	L2173416-90
Duplicate	Tin (Sn)-Total	DUP-H	L2173416-117, -187, -257, -59
Duplicate	Tin (Sn)-Total	DUP-H	L2173416-148
Certified Reference Material	Thallium (Tl)-Total	MES	L2173416-198, -199, -200, -201, -203, -205, -206, -207, -208, -210, -212, -213, -214, -215, -216, -217, -218, -219, -220, -221

Qualifiers for Individual Parameters Listed:

Qualifier	Description
B	Method Blank exceeds ALS DQO. Associated sample results which are < Limit of Reporting or > 5 times blank level are considered reliable.
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.
MES	Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-WET-CVAFS-N-VA	Tissue	Mercury in Tissue by CVAFS (WET)	EPA 200.3, EPA 245.7

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Analysis is by atomic fluorescence spectrophotometry or atomic absorption spectrophotometry, adapted from US EPA Method 245.7.

HG-WET-MICR-CVAF-VA	Tissue	Mercury in Tissue by CVAFS Micro (WET)	EPA 200.3, EPA 245.7

This method is adapted from US EPA Method 200.3 "Sample Procedures for Spectrochemical Determination of Total Recoverable Elements in Biological Tissues" (1996). Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with repeated additions of hydrogen peroxide. Analysis is by atomic fluorescence spectrophotometry or atomic absorption spectrophotometry, adapted from US EPA Method 245.7.

LIPIDS-GRAV-VA	Tissue	Lipids in Tissue by Gravimetric	EPA 3570, 8290A

A portion of homogenized sample is extracted with dichloromethane. The extract is evaporated to dryness and the lipid content determined gravimetrically.

MEHG-WET-GCAF-VA	Tissue	Methylmercury in Tissue by GCAFS (Wet)	Liang et al. (1994)

This method follows the procedures published by Liang, Bloom and Horvat in Clinical Chemistry (Vol 40, No 4, 1994). Samples are homogenized and then digested in a methanolic potassium hydroxide solution. An aliquot of the digestate is analyzed by aqueous phase ethylation, purge and trap, desorption and GC separation. The separated species are then pyrolized to elemental Hg and quantified by cold vapour atomic fluorescence spectroscopy. Results are reported "as MeHg".

MEHG-WET-MIC-GCAF-VA	Tissue	Methylmercury in Tissue by GCAFS (Wet)	Liang et al. (1994)

This method follows the procedures published by Liang, Bloom and Horvat in Clinical Chemistry (Vol 40, No 4, 1994). Samples are homogenized and then digested in a methanolic potassium hydroxide solution. An aliquot of the digestate is analyzed by aqueous phase ethylation, purge and trap, desorption and GC separation. The separated species are then pyrolized to elemental Hg and quantified by cold vapour atomic fluorescence spectroscopy. Results are reported "as MeHg".

MET-WET-CCMS-MID-VA	Tissue	Metals in Tissue by CRC ICPMS (WET)	EPA 200.3/6020A

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).

Reference Information

Method Limitation: This method employs a strong acid/peroxide digestion, and is intended to provide a conservative estimate of bio-available metals. Near complete recoveries are achieved for most toxicologically important metals, but elements associated with recalcitrant minerals may be only partially recovered.

MET-WET-CCMS-N-VA Tissue Metals in Tissue by CRC ICPMS (WET) EPA 200.3/6020A

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).

Method Limitation: This method employs a strong acid/peroxide digestion, and is intended to provide a conservative estimate of bio-available metals. Near complete recoveries are achieved for most toxicologically important metals, but elements associated with recalcitrant minerals may be only partially recovered.

MET-WET-MICR-HRMS-VA Tissue Metals in Tissue by HR-ICPMS Micro (WET) EPA 200.3/200.8

Trace metals in tissue are analyzed by high resolution inductively coupled plasma mass spectrometry (HR-ICPMS) modified from US EPA Method 200.8, (Revision 5.5). The sample preparation procedure is modified from US EPA 200.3. Analytical results are reported on wet weight basis.

Method Limitation: This method employs a strong acid/peroxide digestion, and is intended to provide a conservative estimate of bio-available metals. Near complete recoveries are achieved for most toxicologically important metals, but elements associated with recalcitrant minerals may be only partially recovered.

MOISTURE-MICR-VA Tissue Moisture in Tissue Puget Sound WQ Authority, Apr 1997

This analysis is carried out gravimetrically by drying the sample at <60 deg. C.

MOISTURE-TISS-VA Tissue % Moisture in Tissues Puget Sound WQ Authority, Apr 1997

This analysis is carried out gravimetrically by drying the sample at 105 C for a minimum of six hours.

** 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
VA	ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour 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.
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-adjusted weight of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

Chain of Custody (COC) / Analytical Request Form

ALS Environmental

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

L2173416-COFC

Number: 17

Page of

Report To	Contact and company name below will appear on the final report
Company:	Greenstone Gold Mines Ltd. / Stantec
Contact:	Mike Johns
Phone:	519-780-8145
	Company address below will appear on the final report
Street:	1-70 Southgate Drive
City/Province:	Guelph, ON
Postal Code:	N1G 4P5
Invoice To	Same as Report To ☐ ☑ NO
	Copy of Invoice with Report ☐ ☐ NO
Company:	Greenstone Gold Mines Ltd.
Contact:	Accounts Payable

Project Information

ALS Account # / Quote #:	Q66285
Job #:	160961254
PO / AFE:	
LSD:	

ALS Lab Work Order # (lab use only): L2173416

Report Format / Distribution

Select Report Format: ☑ PDF ☑ EXCEL ☑ EDD (DIGITAL)

Quality Control (QC) Report with Report ☐ ☐ NO

☐ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1	environmental@ggmines.com
Email 2	Aaron.MacDonell@ggmines.com
Email 3	Mike.Johns@stantec.com, Nathan.Burnett@stantec.com

Invoice Distribution

Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax	ap@premiergoldmines.com
Email 2	environmental@ggmines.com

Oil and Gas Required Fields (client use)

AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Contact: | **Sampler:**

Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)

Regular [R] ☑ Standard TAT if received by 3 pm - business days - no surcharges apply

PRIORITY (Business Days)
- 4 day [P4-20%] ☐
- 3 day [P3-25%] ☐
- 2 day [P2-50%] ☐

EMERGENCY
- 1 Business day [E - 100%] ☐
- Same Day, Weekend or Statutory holiday [E2 -200% (Laboratory opening fees may apply)] ☐

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm

For tests that can not be performed according to the service level selected, you will be contacted.

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	Metals Tissue CRC ICPMS (WET)	Mercury Tissue CVAFS (WET)	Lipids in Tissue by Gravimetric	% Moisture Tissue	Methyl Mercury Tissue GCAFS (WET)	Lab to Create Duplicate	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
	GMBY-LKWH-001-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-002-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-003-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-004-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-005-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-006-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-007-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-008-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-009-TB	23-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-009-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-010-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-011-T	24-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-NRPK-001-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-002-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-003-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-004-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-005-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-006-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-007-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-008-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-009-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-010-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-011-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-012-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		

L2173416-COFC

| | | |

	GMBY-WALL-016-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-017-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-018-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-019-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-020-L	21-Aug-18	9:00	Tissue	1	1	1	1	0	0										0		
	GMBY-WALL-020-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-020-WB	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-021-L	21-Aug-18	9:00	Tissue	1	1	1	1	0	0										0		
	GMBY-WALL-021-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-021-WB	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-022-L	21-Aug-18	9:00	Tissue	1	1	1	1	0	0										0		
	GMBY-WALL-022-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-022-WB	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-023-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-024-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-025-T-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-026-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-027-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-028-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-029-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-030-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-031-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-032-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-033-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-034-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-035-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-036-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-037-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-038-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-039-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-040-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-041-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-042-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-043-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-045-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-046-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-047-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-048-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WHSC-001-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	GMBY-WHSC-001-WB	21-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	GMBY-WHSC-002-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	GMBY-WHSC-002-WB	21-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	GMBY-WHSC-003-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	GMBY-WHSC-003-WB	21-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	GMBY-WHSC-004-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	GMBY-WHSC-004-WB	21-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		

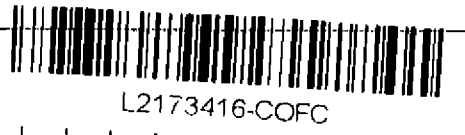
L2173416-COFC

| | | |

	GMBY-YLPR-015-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-016	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-017-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-018-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-019-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-020-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-021-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-022-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-023-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-024-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-LKWH-001-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-LKWH-002-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-LKWH-003-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-LKWH-004-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-LKWH-005-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-NRPK-001-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-NRPK-002-T	2-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-NRPK-003-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-001-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-002-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-003-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-004-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-005-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-006-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-006-WB	1-Sep-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WALL-010-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-010-WB	1-Sep-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WALL-014-G	2-Sep-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WALL-014-L	2-Sep-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WALL-014-T	2-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-014-WB	2-Sep-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WALL-020-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-022-T	3-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-023-T	3-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-024-T	3-Sep-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-001-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-002-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-003-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-004-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-004-WB	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-005-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-005-WB	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-006-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-007-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-008-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-010-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		

L2173416-COFC

| | | |


L2173416-COFC

| | | |

L2173416-COFC

| | | |

L2173416-COFC

| | | |

L2173416-COFC

| | | |

L2173416-COFC

| | | |

L2173416-COFC

| | | |

L2173416-COFC

| | | |

Client: Greenstone

L2173416-COFC

Verified By	Date	Time	Sample Integrity Issues Enter information on back page
	Oct. 1/18		

Sample Layout Verification:

Labels Verification:

Verified By	Do any samples require prep?
KW/LS/CY/CP	(NO). P F/P

		Sample #:															
1L	Plastic																
500mL	Plastic																
250mL	Plastic																
145mL	Plastic																
60mL	Plastic																
Micro																	
Toxicity Pail																	
1L	Glass																
500mL	Glass																
250mL	Glass																
120mL	Glass																
60mL	Glass																
40mL	Vial (Glass)																
40mL	Methanol Vials																
Soil Jar (120, 250 or 500mL)																	
Other:																	
Other:																	
Total Number of Bottles																	

Trip/Travel/Field Blank Information

Solids Batch#:	Metals Batch#:	T:	D:
Routine Batch#:	Mercury Batch#:	T:	D:
BOD Batch#:	Cyanide Batch#:	T:	D:
Nutrients Batch#:	OGG Batch#:		
DOC/Carbon Batch#:	Phenols Batch#:		
VOC Batch#:			
Other:			

COOLER TRACKING

EPP		Coleman	
Small		Micro (5QT)	
Med		Sm(9QT)	
Lrg		Med(16QT)	
Micro Box		Lrg(28QT)	
		Lrg(48QT)	10 - fish

Greenstone Gold Mines GP INC.
ATTN: Mike Johns
1-70 Southgate Drive
Guelph ON N1G 4P5

Date Received: 01-OCT-18
Report Date: 28-FEB-19 11:40 (MT)
Version: FINAL

Client Phone: 519-780-8145

Certificate of Analysis

Lab Work Order #: L2201773

Project P.O. #: NOT SUBMITTED
Job Reference: 160961254
C of C Numbers:
Legal Site Desc:

<original signed by>

Christine Paradis
Project Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-1	L2201773-2	L2201773-3	L2201773-4	L2201773-5
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	30-AUG-18	30-AUG-18	30-AUG-18	30-AUG-18	30-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLCB-WHSC-010-T	KLCB-WHSC-010-WB	KLCB-WHSC-011-T	KLCB-WHSC-011-WB	KLCB-WHSC-012-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	80.7	72.6	81.7	77.8	83.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	26.7	<0.40	57.7	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	0.0027	<0.0020	0.0085	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.218	0.745	0.271	1.56	0.234
	Barium (Ba)-Total (mg/kg wwt)	0.012	0.713	0.014	0.900	0.018
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0107	<0.0010	0.0224	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	121	12000	94.3	17300	102
	Cesium (Cs)-Total (mg/kg wwt)	0.0165	0.0129	0.0316	0.0276	0.0287
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.079	<0.010	0.196	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0274	<0.0040	0.0535	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.215	1.05	0.272	0.965	0.171
	Iron (Fe)-Total (mg/kg wwt)	3.08	69.8	5.77	140	3.36
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0466	<0.0040	0.101	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	325	466	264	582	251
	Manganese (Mn)-Total (mg/kg wwt)	0.161	4.47	0.155	9.19	0.157
	Mercury (Hg)-Total (mg/kg wwt)	0.0851	0.0537	0.102	0.0701	0.181
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0248	<0.0040	0.0241	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	0.062	<0.040	0.131	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2360	7670	2120	10600	2070
	Potassium (K)-Total (mg/kg wwt)	4160	2980	3910	3070	3900
	Rubidium (Rb)-Total (mg/kg wwt)	4.20	3.04	5.48	4.20	5.76
	Selenium (Se)-Total (mg/kg wwt)	0.208	0.232	0.274	0.305	0.224
	Sodium (Na)-Total (mg/kg wwt)	280	1020	364	953	274
	Strontium (Sr)-Total (mg/kg wwt)	0.023	3.49	0.019	5.63	0.021
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00125	0.00100	<0.00040	0.00076	<0.00040
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.026
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00353	<0.00040	0.00686	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.094	<0.020	0.185	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.27	16.8	4.05	15.7	3.13
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	0.053	<0.040	0.104	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	1.5	5.5	0.8	2.2	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-6 Tissue 30-AUG-18 09:00 KLCB-YLPR-002-T	L2201773-7 Tissue 31-AUG-18 09:00 KLCB-YLPR-003-T	L2201773-8 Tissue 31-AUG-18 09:00 KLCB-YLPR-005-T	L2201773-9 Tissue 31-AUG-18 09:00 KLCB-YLPR-006-T	L2201773-10 Tissue 31-AUG-18 09:00 KLCB-YLPR-007-T
TISSUE						
Physical Tests	% Moisture (%)	80.0	78.8	79.0	78.0	78.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.125	0.139	0.128	0.138	0.0739
	Barium (Ba)-Total (mg/kg wwt)	0.022	<0.010	0.015	0.017	0.037
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	574	179	422	645	732
	Cesium (Cs)-Total (mg/kg wwt)	0.0316	0.0862	0.0694	0.0976	0.0315
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.224
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0049	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.133	0.122	0.184	0.167	0.184
	Iron (Fe)-Total (mg/kg wwt)	2.03	2.58	2.32	1.94	3.50
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	321	325	351	364	381
	Manganese (Mn)-Total (mg/kg wwt)	0.319	0.201	0.280	0.392	0.564
	Mercury (Hg)-Total (mg/kg wwt)	0.0691	0.206	0.0661	0.0571	0.0844
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2470	2570	2730	2900	2880
	Potassium (K)-Total (mg/kg wwt)	4040	4370	4590	4610	4680
	Rubidium (Rb)-Total (mg/kg wwt)	6.64	9.20	9.78	13.5	10.6
	Selenium (Se)-Total (mg/kg wwt)	0.329	0.263	0.282	0.171	0.270
	Sodium (Na)-Total (mg/kg wwt)	233	290	298	257	276
	Strontium (Sr)-Total (mg/kg wwt)	0.123	0.037	0.089	0.178	0.147
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00227	0.00164	0.00146	0.00318	0.00557
	Tin (Sn)-Total (mg/kg wwt)	0.028	<0.020	0.065	0.039	0.022
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.89	3.56	4.20	4.73	4.12
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-11 Tissue 31-AUG-18 09:00 KLCB-YLPR-008-T	L2201773-12 Tissue 31-AUG-18 09:00 KLCB-YLPR-009-T	L2201773-13 Tissue 31-AUG-18 09:00 KLCB-YLPR-010-T	L2201773-14 Tissue 31-AUG-18 09:00 KLCB-YLPR-011-T	L2201773-15 Tissue 01-SEP-18 09:00 KLOE-LKWH-001-T
TISSUE						
Physical Tests	% Moisture (%)	77.8	79.2	78.2	77.8	81.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.58	<0.40	<0.40	0.74	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0864	0.171	0.126	0.201	0.156
	Barium (Ba)-Total (mg/kg wwt)	0.039	0.046	0.022	0.047	0.011
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	653	884	521	852	336
	Cesium (Cs)-Total (mg/kg wwt)	0.0318	0.0436	0.0368	0.0417	0.0124
	Chromium (Cr)-Total (mg/kg wwt)	0.028	0.011	0.033	<0.010	0.017
	Cobalt (Co)-Total (mg/kg wwt)	0.0054	<0.0040	<0.0040	0.0049	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.232	0.184	0.142	0.125	0.113
	Iron (Fe)-Total (mg/kg wwt)	3.38	2.69	2.08	2.61	3.03
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0052	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	378	354	370	346	289
	Manganese (Mn)-Total (mg/kg wwt)	0.541	0.825	0.445	0.560	0.181
	Mercury (Hg)-Total (mg/kg wwt)	0.0832	0.0555	0.0456	0.104	0.0800
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	0.265	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2990	2880	2750	2990	2450
	Potassium (K)-Total (mg/kg wwt)	4770	4460	4610	4340	4140
	Rubidium (Rb)-Total (mg/kg wwt)	10.8	7.66	8.75	7.79	4.77
	Selenium (Se)-Total (mg/kg wwt)	0.289	0.211	0.281	0.331	0.211
	Sodium (Na)-Total (mg/kg wwt)	341	276	267	275	281
	Strontium (Sr)-Total (mg/kg wwt)	0.128	0.209	0.119	0.194	0.143
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00879	0.00129	0.00136	0.00142	0.00128
	Tin (Sn)-Total (mg/kg wwt)	0.050	0.036	0.109	0.048	0.029
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.95	4.94	4.27	3.86	2.59
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	0.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-16	L2201773-17	L2201773-18	L2201773-19	L2201773-20
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	01-SEP-18	01-SEP-18	01-SEP-18	01-SEP-18	01-SEP-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLOE-LKWH-002-T	KLOE-LKWH-003-T	KLOE-LKWH-004-T	KLOE-LKWH-005-T	KLOE-NRPK-001-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	77.9	76.6	78.2	79.1	79.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.109	0.0441	0.205	0.0937	0.0862
	Barium (Ba)-Total (mg/kg wwt)	0.020	<0.010	0.013	<0.010	0.021
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	673	191	545	149	455
	Cesium (Cs)-Total (mg/kg wwt)	0.0131	0.0078	0.0103	0.0118	0.0212
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.046
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.129	0.203	0.198	0.158	0.161
	Iron (Fe)-Total (mg/kg wwt)	2.72	2.34	2.93	2.75	2.15
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	336	278	285	277	312
	Manganese (Mn)-Total (mg/kg wwt)	0.305	0.154	0.241	0.143	0.300
	Mercury (Hg)-Total (mg/kg wwt)	0.0924	0.111	0.128	0.110	0.117
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2790	2380	2670	2310	2540
	Potassium (K)-Total (mg/kg wwt)	4050	3870	3890	3790	3920
	Rubidium (Rb)-Total (mg/kg wwt)	6.71	6.35	4.38	5.56	9.20
	Selenium (Se)-Total (mg/kg wwt)	0.198	0.181	0.217	0.224	0.171
	Sodium (Na)-Total (mg/kg wwt)	382	301	334	468	370
	Strontium (Sr)-Total (mg/kg wwt)	0.327	0.076	0.261	0.057	0.076
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00123	0.00397	0.00244	0.00248	0.00450
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.022	<0.020	0.022	0.042
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.32	3.84	3.82	3.22	4.04
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					0.0791
Aggregate Organics	Lipid Content (% wwt)	1.8	1.6	1.4	0.9	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-21 Tissue 01-SEP-18 09:00 KLOE-NRPK-002-T	L2201773-22 Tissue 03-SEP-18 09:00 KLOE-NRPK-003-T	L2201773-23 Tissue 03-SEP-18 09:00 KLOE-NRPK-004-T	L2201773-24 Tissue 03-SEP-18 09:00 KLOE-NRPK-005-T	L2201773-25 Tissue 03-SEP-18 09:00 KLOE-NRPK-006-T
Sample ID						
Description						
Sampled Date						
Sampled Time						
Client ID						
TISSUE						
Physical Tests	% Moisture (%)	79.2	78.3	78.3	78.8	78.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0891	0.102	0.133	0.0997	0.129
	Barium (Ba)-Total (mg/kg wwt)	0.015	0.010	0.011	<0.010	0.012
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	393	425	329	250	372
	Cesium (Cs)-Total (mg/kg wwt)	0.0250	0.0440	0.0414	0.0345	0.0385
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.194	0.116	0.173	0.161	0.209
	Iron (Fe)-Total (mg/kg wwt)	1.64	1.00	1.99	1.48	1.92
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	302	337	342	340	325
	Manganese (Mn)-Total (mg/kg wwt)	0.280	0.238	0.256	0.198	0.263
	Mercury (Hg)-Total (mg/kg wwt)	0.101	0.250	0.210	0.150	0.152
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2380	2560	2690	2540	2720
	Potassium (K)-Total (mg/kg wwt)	3660	3930	4300	4020	4080
	Rubidium (Rb)-Total (mg/kg wwt)	9.48	10.9	10.8	10.6	10.1
	Selenium (Se)-Total (mg/kg wwt)	0.162	0.179	0.205	0.195	0.179
	Sodium (Na)-Total (mg/kg wwt)	463	405	283	413	490
	Strontium (Sr)-Total (mg/kg wwt)	0.067	0.066	0.055	0.039	0.068
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00788	0.00410	0.00544	0.00530	0.00361
	Tin (Sn)-Total (mg/kg wwt)	0.026	0.025	0.035	0.030	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.99	4.14	4.45	3.64	4.16
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0524	0.162	0.110	0.0719	0.0852
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-26	L2201773-27	L2201773-28	L2201773-29	L2201773-30
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	01-SEP-18	01-SEP-18	01-SEP-18	01-SEP-18	01-SEP-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLOE-WALL-001-T	KLOE-WALL-001-WB	KLOE-WALL-002-T	KLOE-WALL-003-T	KLOE-WALL-003-WB
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	80.2	74.2	78.2	79.2	69.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	0.68
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0813	0.0760	0.0800	0.0812	0.0742
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.345	<0.010	0.013	0.576
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0048	<0.0010	<0.0010	0.0055
	Calcium (Ca)-Total (mg/kg wwt)	76.5	17900	153	352	21300
	Cesium (Cs)-Total (mg/kg wwt)	0.0676	0.0461	0.0675	0.0695	0.0405
	Chromium (Cr)-Total (mg/kg wwt)	0.016	0.036	0.026	<0.010	0.012
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.114	0.265	0.190	0.118	0.280
	Iron (Fe)-Total (mg/kg wwt)	1.63	7.90	1.87	1.69	8.42
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0072	<0.0040	<0.0040	0.0143
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	317	546	332	314	582
	Manganese (Mn)-Total (mg/kg wwt)	0.073	1.31	0.080	0.079	1.22
	Mercury (Hg)-Total (mg/kg wwt)	0.311	0.199	0.334	0.463	0.333
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2420	10900	2580	2520	13100
	Potassium (K)-Total (mg/kg wwt)	4550	3330	4590	4340	3370
	Rubidium (Rb)-Total (mg/kg wwt)	22.7	15.6	21.5	19.6	14.1
	Selenium (Se)-Total (mg/kg wwt)	0.221	0.263	0.181	0.225	0.252
	Sodium (Na)-Total (mg/kg wwt)	182	1060	287	294	1260
	Strontium (Sr)-Total (mg/kg wwt)	<0.010	2.77	0.029	0.055	3.44
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00839	0.00837	0.00736	0.00791	0.00857
	Tin (Sn)-Total (mg/kg wwt)	0.038	<0.020	0.030	0.040	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00046	<0.00040	<0.00040	0.00053
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	2.93	15.1	3.57	2.90	16.3
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0339		0.209	0.111	
Aggregate Organics	Lipid Content (% wwt)	<0.5	1.5	0.5	<0.5	2.4

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-31	L2201773-32	L2201773-33	L2201773-34	L2201773-35
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	01-SEP-18	01-SEP-18	01-SEP-18	01-SEP-18	01-SEP-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLOE-WALL-004-T	KLOE-WALL-005-T	KLOE-WALL-005-WB	KLOE-WALL-006-T	KLOE-WALL-007-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	79.0	80.1	76.5	78.8	79.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	1.57	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0891	0.0518	0.0506	0.0661	0.0522
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	0.470	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	0.0061	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	238	124	16200	217	244
	Cesium (Cs)-Total (mg/kg wwt)	0.0681	0.0697	0.0396	0.0627	0.0609
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.011	0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0108	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.159	0.125	0.296	0.172	0.142
	Iron (Fe)-Total (mg/kg wwt)	1.63	1.38	8.48	1.47	1.65
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0110	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	329	312	492	328	279
	Manganese (Mn)-Total (mg/kg wwt)	0.068	0.067	0.892	0.095	0.079
	Mercury (Hg)-Total (mg/kg wwt)	0.305	0.612	0.362	0.226	0.380
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0045	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	0.088	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2540	2500	9880	2490	2320
	Potassium (K)-Total (mg/kg wwt)	4380	4570	3030	4310	3920
	Rubidium (Rb)-Total (mg/kg wwt)	19.4	19.9	13.3	21.4	17.8
	Selenium (Se)-Total (mg/kg wwt)	0.216	0.219	0.246	0.203	0.200
	Sodium (Na)-Total (mg/kg wwt)	346	354	1230	413	255
	Strontium (Sr)-Total (mg/kg wwt)	0.041	0.020	2.76	0.029	0.043
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00605	0.00663	0.00633	0.00835	0.00635
	Tin (Sn)-Total (mg/kg wwt)	0.028	0.037	<0.020	0.041	0.039
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	0.00054	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.63	3.07	15.8	3.37	3.14
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.192	0.307		0.104	0.298
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	0.5	<0.5	1.7

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-36 Tissue 01-SEP-18 09:00 KLOE-WALL-008-T	L2201773-37 Tissue 01-SEP-18 09:00 KLOE-WALL-009-T	L2201773-38 Tissue 01-SEP-18 09:00 KLOE-WALL-010-T	L2201773-39 Tissue 01-SEP-18 09:00 KLOE-WALL-013-G	L2201773-40 Tissue 01-SEP-18 09:00 KLOE-WALL-013-L
TISSUE						
Physical Tests	% Moisture (%)	78.1	78.2	80.2	72.5	75.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	0.66
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.182	0.0894	0.0955	0.0162	0.0390
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.017	0.012
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	0.0029	0.0989
	Calcium (Ca)-Total (mg/kg wwt)	88.3	178	66.9	267	87.6
	Cesium (Cs)-Total (mg/kg wwt)	0.0749	0.0668	0.0821	0.0588	0.0392
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0462	0.123
	Copper (Cu)-Total (mg/kg wwt)	0.138	0.176	0.115	0.775	1.56
	Iron (Fe)-Total (mg/kg wwt)	1.56	1.89	1.31	35.0	72.1
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	326	307	279	280	203
	Manganese (Mn)-Total (mg/kg wwt)	0.055	0.058	0.057	2.36	1.80
	Mercury (Hg)-Total (mg/kg wwt)	0.404	0.410	0.411	0.0758	0.448
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0109	0.139
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2630	2500	2260	2710	3310
	Potassium (K)-Total (mg/kg wwt)	4740	4250	4160	2850	2810
	Rubidium (Rb)-Total (mg/kg wwt)	19.1	18.8	17.2	15.7	15.8
	Selenium (Se)-Total (mg/kg wwt)	0.232	0.203	0.200	0.704	1.01
	Sodium (Na)-Total (mg/kg wwt)	296	366	150	988	1580
	Strontium (Sr)-Total (mg/kg wwt)	0.013	0.027	<0.010	0.034	0.027
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00702	0.00678	0.00637	0.0126	0.0189
	Tin (Sn)-Total (mg/kg wwt)	0.035	0.023	<0.020	0.027	0.056
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.025
	Zinc (Zn)-Total (mg/kg wwt)	3.14	3.47	2.72	34.2	23.3
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.228	0.211	0.246		
Aggregate Organics	Lipid Content (% wwt)	<0.5	0.5	<0.5	5.0	3.8

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-41 Tissue 01-SEP-18 09:00 KLOE-WALL-013-T	L2201773-42 Tissue 01-SEP-18 09:00 KLOE-WALL-013-WB	L2201773-43 Tissue 03-SEP-18 09:00 KLOE-WALL-017-T	L2201773-44 Tissue 03-SEP-18 09:00 KLOE-WALL-020-T	L2201773-45 Tissue 03-SEP-18 09:00 KLOE-WALL-023-T
TISSUE						
Physical Tests	% Moisture (%)	78.7	67.6	79.4	77.6	80.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.120	0.0816	0.0550	0.422	0.0471
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.216	0.012	0.012	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0018	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	103	10600	241	72.3	83.0
	Cesium (Cs)-Total (mg/kg wwt)	0.0834	0.0550	0.0490	0.0866	0.0730
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.112	0.252	0.113	0.128	0.122
	Iron (Fe)-Total (mg/kg wwt)	1.44	7.09	1.50	1.85	1.37
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0063	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	293	394	297	294	281
	Manganese (Mn)-Total (mg/kg wwt)	0.043	0.490	0.078	0.044	0.058
	Mercury (Hg)-Total (mg/kg wwt)	0.841	0.569	0.424	1.78	1.07
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2350	7000	2310	2440	2310
	Potassium (K)-Total (mg/kg wwt)	4160	3000	3930	4250	4180
	Rubidium (Rb)-Total (mg/kg wwt)	21.3	14.8	13.5	19.8	15.6
	Selenium (Se)-Total (mg/kg wwt)	0.249	0.266	0.226	0.247	0.230
	Sodium (Na)-Total (mg/kg wwt)	326	1160	219	286	305
	Strontium (Sr)-Total (mg/kg wwt)	0.013	1.66	0.040	0.012	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00570	0.00475	0.00487	0.00290	0.00533
	Tin (Sn)-Total (mg/kg wwt)	0.024	<0.020	<0.020	0.030	0.032
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.00	12.6	3.26	3.15	2.94
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	1.04		0.238	1.96	1.20
Aggregate Organics	Lipid Content (% wwt)	<0.5	5.2	<0.5	0.6	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-46 Tissue 03-SEP-18 09:00 KLOE-WALL-024-T	L2201773-47 Tissue 03-SEP-18 09:00 KLOE-WALL-039-T	L2201773-48 Tissue 01-SEP-18 09:00 KLOE-WHSC-001-T	L2201773-49 Tissue 01-SEP-18 09:00 KLOE-WHSC-002-T	L2201773-50 Tissue 01-SEP-18 09:00 KLOE-WHSC-003-T
TISSUE						
Physical Tests	% Moisture (%)	81.1	77.7	81.6	80.5	82.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.123	0.158	0.131	0.117	0.136
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.014	0.026	0.022	0.018
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	211	306	103	127	114
	Cesium (Cs)-Total (mg/kg wwt)	0.102	0.0802	0.0160	0.0120	0.0126
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.032	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0049	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.120	0.148	0.528	0.304	0.262
	Iron (Fe)-Total (mg/kg wwt)	1.27	2.62	9.28	4.88	4.82
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	285	309	251	279	267
	Manganese (Mn)-Total (mg/kg wwt)	0.058	0.095	0.127	0.153	0.138
	Mercury (Hg)-Total (mg/kg wwt)	1.01	1.03	0.214	0.0815	0.182
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2390	2520	1990	2150	2110
	Potassium (K)-Total (mg/kg wwt)	4160	4260	3360	3620	3690
	Rubidium (Rb)-Total (mg/kg wwt)	22.1	22.2	5.26	4.98	5.40
	Selenium (Se)-Total (mg/kg wwt)	0.248	0.238	0.184	0.251	0.197
	Sodium (Na)-Total (mg/kg wwt)	310	305	392	380	280
	Strontium (Sr)-Total (mg/kg wwt)	0.037	0.053	0.019	0.027	0.024
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00256	0.00433	0.00139	<0.00040	<0.00040
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.035	0.025	0.045	0.023
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.18	3.60	4.38	4.10	3.33
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	1.11	1.28			
Aggregate Organics	Lipid Content (% wwt)	0.5	0.6	2.9	1.1	0.9

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-51 Tissue 01-SEP-18 09:00 KLOE-WHSC-004-T	L2201773-52 Tissue 01-SEP-18 09:00 KLOE-WHSC-004-WB	L2201773-53 Tissue 01-SEP-18 09:00 KLOE-WHSC-004-WBLD	L2201773-54 Tissue 01-SEP-18 09:00 KLOE-WHSC-005-T	L2201773-55 Tissue 01-SEP-18 09:00 KLOE-WHSC-005-WB
TISSUE						
Physical Tests	% Moisture (%)	82.0	75.5	74.2	79.6	77.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	8.16	7.59	<0.40	8.03
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.214	0.326	0.322	0.107	0.193
	Barium (Ba)-Total (mg/kg wwt)	0.019	0.429	0.475	0.023	0.704
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0070	0.0070	<0.0010	0.0092
	Calcium (Ca)-Total (mg/kg wwt)	162	10800	12100	215	15400
	Cesium (Cs)-Total (mg/kg wwt)	0.0274	0.0164	0.0158	0.0195	0.0131
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.022	0.025	<0.010	0.026
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0097	0.0103	<0.0040	0.0119
	Copper (Cu)-Total (mg/kg wwt)	0.319	0.890	0.830	0.231	0.835
	Iron (Fe)-Total (mg/kg wwt)	4.92	24.7	25.5	3.71	29.1
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0250	0.0262	<0.0040	0.0279
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	289	400	420	298	502
	Manganese (Mn)-Total (mg/kg wwt)	0.135	4.50	4.32	0.201	7.93
	Mercury (Hg)-Total (mg/kg wwt)	0.208	0.111	0.112	0.157	0.0888
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0132	0.0142	<0.0040	0.0163
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2280	7200	7810	2470	9390
	Potassium (K)-Total (mg/kg wwt)	3840	2810	2810	4140	3030
	Rubidium (Rb)-Total (mg/kg wwt)	7.84	5.57	5.48	7.59	5.20
	Selenium (Se)-Total (mg/kg wwt)	0.168	0.215	0.205	0.191	0.249
	Sodium (Na)-Total (mg/kg wwt)	299	926	915	254	1020
	Strontium (Sr)-Total (mg/kg wwt)	0.033	2.49	2.75	0.051	4.11
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00171	0.00229	0.00231	0.00207	0.00413
	Tin (Sn)-Total (mg/kg wwt)	0.048	<0.020	<0.020	0.041	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00210	0.00227	<0.00040	0.00583
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.031	0.033	<0.020	0.063
	Zinc (Zn)-Total (mg/kg wwt)	3.51	15.4	15.4	3.60	19.4
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	0.048
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.9	2.1	4.1	0.7	3.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-56 Tissue 01-SEP-18 09:00 KLOE-WHSC-006-T	L2201773-57 Tissue 01-SEP-18 09:00 KLOE-WHSC-006-WB	L2201773-58 Tissue 01-SEP-18 09:00 KLOE-WHSC-007-T	L2201773-59 Tissue 01-SEP-18 09:00 KLOE-WHSC-008-T	L2201773-60 Tissue 01-SEP-18 09:00 KLOE-WHSC-009-T
TISSUE						
Physical Tests	% Moisture (%)	78.4	77.9	83.5	81.2	82.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	4.59	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.122	0.254	0.141	0.112	0.152
	Barium (Ba)-Total (mg/kg wwt)	0.026	0.525	0.013	0.021	0.018
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0073	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	290	11900	94.6	154	105
	Cesium (Cs)-Total (mg/kg wwt)	0.0139	0.0091	0.0118	0.0136	0.0140
	Chromium (Cr)-Total (mg/kg wwt)	0.020	0.016	0.019	<0.010	0.027
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0143	0.0047	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.204	1.02	0.334	0.176	0.180
	Iron (Fe)-Total (mg/kg wwt)	3.64	30.7	5.97	2.63	2.98
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0201	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	314	463	251	272	279
	Manganese (Mn)-Total (mg/kg wwt)	0.123	4.08	0.129	0.138	0.141
	Mercury (Hg)-Total (mg/kg wwt)	0.0907	0.0556	0.247	0.130	0.160
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0186	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2420	8540	2140	2170	2070
	Potassium (K)-Total (mg/kg wwt)	3960	3400	3750	3760	3560
	Rubidium (Rb)-Total (mg/kg wwt)	6.09	5.06	4.61	5.52	4.80
	Selenium (Se)-Total (mg/kg wwt)	0.167	0.217	0.191	0.158	0.228
	Sodium (Na)-Total (mg/kg wwt)	298	1020	255	205	360
	Strontium (Sr)-Total (mg/kg wwt)	0.069	2.72	0.016	0.032	0.018
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00082	0.00164	<0.00040	0.00155	0.00064
	Tin (Sn)-Total (mg/kg wwt)	0.029	<0.020	0.049	0.070	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00236	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.045	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.06	15.2	3.40	2.97	3.76
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	1.3	4.6	2.0	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-61 Tissue 01-SEP-18 09:00 KLOE-WHSC-010-T	L2201773-62 Tissue 01-SEP-18 09:00 KLOE-WHSC-010-WB	L2201773-63 Tissue 01-SEP-18 09:00 KLOE-WHSC-010-WBLD	L2201773-64 Tissue 31-AUG-18 09:00 KLOE-YLPR-001-T	L2201773-65 Tissue 31-AUG-18 09:00 KLOE-YLPR-002-T
TISSUE						
Physical Tests	% Moisture (%)	82.4	83.2	82.8	79.0	77.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	22.7	22.9	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	0.0021	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0765	0.215	0.211	0.0961	0.0730
	Barium (Ba)-Total (mg/kg wwt)	0.032	0.981	1.08	0.031	0.020
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0084	0.0092	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	259	18900	18500	609	411
	Cesium (Cs)-Total (mg/kg wwt)	0.0107	0.0088	0.0086	0.0149	0.0477
	Chromium (Cr)-Total (mg/kg wwt)	0.013	0.062	0.062	0.099	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0162	0.0179	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.152	0.830	0.800	0.164	0.154
	Iron (Fe)-Total (mg/kg wwt)	2.75	46.0	46.3	2.75	1.60
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0484	0.0526	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	265	557	565	322	334
	Manganese (Mn)-Total (mg/kg wwt)	0.241	7.70	8.45	0.354	0.224
	Mercury (Hg)-Total (mg/kg wwt)	0.168	0.0764	0.0825	0.0427	0.120
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0182	0.0180	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	0.041	0.046	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2140	10900	10700	2500	2530
	Potassium (K)-Total (mg/kg wwt)	3570	2620	2550	3800	4200
	Rubidium (Rb)-Total (mg/kg wwt)	4.72	3.31	3.29	7.53	10.6
	Selenium (Se)-Total (mg/kg wwt)	0.157	0.208	0.199	0.240	0.269
	Sodium (Na)-Total (mg/kg wwt)	351	1010	996	571	248
	Strontium (Sr)-Total (mg/kg wwt)	0.070	4.48	4.60	0.117	0.080
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00045	0.00141	0.00138	0.00342	0.00625
	Tin (Sn)-Total (mg/kg wwt)	0.022	<0.020	<0.020	0.031	0.048
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00537	0.00555	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.075	0.077	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.07	14.8	15.4	4.04	4.23
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	0.044	0.043	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.7	1.0	3.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-66 Tissue 31-AUG-18 09:00 KLOE-YLPR-003-T	L2201773-67 Tissue 31-AUG-18 09:00 KLOE-YLPR-004-T	L2201773-68 Tissue 31-AUG-18 09:00 KLOE-YLPR-005-T	L2201773-69 Tissue 31-AUG-18 09:00 KLOE-YLPR-006-T	L2201773-70 Tissue 31-AUG-18 09:00 KLOE-YLPR-007-T
TISSUE						
Physical Tests	% Moisture (%)	74.4	78.2	78.0	78.2	78.3
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	0.0024
	Arsenic (As)-Total (mg/kg wwt)	0.121	0.0810	0.0676	0.0751	0.0798
	Barium (Ba)-Total (mg/kg wwt)	0.036	0.298	0.041	0.014	0.022
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	0.0038
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	837	1080	701	153	646
	Cesium (Cs)-Total (mg/kg wwt)	0.0143	0.0119	0.0127	0.0201	0.0229
	Chromium (Cr)-Total (mg/kg wwt)	0.045	<0.010	0.018	<0.010	0.014
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.158	0.161	0.135	0.118	0.197
	Iron (Fe)-Total (mg/kg wwt)	2.47	1.63	1.77	1.54	2.55
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0044	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	309	325	324	315	340
	Manganese (Mn)-Total (mg/kg wwt)	0.428	0.974	0.508	0.159	0.331
	Mercury (Hg)-Total (mg/kg wwt)	0.0584	0.0431	0.0577	0.0806	0.104
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2600	2730	2450	2430	2820
	Potassium (K)-Total (mg/kg wwt)	3920	3780	3620	4180	4370
	Rubidium (Rb)-Total (mg/kg wwt)	7.40	6.25	6.87	8.17	10.6
	Selenium (Se)-Total (mg/kg wwt)	0.272	0.279	0.269	0.361	0.375
	Sodium (Na)-Total (mg/kg wwt)	562	502	533	238	319
	Strontium (Sr)-Total (mg/kg wwt)	0.153	0.280	0.131	0.021	0.094
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00196	0.00604	0.00395	0.00276	0.00763
	Tin (Sn)-Total (mg/kg wwt)	0.061	0.042	0.055	0.050	0.053
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.31	3.91	3.90	3.58	4.73
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.9	<0.5	0.8	<0.5	0.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-71	L2201773-72	L2201773-73	L2201773-74	L2201773-75
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	31-AUG-18	31-AUG-18	31-AUG-18	30-AUG-18	30-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLOE-YLPR-008-T	KLOE-YLPR-009-T	KLOE-YLPR-010-T	KLOW-LKWH-001-T	KLOW-LKWH-002-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	78.3	77.1	79.0	78.5	79.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0909	0.0790	0.0508	0.117	0.136
	Barium (Ba)-Total (mg/kg wwt)	0.027	0.044	0.015	0.013	0.032
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	583	980	184	216	500
	Cesium (Cs)-Total (mg/kg wwt)	0.0208	0.0138	0.0332	0.0244	0.0227
	Chromium (Cr)-Total (mg/kg wwt)	0.021	0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.103	0.153	0.168	0.149	0.151
	Iron (Fe)-Total (mg/kg wwt)	1.86	2.03	1.77	2.11	2.73
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	341	320	346	284	354
	Manganese (Mn)-Total (mg/kg wwt)	0.367	0.507	0.197	0.121	0.491
	Mercury (Hg)-Total (mg/kg wwt)	0.102	0.0686	0.0984	0.0831	0.121
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2610	2610	2330	2470	2730
	Potassium (K)-Total (mg/kg wwt)	4000	3760	3970	3800	4210
	Rubidium (Rb)-Total (mg/kg wwt)	7.58	8.15	8.24	5.26	10.2
	Selenium (Se)-Total (mg/kg wwt)	0.316	0.276	0.325	0.236	0.200
	Sodium (Na)-Total (mg/kg wwt)	184	616	569	293	340
	Strontium (Sr)-Total (mg/kg wwt)	0.102	0.179	0.031	0.113	0.095
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00269	0.00322	0.0110	0.00051	0.00443
	Tin (Sn)-Total (mg/kg wwt)	0.038	0.052	0.043	0.023	0.039
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.51	4.60	4.51	2.76	4.02
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	<0.5	0.9	0.6	1.4	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-76	L2201773-77	L2201773-78	L2201773-79	L2201773-80
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	30-AUG-18	31-AUG-18	31-AUG-18	31-AUG-18	31-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLOW-LKWH-003-T	KLOW-LKWH-004-T	KLOW-LKWH-004-T-B	KLOW-LKWH-005-T	KLOW-NRPK-001-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	78.2	79.0	76.5	79.5	79.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	0.41	0.45
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.125	0.0533	0.199	0.185	0.238
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.023	0.034	0.023	0.033
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0019	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	239	617	792	417	700
	Cesium (Cs)-Total (mg/kg wwt)	0.0115	0.0127	0.0136	0.0224	0.0506
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.193	0.108	0.269	0.112	0.213
	Iron (Fe)-Total (mg/kg wwt)	2.56	3.59	2.61	2.57	3.54
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	318	300	354	304	580
	Manganese (Mn)-Total (mg/kg wwt)	0.157	0.161	0.267	0.207	0.399
	Mercury (Hg)-Total (mg/kg wwt)	0.0925	0.219	0.0908	0.121	0.162
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2600	2850	3030	2680	4900
	Potassium (K)-Total (mg/kg wwt)	4120	3950	4300	4060	7320
	Rubidium (Rb)-Total (mg/kg wwt)	5.85	5.80	6.78	6.58	16.0
	Selenium (Se)-Total (mg/kg wwt)	0.167	0.225	0.189	0.220	0.407
	Sodium (Na)-Total (mg/kg wwt)	378	350	421	168	484
	Strontium (Sr)-Total (mg/kg wwt)	0.102	0.230	0.351	0.165	0.196
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00159	0.00063	0.00203	0.00191	0.00642
	Tin (Sn)-Total (mg/kg wwt)	0.062	0.058	0.035	0.041	0.071
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.34	3.39	4.65	2.63	5.56
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					0.189
Aggregate Organics	Lipid Content (% wwt)	1.1	0.6	1.0	0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-81 Tissue 01-SEP-18 09:00 KLOW-NRPK-003-T	L2201773-82 Tissue 30-AUG-18 09:00 KLOW-WALL-001-T	L2201773-83 Tissue 30-AUG-18 09:00 KLOW-WALL-002-T	L2201773-84 Tissue 30-AUG-18 09:00 KLOW-WALL-003-T	L2201773-85 Tissue 30-AUG-18 09:00 KLOW-WALL-003-WB
TISSUE						
Physical Tests	% Moisture (%)	78.4	78.7	77.4	78.2	71.8
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	0.43
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0966	0.0983	0.0404	0.0615	0.0878
	Barium (Ba)-Total (mg/kg wwt)	0.014	0.013	0.011	0.011	0.352
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	0.0053
	Calcium (Ca)-Total (mg/kg wwt)	450	304	148	117	13900
	Cesium (Cs)-Total (mg/kg wwt)	0.0307	0.0761	0.0471	0.0560	0.0316
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0069
	Copper (Cu)-Total (mg/kg wwt)	0.137	0.180	0.140	0.140	0.319
	Iron (Fe)-Total (mg/kg wwt)	1.05	2.34	1.78	1.34	6.74
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0090
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	329	304	327	324	441
	Manganese (Mn)-Total (mg/kg wwt)	0.244	0.074	0.098	0.068	1.02
	Mercury (Hg)-Total (mg/kg wwt)	0.161	0.855	0.537	0.529	0.329
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0044
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2830	2600	2420	2600	8660
	Potassium (K)-Total (mg/kg wwt)	4260	4300	4010	4400	2990
	Rubidium (Rb)-Total (mg/kg wwt)	9.13	17.6	13.5	14.2	9.49
	Selenium (Se)-Total (mg/kg wwt)	0.168	0.225	0.244	0.265	0.279
	Sodium (Na)-Total (mg/kg wwt)	331	344	354	283	1020
	Strontium (Sr)-Total (mg/kg wwt)	0.085	0.055	0.018	0.014	2.33
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00409	0.00442	0.00559	0.00649	0.00546
	Tin (Sn)-Total (mg/kg wwt)	0.031	0.044	0.066	0.042	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.15	4.33	3.75	3.16	14.0
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.204	1.09	0.643	0.659	
Aggregate Organics	Lipid Content (% wwt)	0.6	0.9	0.7	<0.5	4.2

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-86 Tissue 30-AUG-18 09:00 KLOW-WALL-004-T	L2201773-87 Tissue 30-AUG-18 09:00 KLOW-WALL-006-T	L2201773-88 Tissue 30-AUG-18 09:00 KLOW-WALL-006-WB	L2201773-89 Tissue 30-AUG-18 09:00 KLOW-WALL-006-WBLD	L2201773-90 Tissue 30-AUG-18 09:00 KLOW-WALL-007-T
TISSUE						
Physical Tests	% Moisture (%)	78.2	78.4	73.0	74.9	78.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	0.48	0.49	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0535	0.125	0.121	0.119	0.0587
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	0.396	0.315	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	0.0057	0.0057	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	123	146	17700	12400	210
	Cesium (Cs)-Total (mg/kg wwt)	0.0522	0.0659	0.0409	0.0393	0.0403
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.149
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0057	0.0052	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.115	0.202	0.326	0.324	0.148
	Iron (Fe)-Total (mg/kg wwt)	1.38	2.41	11.5	11.7	2.21
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0061	0.0061	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	289	311	514	413	325
	Manganese (Mn)-Total (mg/kg wwt)	0.067	0.071	1.22	1.00	0.091
	Mercury (Hg)-Total (mg/kg wwt)	0.538	0.546	0.348	0.338	0.186
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0040	0.0044	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2420	2730	10900	8040	2600
	Potassium (K)-Total (mg/kg wwt)	3950	4540	3440	3350	4220
	Rubidium (Rb)-Total (mg/kg wwt)	13.3	17.9	12.6	12.4	15.6
	Selenium (Se)-Total (mg/kg wwt)	0.245	0.233	0.259	0.314	0.212
	Sodium (Na)-Total (mg/kg wwt)	339	312	1060	981	416
	Strontium (Sr)-Total (mg/kg wwt)	0.016	0.022	3.33	2.32	0.030
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00547	0.00630	0.00620	0.00555	0.00637
	Tin (Sn)-Total (mg/kg wwt)	0.028	0.039	0.021	<0.020	0.027
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	0.00058	0.00046	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.35	4.42	21.5	19.6	3.74
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.561	0.552			0.204
Aggregate Organics	Lipid Content (% wwt)	0.7	<0.5	3.0	2.9	0.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-91 Tissue 30-AUG-18 09:00 KLOW-WALL-008-L	L2201773-92 Tissue 30-AUG-18 09:00 KLOW-WALL-008-T	L2201773-93 Tissue 30-AUG-18 09:00 KLOW-WALL-008-WB	L2201773-94 Tissue 30-AUG-18 09:00 KLOW-WALL-009-T	L2201773-95 Tissue 30-AUG-18 09:00 KLOW-WALL-010-T
TISSUE						
Physical Tests	% Moisture (%)	76.5	76.2	70.8	80.9	80.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<1.0	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0279	0.0588	0.0512	0.189	0.0628
	Barium (Ba)-Total (mg/kg wwt)	0.047	0.020	0.470	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.116	<0.0010	0.0017	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	127	539	14500	102	104
	Cesium (Cs)-Total (mg/kg wwt)	0.0203	0.0609	0.0400	0.0569	0.0500
	Chromium (Cr)-Total (mg/kg wwt)	<0.040	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.642	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	1.25	0.157	0.266	0.164	0.143
	Iron (Fe)-Total (mg/kg wwt)	37.7	2.18	6.48	1.65	1.51
	Lead (Pb)-Total (mg/kg wwt)	<0.010	<0.0040	0.0058	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	173	331	456	258	264
	Manganese (Mn)-Total (mg/kg wwt)	1.28	0.101	0.909	0.075	0.056
	Mercury (Hg)-Total (mg/kg wwt)	0.545	0.782	0.441	0.235	0.459
	Molybdenum (Mo)-Total (mg/kg wwt)	0.149	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2340	3060	9520	2130	2210
	Potassium (K)-Total (mg/kg wwt)	2340	4540	3160	3620	4100
	Rubidium (Rb)-Total (mg/kg wwt)	8.92	14.7	10.3	16.4	13.7
	Selenium (Se)-Total (mg/kg wwt)	0.815	0.265	0.297	0.196	0.213
	Sodium (Na)-Total (mg/kg wwt)	1100	335	1060	382	249
	Strontium (Sr)-Total (mg/kg wwt)	0.057	0.095	2.71	0.015	0.013
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.0126	0.00609	0.00504	0.00639	0.00686
	Tin (Sn)-Total (mg/kg wwt)	0.066	0.020	<0.020	<0.020	0.063
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	0.035	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	17.9	4.92	16.3	3.71	3.38
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)		0.889		0.266	0.487
Aggregate Organics	Lipid Content (% wwt)	8.4	2.0	5.0	<0.5	0.7

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-96 Tissue 30-AUG-18 09:00 KLOW-WALL-012-T	L2201773-97 Tissue 31-AUG-18 09:00 KLOW-WALL-013-T	L2201773-98 Tissue 01-SEP-18 09:00 KLOW-WALL-029-T	L2201773-99 Tissue 01-SEP-18 09:00 KLOW-WALL-029-WB	L2201773-100 Tissue 01-SEP-18 09:00 KLOW-WALL-029-WBLD
TISSUE						
Physical Tests	% Moisture (%)	79.3	76.6	79.0	71.0	70.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0512	0.241	0.0514	0.0480	0.0502
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.012	<0.010	0.471	0.358
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	0.0019	0.0016
	Calcium (Ca)-Total (mg/kg wwt)	243	190	139	18400	13000
	Cesium (Cs)-Total (mg/kg wwt)	0.0496	0.107	0.0643	0.0383	0.0389
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.200	0.011	0.011
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0065	0.0060
	Copper (Cu)-Total (mg/kg wwt)	0.117	0.165	0.114	0.336	0.349
	Iron (Fe)-Total (mg/kg wwt)	1.18	2.28	2.43	7.03	6.83
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0159	0.0071
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	285	297	334	534	411
	Manganese (Mn)-Total (mg/kg wwt)	0.095	0.065	0.061	1.04	0.806
	Mercury (Hg)-Total (mg/kg wwt)	0.227	0.782	0.260	0.151	0.147
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2450	2540	2550	11100	8280
	Potassium (K)-Total (mg/kg wwt)	4390	4580	5010	3150	3080
	Rubidium (Rb)-Total (mg/kg wwt)	17.0	23.3	23.8	15.1	15.1
	Selenium (Se)-Total (mg/kg wwt)	0.209	0.206	0.199	0.208	0.224
	Sodium (Na)-Total (mg/kg wwt)	205	301	326	1120	1050
	Strontium (Sr)-Total (mg/kg wwt)	0.036	0.027	0.016	3.21	2.29
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00402	0.00395	0.00798	0.00881	0.00715
	Tin (Sn)-Total (mg/kg wwt)	0.037	0.062	0.033	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.58	4.08	3.14	15.2	13.9
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.229	0.872	0.288		
Aggregate Organics	Lipid Content (% wwt)	<0.5	0.8	<0.5	3.9	4.0

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-101 Tissue 01-SEP-18 09:00 KLOW-WALL-032-G	L2201773-102 Tissue 01-SEP-18 09:00 KLOW-WALL-032-L	L2201773-103 Tissue 01-SEP-18 09:00 KLOW-WALL-032-T	L2201773-104 Tissue 01-SEP-18 09:00 KLOW-WALL-032-WB	L2201773-105 Tissue 30-AUG-18 09:00 KLOW-WHSC-001-T
TISSUE						
Physical Tests	% Moisture (%)	79.4	80.8	77.6	73.1	81.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<1.0	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0142	0.0275	0.0588	0.0557	0.0421
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.029	<0.010	0.435	0.014
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0014	0.0639	<0.0010	0.0013	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	230	46.3	84.6	20200	105
	Cesium (Cs)-Total (mg/kg wwt)	0.0575	0.0285	0.0758	0.0508	0.0092
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.040	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0584	0.200	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.851	1.23	0.129	0.296	0.239
	Iron (Fe)-Total (mg/kg wwt)	26.9	48.1	1.34	6.28	3.32
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.010	<0.0040	0.0120	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	216	154	328	605	285
	Manganese (Mn)-Total (mg/kg wwt)	1.33	0.871	0.070	1.02	0.153
	Mercury (Hg)-Total (mg/kg wwt)	0.0499	0.181	0.455	0.313	0.132
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0074	0.117	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2940	2470	2590	12900	2230
	Potassium (K)-Total (mg/kg wwt)	4030	2660	5150	3980	4030
	Rubidium (Rb)-Total (mg/kg wwt)	20.4	16.3	28.5	20.1	4.30
	Selenium (Se)-Total (mg/kg wwt)	0.545	0.654	0.219	0.256	0.129
	Sodium (Na)-Total (mg/kg wwt)	897	989	277	1360	345
	Strontium (Sr)-Total (mg/kg wwt)	0.021	<0.020	<0.010	3.34	0.014
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00810	0.00869	0.00476	0.00492	0.00115
	Tin (Sn)-Total (mg/kg wwt)	0.062	0.059	0.039	<0.020	0.023
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	0.00058	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	52.4	17.3	3.74	16.4	3.50
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)			0.510		
Aggregate Organics	Lipid Content (% wwt)	1.8	5.8	<0.5	2.7	1.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-106 Tissue 30-AUG-18 09:00 KLOW-WHSC-001-WB	L2201773-107 Tissue 30-AUG-18 09:00 KLOW-WHSC-001-WBLD	L2201773-108 Tissue 30-AUG-18 09:00 KLOW-WHSC-002-T	L2201773-109 Tissue 30-AUG-18 09:00 KLOW-WHSC-002-WB	L2201773-110 Tissue 30-AUG-18 09:00 KLOW-WHSC-003-T
Sample ID						
Description						
Sampled Date						
Sampled Time						
Client ID						
TISSUE						
Physical Tests	% Moisture (%)	70.5	73.7	80.1	75.1	76.3
Metals	Aluminum (Al)-Total (mg/kg wwt)	3.06	3.59	<0.40	45.8	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	0.0028	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.166	0.177	0.103	0.669	0.124
	Barium (Ba)-Total (mg/kg wwt)	0.506	0.515	0.019	0.732	0.023
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0041	0.0040	<0.0010	0.0280	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	12500	13200	138	11700	293
	Cesium (Cs)-Total (mg/kg wwt)	0.0063	0.0064	0.0188	0.0159	0.0182
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.011	<0.010	0.124	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0064	0.0062	<0.0040	0.0386	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.640	0.626	0.173	0.855	0.257
	Iron (Fe)-Total (mg/kg wwt)	17.6	17.9	2.56	110	3.17
	Lead (Pb)-Total (mg/kg wwt)	0.0152	0.0157	<0.0040	0.0949	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	485	476	289	450	294
	Manganese (Mn)-Total (mg/kg wwt)	5.52	5.52	0.153	10.7	0.330
	Mercury (Hg)-Total (mg/kg wwt)	0.0873	0.0837	0.137	0.0807	0.206
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0142	0.0150	<0.0040	0.0239	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	0.097	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	8510	8810	2310	7650	2380
	Potassium (K)-Total (mg/kg wwt)	2960	2910	4320	2780	4090
	Rubidium (Rb)-Total (mg/kg wwt)	3.28	3.18	4.94	3.35	5.54
	Selenium (Se)-Total (mg/kg wwt)	0.191	0.197	0.237	0.313	0.242
	Sodium (Na)-Total (mg/kg wwt)	812	786	222	986	282
	Strontium (Sr)-Total (mg/kg wwt)	3.56	3.62	0.023	2.97	0.060
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00164	0.00158	<0.00040	0.00099	0.00051
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	0.040	<0.020	0.035
	Uranium (U)-Total (mg/kg wwt)	0.00285	0.00293	<0.00040	0.00732	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	0.021	0.022	<0.020	0.147	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	14.7	14.1	3.11	12.9	3.84
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	0.075	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	4.2	4.2	0.9	4.9	1.1

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-111	L2201773-112	L2201773-113	L2201773-114	L2201773-115
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	30-AUG-18	30-AUG-18	30-AUG-18	30-AUG-18	30-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLOW-WHSC-003-WB	KLOW-WHSC-004-T	KLOW-WHSC-004-WB	KLOW-WHSC-004-WBLD	KLOW-WHSC-005-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	71.8	81.5	71.1	65.9	82.3
Metals	Aluminum (Al)-Total (mg/kg wwt)	6.81	<0.40	6.43	6.48	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.220	0.169	0.253	0.259	0.112
	Barium (Ba)-Total (mg/kg wwt)	0.448	0.026	0.590	0.500	0.024
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0104	<0.0010	0.0140	0.0133	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	13700	358	15400	12500	167
	Cesium (Cs)-Total (mg/kg wwt)	0.0117	0.0256	0.0154	0.0164	0.0150
	Chromium (Cr)-Total (mg/kg wwt)	0.019	<0.010	0.015	0.014	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0116	<0.0040	0.0094	0.0103	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.631	0.186	0.641	0.660	0.238
	Iron (Fe)-Total (mg/kg wwt)	24.8	2.44	21.1	21.5	5.50
	Lead (Pb)-Total (mg/kg wwt)	0.0304	<0.0040	0.0274	0.0232	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	515	305	511	446	274
	Manganese (Mn)-Total (mg/kg wwt)	7.68	0.345	8.54	6.77	0.189
	Mercury (Hg)-Total (mg/kg wwt)	0.114	0.174	0.110	0.112	0.170
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0209	<0.0040	0.0176	0.0165	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	8990	2610	10100	8380	2320
	Potassium (K)-Total (mg/kg wwt)	3030	4510	2840	2910	4350
	Rubidium (Rb)-Total (mg/kg wwt)	4.19	6.53	4.34	4.46	4.84
	Selenium (Se)-Total (mg/kg wwt)	0.258	0.170	0.250	0.250	0.163
	Sodium (Na)-Total (mg/kg wwt)	1070	268	791	755	315
	Strontium (Sr)-Total (mg/kg wwt)	3.10	0.074	3.66	2.89	0.029
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00052	0.00121	0.00190	0.00168	0.00056
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.052	<0.020	<0.020	0.032
	Uranium (U)-Total (mg/kg wwt)	0.00289	<0.00040	0.00323	0.00274	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	0.061	<0.020	0.044	0.035	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	14.7	3.23	17.4	15.7	3.39
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	5.1	<0.5	2.7	2.8	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-116 Tissue 30-AUG-18 09:00 KLOW-WHSC-006-T	L2201773-117 Tissue 30-AUG-18 09:00 KLOW-WHSC-007-T	L2201773-118 Tissue 30-AUG-18 09:00 KLOW-WHSC-008-T	L2201773-119 Tissue 30-AUG-18 09:00 KLOW-WHSC-009-T	L2201773-120 Tissue 31-AUG-18 09:00 KLOW-WHSC-010-T
TISSUE						
Physical Tests	% Moisture (%)	80.6	79.4	82.5	81.3	80.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.126	0.173	0.162	0.185	0.0880
	Barium (Ba)-Total (mg/kg wwt)	0.027	0.021	0.034	0.029	0.014
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	172	224	522	340	97.2
	Cesium (Cs)-Total (mg/kg wwt)	0.0163	0.0153	0.0137	0.0118	0.0114
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0044	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.266	0.152	0.317	0.149	0.358
	Iron (Fe)-Total (mg/kg wwt)	6.50	2.39	5.16	2.57	4.74
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	292	305	273	302	269
	Manganese (Mn)-Total (mg/kg wwt)	0.237	0.277	0.439	0.302	0.115
	Mercury (Hg)-Total (mg/kg wwt)	0.264	0.0908	0.0893	0.145	0.183
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2530	2530	2500	2520	2030
	Potassium (K)-Total (mg/kg wwt)	4670	4700	4250	4590	3870
	Rubidium (Rb)-Total (mg/kg wwt)	4.92	4.91	5.07	3.73	4.02
	Selenium (Se)-Total (mg/kg wwt)	0.242	0.193	0.204	0.202	0.239
	Sodium (Na)-Total (mg/kg wwt)	297	232	264	237	304
	Strontium (Sr)-Total (mg/kg wwt)	0.026	0.047	0.127	0.074	0.015
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	<0.00040	<0.00040	0.00119	0.00065	0.00049
	Tin (Sn)-Total (mg/kg wwt)	0.032	0.038	0.057	0.055	0.022
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.75	3.81	3.63	3.35	4.42
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.7	<0.5	0.7	<0.5	0.7

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-121 Tissue 31-AUG-18 09:00 KLOW-YLPR-001-T	L2201773-122 Tissue 31-AUG-18 09:00 KLOW-YLPR-002-T	L2201773-123 Tissue 31-AUG-18 09:00 KLOW-YLPR-003-T	L2201773-124 Tissue 31-AUG-18 09:00 KLOW-YLPR-004-T	L2201773-125 Tissue 31-AUG-18 09:00 KLOW-YLPR-005-T
TISSUE						
Physical Tests	% Moisture (%)	78.6	78.5	77.5	78.4	79.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0865	0.0619	0.0887	0.0434	0.0551
	Barium (Ba)-Total (mg/kg wwt)	0.068	0.042	0.047	0.021	0.069
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	793	1650	1050	445	1010
	Cesium (Cs)-Total (mg/kg wwt)	0.0168	0.0292	0.0208	0.0319	0.0118
	Chromium (Cr)-Total (mg/kg wwt)	0.128	0.014	0.019	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.165	0.161	0.182	0.176	0.141
	Iron (Fe)-Total (mg/kg wwt)	2.56	1.53	1.73	1.55	1.46
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	319	323	327	334	353
	Manganese (Mn)-Total (mg/kg wwt)	0.800	0.523	0.457	0.376	1.05
	Mercury (Hg)-Total (mg/kg wwt)	0.0823	0.0818	0.0514	0.0897	0.0721
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2610	3040	2590	2410	2750
	Potassium (K)-Total (mg/kg wwt)	4290	4250	4030	3980	4210
	Rubidium (Rb)-Total (mg/kg wwt)	8.04	10.6	7.71	11.6	6.13
	Selenium (Se)-Total (mg/kg wwt)	0.200	0.205	0.236	0.202	0.178
	Sodium (Na)-Total (mg/kg wwt)	351	418	556	580	223
	Strontium (Sr)-Total (mg/kg wwt)	0.127	0.239	0.226	0.048	0.140
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00529	0.00552	0.00645	0.0104	0.0118
	Tin (Sn)-Total (mg/kg wwt)	0.144	0.045	0.065	<0.020	0.024
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.51	4.79	5.05	4.72	4.42
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0881				
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-126 Tissue 31-AUG-18 09:00 KLOW-YLPR-006-T	L2201773-127 Tissue 31-AUG-18 09:00 KLOW-YLPR-008-T	L2201773-128 Tissue 02-SEP-18 09:00 KLOW-YLPR-009-T	L2201773-129 Tissue 02-SEP-18 09:00 KLOW-YLPR-010-T	L2201773-130 Tissue 02-SEP-18 09:00 KLOW-YLPR-011-T
TISSUE						
Physical Tests	% Moisture (%)	78.9	78.1	78.1	79.2	72.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0857	0.0595	0.0876	0.0587	0.0580
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.019	0.015	0.025	0.025
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	256	625	322	688	687
	Cesium (Cs)-Total (mg/kg wwt)	0.0553	0.0317	0.0220	0.0173	0.0178
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.055	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.117	0.129	0.160	0.172	0.101
	Iron (Fe)-Total (mg/kg wwt)	1.50	1.68	1.14	2.60	0.89
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	334	304	317	379	329
	Manganese (Mn)-Total (mg/kg wwt)	0.187	0.229	0.241	0.351	0.378
	Mercury (Hg)-Total (mg/kg wwt)	0.488	0.152	0.137	0.0658	0.144
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2530	2350	2410	2850	2470
	Potassium (K)-Total (mg/kg wwt)	4470	3690	4350	5090	3940
	Rubidium (Rb)-Total (mg/kg wwt)	15.5	9.75	11.7	11.9	6.79
	Selenium (Se)-Total (mg/kg wwt)	0.250	0.234	0.157	0.168	0.350
	Sodium (Na)-Total (mg/kg wwt)	217	399	265	316	212
	Strontium (Sr)-Total (mg/kg wwt)	0.046	0.103	0.047	0.137	0.092
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00604	0.00513	0.00382	0.00305	0.00348
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.039	0.021	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.79	3.44	4.47	4.67	3.93
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-131 Tissue 28-AUG-18 09:00 KLSW-LKWH-001-T	L2201773-132 Tissue 28-AUG-18 09:00 KLSW-LKWH-002-T	L2201773-133 Tissue 28-AUG-18 09:00 KLSW-LKWH-003-T	L2201773-134 Tissue 28-AUG-18 09:00 KLSW-LKWH-004-T	L2201773-135 Tissue 28-AUG-18 09:00 KLSW-LKWH-005-T
TISSUE						
Physical Tests	% Moisture (%)	74.8	77.8	75.4	76.2	78.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	2.32	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.136	0.136	0.292	0.0856	0.196
	Barium (Ba)-Total (mg/kg wwt)	0.010	0.013	0.012	0.018	0.011
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	417	332	439	508	345
	Cesium (Cs)-Total (mg/kg wwt)	0.0277	0.0114	0.0178	0.0181	0.0171
	Chromium (Cr)-Total (mg/kg wwt)	0.013	0.075	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.169	0.154	0.204	0.107	0.115
	Iron (Fe)-Total (mg/kg wwt)	3.06	3.88	4.53	1.77	2.03
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	334	297	271	299	300
	Manganese (Mn)-Total (mg/kg wwt)	0.164	0.165	0.189	0.222	0.133
	Mercury (Hg)-Total (mg/kg wwt)	0.172	0.186	0.0857	0.129	0.174
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2840	2630	2420	2600	2660
	Potassium (K)-Total (mg/kg wwt)	4320	4340	3720	4270	4670
	Rubidium (Rb)-Total (mg/kg wwt)	4.84	3.60	3.88	5.61	5.39
	Selenium (Se)-Total (mg/kg wwt)	0.344	0.217	0.250	0.201	0.223
	Sodium (Na)-Total (mg/kg wwt)	272	292	320	298	277
	Strontium (Sr)-Total (mg/kg wwt)	0.169	0.118	0.166	0.207	0.114
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00171	0.00177	0.00199	0.00336	0.00214
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.36	3.48	4.25	3.69	3.11
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	1.8	1.0	2.5	<0.5	0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-136 Tissue 28-AUG-18 09:00 KLSW-LKWH-007-T	L2201773-137 Tissue 28-AUG-18 09:00 KLSW-LKWH-008-T	L2201773-138 Tissue 28-AUG-18 09:00 KLSW-LKWH-009-T	L2201773-139 Tissue 28-AUG-18 09:00 KLSW-LKWH-010-T	L2201773-140 Tissue 28-AUG-18 09:00 KLSW-LKWH-011-T
TISSUE						
Physical Tests	% Moisture (%)	79.0	78.4	79.1	79.8	77.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0491	0.154	0.322	0.128	0.171
	Barium (Ba)-Total (mg/kg wwt)	0.010	0.025	0.011	0.011	0.027
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	321	498	401	286	760
	Cesium (Cs)-Total (mg/kg wwt)	0.0113	0.0186	0.0186	0.0185	0.0142
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0057	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.164	0.103	0.093	0.077	0.152
	Iron (Fe)-Total (mg/kg wwt)	4.34	1.61	2.19	3.73	2.68
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	295	294	286	270	341
	Manganese (Mn)-Total (mg/kg wwt)	0.145	0.168	0.123	0.113	0.359
	Mercury (Hg)-Total (mg/kg wwt)	0.270	0.149	0.0881	0.158	0.108
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2560	2570	2610	2200	3060
	Potassium (K)-Total (mg/kg wwt)	4320	4700	4510	3960	4990
	Rubidium (Rb)-Total (mg/kg wwt)	4.84	6.35	6.61	3.63	5.89
	Selenium (Se)-Total (mg/kg wwt)	0.254	0.153	0.230	0.186	0.179
	Sodium (Na)-Total (mg/kg wwt)	476	305	322	404	324
	Strontium (Sr)-Total (mg/kg wwt)	0.095	0.219	0.135	0.093	0.273
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00190	0.00169	0.00127	0.00124	0.00328
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.18	2.92	2.84	2.70	3.84
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.7	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-141 Tissue 28-AUG-18 09:00 KLSW-LKWH-012-T	L2201773-142 Tissue 28-AUG-18 09:00 KLSW-LKWH-013-T	L2201773-143 Tissue 28-AUG-18 09:00 KLSW-LKWH-014-T	L2201773-144 Tissue 28-AUG-18 09:00 KLSW-NRPK-001-T	L2201773-145 Tissue 28-AUG-18 09:00 KLSW-NRPK-002-T
TISSUE						
Physical Tests	% Moisture (%)	78.6	78.7	79.6	81.5	78.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.150	0.0871	0.0938	0.0421	0.103
	Barium (Ba)-Total (mg/kg wwt)	0.013	<0.010	0.013	0.015	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	360	142	343	344	147
	Cesium (Cs)-Total (mg/kg wwt)	0.0241	0.0105	0.0163	0.0201	0.0368
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.031
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.137	0.116	0.111	0.144	0.130
	Iron (Fe)-Total (mg/kg wwt)	1.82	2.04	1.94	1.55	1.48
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	317	296	281	282	286
	Manganese (Mn)-Total (mg/kg wwt)	0.224	0.117	0.159	0.232	0.122
	Mercury (Hg)-Total (mg/kg wwt)	0.0829	0.209	0.125	0.159	0.242
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2530	2550	2600	2270	2300
	Potassium (K)-Total (mg/kg wwt)	4530	4500	4890	4040	4100
	Rubidium (Rb)-Total (mg/kg wwt)	6.79	3.77	7.23	8.86	11.3
	Selenium (Se)-Total (mg/kg wwt)	0.174	0.262	0.173	0.147	0.159
	Sodium (Na)-Total (mg/kg wwt)	358	333	261	150	345
	Strontium (Sr)-Total (mg/kg wwt)	0.151	0.028	0.121	0.043	0.013
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00189	0.00266	0.00218	0.00640	0.00459
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.30	3.06	3.14	4.06	3.62
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)				0.153	0.228
Aggregate Organics	Lipid Content (% wwt)	<0.5	0.9	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-146 Tissue 28-AUG-18 09:00 KLSW-NRPK-003-T	L2201773-147 Tissue 28-AUG-18 09:00 KLSW-NRPK-004-T	L2201773-148 Tissue 30-AUG-18 09:00 KLSW-NRPK-005-T	L2201773-149 Tissue 30-AUG-18 09:00 KLSW-SPSH-COMP1	L2201773-150 Tissue 30-AUG-18 09:00 KLSW-SPSH-COMP2
TISSUE						
Physical Tests	% Moisture (%)	77.9	78.3	79.9	77.8	74.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	1.51	2.23
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0451	0.0644	0.0855	0.314	0.324
	Barium (Ba)-Total (mg/kg wwt)	0.016	<0.010	0.013	0.520	0.530
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	0.0046	0.0042
	Calcium (Ca)-Total (mg/kg wwt)	450	307	189	7160	7800
	Cesium (Cs)-Total (mg/kg wwt)	0.0275	0.0299	0.0358	0.0160	0.0152
	Chromium (Cr)-Total (mg/kg wwt)	0.011	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0065	0.0062
	Copper (Cu)-Total (mg/kg wwt)	0.141	0.155	0.121	0.476	0.527
	Iron (Fe)-Total (mg/kg wwt)	1.73	1.30	1.28	13.2	13.3
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0043	0.0055
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	305	318	322	397	405
	Manganese (Mn)-Total (mg/kg wwt)	0.293	0.208	0.184	2.37	2.33
	Mercury (Hg)-Total (mg/kg wwt)	0.244	0.192	0.271	0.0442	0.0525
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0160	0.0142
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2630	2410	2350	5900	6300
	Potassium (K)-Total (mg/kg wwt)	4370	4030	4090	3000	2980
	Rubidium (Rb)-Total (mg/kg wwt)	9.85	10.3	11.7	5.19	5.11
	Selenium (Se)-Total (mg/kg wwt)	0.172	0.173	0.155	0.327	0.367
	Sodium (Na)-Total (mg/kg wwt)	396	397	167	551	554
	Strontium (Sr)-Total (mg/kg wwt)	0.058	0.036	0.020	2.02	2.12
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00526	0.00439	0.00572	0.00505	0.00535
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.038
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	0.00067	0.00053
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.08	4.31	3.44	43.0	45.6
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.209	0.162	0.213	0.0527	0.0587
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	3.3	3.0

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-151	L2201773-152	L2201773-153	L2201773-154	L2201773-156
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	30-AUG-18	30-AUG-18	30-AUG-18	28-AUG-18	28-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLSW-SPSH-COMP3	KLSW-SPSH-COMP4	KLSW-SPSH-COMP5	KLSW-WALL-001-T	KLSW-WALL-003-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	76.6	77.8	75.5	76.4	76.3
Metals	Aluminum (Al)-Total (mg/kg wwt)	1.45	1.92	2.48	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.308	0.310	0.296	0.0519	0.0609
	Barium (Ba)-Total (mg/kg wwt)	0.629	0.531	0.538	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0055	0.0048	0.0042	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	8350	7050	7650	167	82.4
	Cesium (Cs)-Total (mg/kg wwt)	0.0142	0.0156	0.0161	0.0676	0.0670
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.051	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0062	0.0070	0.0067	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.494	0.490	0.491	0.111	0.118
	Iron (Fe)-Total (mg/kg wwt)	13.7	13.9	12.2	0.78	1.39
	Lead (Pb)-Total (mg/kg wwt)	0.0041	0.0047	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	385	383	433	328	326
	Manganese (Mn)-Total (mg/kg wwt)	2.72	2.27	2.38	0.073	0.086
	Mercury (Hg)-Total (mg/kg wwt)	0.0485	0.0502	0.0478	1.30	0.679
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0158	0.0155	0.0157	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	0.042	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	6510	5760	6200	2540	2400
	Potassium (K)-Total (mg/kg wwt)	2930	2990	3040	4640	4810
	Rubidium (Rb)-Total (mg/kg wwt)	4.85	4.97	5.40	17.0	21.4
	Selenium (Se)-Total (mg/kg wwt)	0.359	0.345	0.371	0.213	0.267
	Sodium (Na)-Total (mg/kg wwt)	530	554	564	220	257
	Strontium (Sr)-Total (mg/kg wwt)	2.31	2.02	2.05	0.021	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00465	0.00472	0.00485	0.00492	0.00538
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	0.029	0.055	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00061	0.00053	0.00054	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	47.0	40.6	43.7	3.98	3.93
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0576	0.0599	0.0611	1.07	0.664
Aggregate Organics	Lipid Content (% wwt)	3.5	3.3	2.9	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-157 Tissue 28-AUG-18 09:00 KLSW-WALL-004-T	L2201773-158 Tissue 28-AUG-18 09:00 KLSW-WALL-007-T	L2201773-159 Tissue 28-AUG-18 09:00 KLSW-WALL-008-T	L2201773-160 Tissue 28-AUG-18 09:00 KLSW-WALL-009-T	L2201773-161 Tissue 28-AUG-18 09:00 KLSW-WALL-010-G
TISSUE						
Physical Tests	% Moisture (%)	76.6	78.4	78.1	77.5	68.3
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0713	0.0479	0.173	0.0556	0.0170
	Barium (Ba)-Total (mg/kg wwt)	0.012	<0.010	0.015	<0.010	0.013
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	0.0025
	Calcium (Ca)-Total (mg/kg wwt)	296	226	369	151	366
	Cesium (Cs)-Total (mg/kg wwt)	0.0535	0.0779	0.0533	0.0836	0.0655
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0621
	Copper (Cu)-Total (mg/kg wwt)	0.316	0.110	0.135	0.174	0.799
	Iron (Fe)-Total (mg/kg wwt)	3.46	1.45	2.20	1.72	26.6
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	295	334	307	313	248
	Manganese (Mn)-Total (mg/kg wwt)	0.107	0.085	0.101	0.077	3.33
	Mercury (Hg)-Total (mg/kg wwt)	0.534	0.764	0.497	1.02	0.214
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0114
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2640	2470	2410	2350	2920
	Potassium (K)-Total (mg/kg wwt)	4490	4790	4370	4410	2960
	Rubidium (Rb)-Total (mg/kg wwt)	15.3	18.8	18.0	21.6	15.4
	Selenium (Se)-Total (mg/kg wwt)	0.223	0.195	0.217	0.216	0.561
	Sodium (Na)-Total (mg/kg wwt)	347	267	293	261	720
	Strontium (Sr)-Total (mg/kg wwt)	0.033	0.024	0.048	0.019	0.027
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00724	0.00640	0.00822	0.00825	0.0112
	Tin (Sn)-Total (mg/kg wwt)	0.024	<0.020	0.036	0.026	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.82	4.04	3.76	3.79	47.7
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.548	0.743	0.383	1.07	
Aggregate Organics	Lipid Content (% wwt)	1.6	<0.5	0.6	0.7	9.9

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-162 Tissue 28-AUG-18 09:00 KLSW-WALL-010-L	L2201773-163 Tissue 28-AUG-18 09:00 KLSW-WALL-010-T	L2201773-164 Tissue 28-AUG-18 09:00 KLSW-WALL-010-WB	L2201773-165 Tissue 28-AUG-18 09:00 KLSW-WALL-011-T	L2201773-167 Tissue 28-AUG-18 09:00 KLSW-WALL-012-T
TISSUE						
Physical Tests	% Moisture (%)	77.6	80.2	69.5	79.6	79.3
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.50	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0341	0.0560	0.0582	0.0640	0.0471
	Barium (Ba)-Total (mg/kg wwt)	0.010	<0.010	0.192	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0671	<0.0010	0.0014	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	175	71.4	8420	115	101
	Cesium (Cs)-Total (mg/kg wwt)	0.0453	0.0903	0.0685	0.0719	0.0805
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.011	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0995	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	1.32	0.087	0.287	0.143	0.102
	Iron (Fe)-Total (mg/kg wwt)	83.3	0.81	6.49	1.87	1.23
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	164	285	348	292	311
	Manganese (Mn)-Total (mg/kg wwt)	1.34	0.062	0.506	0.057	0.054
	Mercury (Hg)-Total (mg/kg wwt)	0.749	1.14	0.637	0.445	0.619
	Molybdenum (Mo)-Total (mg/kg wwt)	0.114	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2820	2130	5950	2260	2310
	Potassium (K)-Total (mg/kg wwt)	2710	4090	3230	4650	4580
	Rubidium (Rb)-Total (mg/kg wwt)	13.8	20.6	16.2	18.6	23.5
	Selenium (Se)-Total (mg/kg wwt)	0.785	0.182	0.237	0.202	0.193
	Sodium (Na)-Total (mg/kg wwt)	900	193	937	261	248
	Strontium (Sr)-Total (mg/kg wwt)	0.032	<0.010	1.02	0.012	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.0111	0.00430	0.00367	0.00496	0.00582
	Tin (Sn)-Total (mg/kg wwt)	0.026	0.029	<0.020	0.024	0.041
	Uranium (U)-Total (mg/kg wwt)	0.00047	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	18.8	2.81	12.2	3.61	3.08
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)		0.775		0.437	0.604
Aggregate Organics	Lipid Content (% wwt)	5.4	<0.5	9.3	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-168 Tissue 28-AUG-18 09:00 KLSW-WALL-012-WB	L2201773-169 Tissue 28-AUG-18 09:00 KLSW-WALL-013-T	L2201773-170 Tissue 28-AUG-18 09:00 KLSW-WALL-014-T	L2201773-171 Tissue 28-AUG-18 09:00 KLSW-WALL-015-T	L2201773-172 Tissue 28-AUG-18 09:00 KLSW-WALL-015-WB
TISSUE						
Physical Tests	% Moisture (%)	64.3	79.4	78.6	79.1	68.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	0.60
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0531	0.0744	0.0638	0.0774	0.0777
	Barium (Ba)-Total (mg/kg wwt)	0.233	<0.010	<0.010	0.016	0.466
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0040	<0.0010	<0.0010	<0.0010	0.0053
	Calcium (Ca)-Total (mg/kg wwt)	10600	110	132	280	13100
	Cesium (Cs)-Total (mg/kg wwt)	0.0554	0.135	0.0667	0.0683	0.0459
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.136	0.025	0.010	0.033
	Cobalt (Co)-Total (mg/kg wwt)	0.0048	<0.0040	<0.0040	<0.0040	0.0094
	Copper (Cu)-Total (mg/kg wwt)	0.298	0.106	0.111	0.191	0.347
	Iron (Fe)-Total (mg/kg wwt)	6.66	2.27	1.30	1.77	10.2
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0086
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	0.12
	Magnesium (Mg)-Total (mg/kg wwt)	383	316	283	311	415
	Manganese (Mn)-Total (mg/kg wwt)	0.656	0.071	0.072	0.107	1.79
	Mercury (Hg)-Total (mg/kg wwt)	0.316	0.928	0.445	0.388	0.192
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0048	<0.0040	<0.0040	<0.0040	0.0067
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	7220	2140	2120	2320	8420
	Potassium (K)-Total (mg/kg wwt)	3380	4040	4410	4380	3180
	Rubidium (Rb)-Total (mg/kg wwt)	17.5	23.0	17.0	17.3	12.6
	Selenium (Se)-Total (mg/kg wwt)	0.246	0.149	0.193	0.186	0.233
	Sodium (Na)-Total (mg/kg wwt)	1030	348	301	341	1090
	Strontium (Sr)-Total (mg/kg wwt)	1.26	0.013	0.013	0.036	1.87
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00488	0.00508	0.00399	0.00510	0.00428
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	0.032	0.023	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	0.00061
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	13.7	4.06	3.45	4.24	15.7
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)		1.07	0.471	0.418	
Aggregate Organics	Lipid Content (% wwt)	2.6	<0.5	<0.5	<0.5	4.9

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-173 Tissue 28-AUG-18 09:00 KLSW-WALL-016-T	L2201773-174 Tissue 28-AUG-18 09:00 KLSW-WALL-017-T	L2201773-175 Tissue 28-AUG-18 09:00 KLSW-WALL-018-T	L2201773-176 Tissue 28-AUG-18 09:00 KLSW-WALL-019-T	L2201773-177 Tissue 28-AUG-18 09:00 KLSW-WALL-020-T
TISSUE						
Physical Tests	% Moisture (%)	78.6	78.5	79.1	78.5	79.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0623	0.0440	0.0304	0.0530	0.142
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	0.013	<0.010	0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	0.0032
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	95.7	93.2	279	187	244
	Cesium (Cs)-Total (mg/kg wwt)	0.0793	0.0746	0.0707	0.0649	0.0750
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.022	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.111	0.124	0.103	0.138	0.160
	Iron (Fe)-Total (mg/kg wwt)	1.30	1.29	1.45	1.42	1.60
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	301	274	304	324	331
	Manganese (Mn)-Total (mg/kg wwt)	0.059	0.052	0.078	0.063	0.081
	Mercury (Hg)-Total (mg/kg wwt)	0.517	0.538	0.854	0.772	0.482
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2150	2250	2270	2360	2290
	Potassium (K)-Total (mg/kg wwt)	4290	4540	4420	4560	4230
	Rubidium (Rb)-Total (mg/kg wwt)	16.4	17.0	16.2	14.1	13.9
	Selenium (Se)-Total (mg/kg wwt)	0.199	0.197	0.192	0.225	0.167
	Sodium (Na)-Total (mg/kg wwt)	296	329	284	317	290
	Strontium (Sr)-Total (mg/kg wwt)	<0.010	<0.010	0.033	0.018	0.030
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00426	0.00479	0.00441	0.00631	0.00605
	Tin (Sn)-Total (mg/kg wwt)	0.021	<0.020	<0.020	<0.020	0.029
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.13	3.80	3.28	3.56	4.31
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.576	0.615	0.873	0.688	0.424
Aggregate Organics	Lipid Content (% wwt)	<0.5	0.5	0.5	<0.5	1.3

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-178 Tissue 28-AUG-18 09:00 KLSW-WALL-020-WB	L2201773-179 Tissue 28-AUG-18 09:00 KLSW-WALL-021-T	L2201773-180 Tissue 28-AUG-18 09:00 KLSW-WALL-022-T	L2201773-181 Tissue 28-AUG-18 09:00 KLSW-WALL-023-T	L2201773-182 Tissue 28-AUG-18 09:00 KLSW-WALL-024-T
TISSUE						
Physical Tests	% Moisture (%)	68.2	78.9	80.2	79.0	79.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.123	0.0380	0.0576	0.0709	0.0428
	Barium (Ba)-Total (mg/kg wwt)	0.590	<0.010	0.013	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	0.0027	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0021	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	22800	152	240	106	149
	Cesium (Cs)-Total (mg/kg wwt)	0.0508	0.0742	0.0626	0.0687	0.0700
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0051	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.579	0.098	0.178	0.173	0.179
	Iron (Fe)-Total (mg/kg wwt)	7.94	1.09	2.63	1.68	1.84
	Lead (Pb)-Total (mg/kg wwt)	0.0093	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	631	307	264	287	317
	Manganese (Mn)-Total (mg/kg wwt)	1.54	0.060	0.092	0.068	0.081
	Mercury (Hg)-Total (mg/kg wwt)	0.297	0.541	0.706	0.459	0.416
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0076	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	15000	2260	2200	2290	2210
	Potassium (K)-Total (mg/kg wwt)	3410	4490	4060	4570	4240
	Rubidium (Rb)-Total (mg/kg wwt)	10.8	18.7	12.1	17.6	17.4
	Selenium (Se)-Total (mg/kg wwt)	0.218	0.182	0.204	0.199	0.196
	Sodium (Na)-Total (mg/kg wwt)	1150	286	294	325	387
	Strontium (Sr)-Total (mg/kg wwt)	3.33	0.013	0.028	<0.010	0.015
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00629	0.00551	0.00356	0.00670	0.00635
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00055	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	18.3	3.83	4.58	4.41	4.25
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)		0.599	0.779	0.441	0.466
Aggregate Organics	Lipid Content (% wwt)	3.7	<0.5	0.5	0.7	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-183 Tissue 28-AUG-18 09:00 KLSW-WALL-025-T	L2201773-184 Tissue 28-AUG-18 09:00 KLSW-WALL-026-T	L2201773-185 Tissue 28-AUG-18 09:00 KLSW-WALL-028-T	L2201773-186 Tissue 28-AUG-18 09:00 KLSW-WALL-034-T	L2201773-187 Tissue 30-AUG-18 09:00 KLSW-WALL-040-T
TISSUE						
Physical Tests	% Moisture (%)	77.9	77.6	78.0	80.5	79.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0470	0.0792	0.0511	0.0608	0.0450
	Barium (Ba)-Total (mg/kg wwt)	0.013	<0.010	0.022	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	264	116	640	120	116
	Cesium (Cs)-Total (mg/kg wwt)	0.0591	0.0736	0.0808	0.0618	0.0763
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.135	0.131	0.127	0.153	0.188
	Iron (Fe)-Total (mg/kg wwt)	1.59	1.45	1.46	1.72	2.27
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	289	293	331	274	291
	Manganese (Mn)-Total (mg/kg wwt)	0.064	0.058	0.152	0.062	0.077
	Mercury (Hg)-Total (mg/kg wwt)	1.43	0.676	0.681	0.492	0.639
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2340	2180	2570	2200	2310
	Potassium (K)-Total (mg/kg wwt)	4190	4260	4450	4280	4290
	Rubidium (Rb)-Total (mg/kg wwt)	15.6	22.3	18.7	16.1	17.6
	Selenium (Se)-Total (mg/kg wwt)	0.209	0.183	0.202	0.183	0.198
	Sodium (Na)-Total (mg/kg wwt)	296	299	341	350	301
	Strontium (Sr)-Total (mg/kg wwt)	0.030	0.010	0.074	0.014	0.016
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00523	0.00682	0.00612	0.00637	0.00466
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.021	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.50	3.63	4.72	3.98	3.91
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	1.13	0.663	0.457	0.534	0.668
Aggregate Organics	Lipid Content (% wwt)	2.5	0.7	0.6	0.7	0.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-188 Tissue 30-AUG-18 09:00 KLSW-WALL-041-T	L2201773-189 Tissue 30-AUG-18 09:00 KLSW-WALL-042-T	L2201773-190 Tissue 30-AUG-18 09:00 KLSW-WALL-043-T	L2201773-191 Tissue 28-AUG-18 09:00 KLSW-WHSC-001-T	L2201773-192 Tissue 28-AUG-18 09:00 KLSW-WHSC-002-T
TISSUE						
Physical Tests	% Moisture (%)	81.4	80.0	80.0	81.0	83.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	0.61
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0624	0.114	0.0764	0.0722	0.0488
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.010	<0.010	0.019	0.029
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	82.6	152	106	183	365
	Cesium (Cs)-Total (mg/kg wwt)	0.0576	0.0756	0.0685	0.0155	0.0164
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.146	0.136	0.142	0.174	0.200
	Iron (Fe)-Total (mg/kg wwt)	2.03	2.21	2.17	2.74	3.69
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	294	293	312	280	291
	Manganese (Mn)-Total (mg/kg wwt)	0.058	0.087	0.079	0.289	0.302
	Mercury (Hg)-Total (mg/kg wwt)	0.780	0.594	0.601	0.220	0.209
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2080	2210	2310	2150	2220
	Potassium (K)-Total (mg/kg wwt)	3930	4130	4340	3750	3980
	Rubidium (Rb)-Total (mg/kg wwt)	13.5	18.2	16.0	5.13	4.85
	Selenium (Se)-Total (mg/kg wwt)	0.210	0.202	0.213	0.174	0.183
	Sodium (Na)-Total (mg/kg wwt)	283	333	353	270	242
	Strontium (Sr)-Total (mg/kg wwt)	0.011	0.015	<0.010	0.036	0.070
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00508	0.00480	0.00547	0.00078	0.00080
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.032
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.23	3.31	4.21	3.30	2.73
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.812	0.515	0.572		
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	0.7	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-193 Tissue 28-AUG-18 09:00 KLSW-WHSC-003-T	L2201773-194 Tissue 28-AUG-18 09:00 KLSW-WHSC-004-T	L2201773-195 Tissue 28-AUG-18 09:00 KLSW-WHSC-004-WB	L2201773-196 Tissue 28-AUG-18 09:00 KLSW-WHSC-005-T	L2201773-197 Tissue 28-AUG-18 09:00 KLSW-WHSC-006-T
TISSUE						
Physical Tests	% Moisture (%)	81.9	81.0	71.4	82.9	79.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	15.4	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0526	0.0589	0.126	0.0313	0.0433
	Barium (Ba)-Total (mg/kg wwt)	0.036	0.023	1.34	<0.010	0.013
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	0.0098	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	348	209	25000	94.9	136
	Cesium (Cs)-Total (mg/kg wwt)	0.0192	0.0190	0.0122	0.0152	0.0113
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.048	<0.010	0.015
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0141	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.149	0.191	0.692	0.158	0.235
	Iron (Fe)-Total (mg/kg wwt)	1.72	3.07	40.0	3.06	2.82
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0405	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	326	345	692	270	301
	Manganese (Mn)-Total (mg/kg wwt)	0.228	0.199	10.2	0.114	0.146
	Mercury (Hg)-Total (mg/kg wwt)	0.162	0.218	0.113	0.181	0.113
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0173	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2660	2550	15700	2010	2180
	Potassium (K)-Total (mg/kg wwt)	4780	4730	3120	3660	3920
	Rubidium (Rb)-Total (mg/kg wwt)	5.72	6.08	3.84	4.62	4.00
	Selenium (Se)-Total (mg/kg wwt)	0.263	0.260	0.331	0.144	0.162
	Sodium (Na)-Total (mg/kg wwt)	236	301	1320	262	177
	Strontium (Sr)-Total (mg/kg wwt)	0.066	0.043	6.90	<0.010	0.020
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00057	0.00051	0.00093	0.00052	<0.00040
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	0.00837	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	0.121	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.74	3.77	22.8	2.80	3.64
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	4.4	1.7	2.3

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-198 Tissue 28-AUG-18 09:00 KLSW-WHSC-006-WB	L2201773-199 Tissue 28-AUG-18 09:00 KLSW-WHSC-008-T	L2201773-200 Tissue 28-AUG-18 09:00 KLSW-WHSC-009-T	L2201773-201 Tissue 28-AUG-18 09:00 KLSW-WHSC-009-WB	L2201773-202 Tissue 28-AUG-18 09:00 KLSW-WHSC-013-T
TISSUE						
Physical Tests	% Moisture (%)	75.8	81.1	82.9	73.1	83.8
Metals	Aluminum (Al)-Total (mg/kg wwt)	22.7	<0.40	<0.40	22.2	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0977	0.0857	0.0490	0.116	0.0217
	Barium (Ba)-Total (mg/kg wwt)	0.511	0.026	0.026	1.00	0.012
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0057	<0.0010	<0.0010	0.0104	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	12000	173	245	18300	184
	Cesium (Cs)-Total (mg/kg wwt)	0.0100	0.0168	0.0170	0.0126	0.0157
	Chromium (Cr)-Total (mg/kg wwt)	0.069	<0.010	<0.010	0.065	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0172	<0.0040	<0.0040	0.0185	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.569	0.211	0.320	0.662	0.203
	Iron (Fe)-Total (mg/kg wwt)	46.8	2.84	5.25	54.3	3.04
	Lead (Pb)-Total (mg/kg wwt)	0.0344	0.0067	<0.0040	0.0341	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	453	310	277	592	293
	Manganese (Mn)-Total (mg/kg wwt)	4.60	0.171	0.209	9.74	0.157
	Mercury (Hg)-Total (mg/kg wwt)	0.0750	0.122	0.215	0.128	0.140
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0162	<0.0040	<0.0040	0.0163	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	0.046	<0.040	<0.040	0.042	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	7680	2010	2190	11300	2150
	Potassium (K)-Total (mg/kg wwt)	3090	3640	3910	2950	3940
	Rubidium (Rb)-Total (mg/kg wwt)	3.21	6.05	6.53	4.62	5.11
	Selenium (Se)-Total (mg/kg wwt)	0.214	0.152	0.154	0.213	0.189
	Sodium (Na)-Total (mg/kg wwt)	810	200	237	996	271
	Strontium (Sr)-Total (mg/kg wwt)	2.75	0.026	0.044	4.04	0.031
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00066	0.00155	0.00190	0.00229	0.00050
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00500	<0.00040	<0.00040	0.00774	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	0.078	<0.020	<0.020	0.112	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	11.7	3.66	3.82	19.3	2.64
	Zirconium (Zr)-Total (mg/kg wwt)	0.042	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	3.5	1.7	0.8	4.4	0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-203	L2201773-204	L2201773-205	L2201773-206	L2201773-207
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	28-AUG-18	28-AUG-18	28-AUG-18	28-AUG-18	28-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLSW-WHSC-015-T	KLSW-WHSC-015-WB	KLSW-WHSC-016-T	KLSW-YLPR-004-T	KLSW-YLPR-005-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	80.4	72.3	80.1	80.3	80.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	16.6	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0637	0.126	0.0834	0.0168	0.0137
	Barium (Ba)-Total (mg/kg wwt)	0.014	0.515	0.025	0.020	0.021
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0077	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	161	10600	249	780	696
	Cesium (Cs)-Total (mg/kg wwt)	0.0148	0.0121	0.0136	0.0437	0.0370
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.055	<0.010	<0.010	0.018
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0146	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.219	0.999	0.174	0.109	0.164
	Iron (Fe)-Total (mg/kg wwt)	2.17	37.8	1.98	1.28	1.68
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0298	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	279	425	309	325	306
	Manganese (Mn)-Total (mg/kg wwt)	0.125	3.28	0.189	0.242	0.279
	Mercury (Hg)-Total (mg/kg wwt)	0.151	0.0869	0.145	0.365	0.155
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0201	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2010	7070	2460	2540	2510
	Potassium (K)-Total (mg/kg wwt)	3700	3040	4410	3830	3940
	Rubidium (Rb)-Total (mg/kg wwt)	4.58	3.75	7.11	12.6	12.6
	Selenium (Se)-Total (mg/kg wwt)	0.210	0.260	0.150	0.239	0.205
	Sodium (Na)-Total (mg/kg wwt)	234	891	328	370	460
	Strontium (Sr)-Total (mg/kg wwt)	0.028	2.39	0.048	0.084	0.074
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00154	0.00139	0.00254	0.00535	0.00550
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	0.022	0.021	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00458	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.074	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.27	13.1	4.49	3.54	4.19
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	0.041	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)				0.364	0.146
Aggregate Organics	Lipid Content (% wwt)	2.0	4.7	0.7	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-208 Tissue 28-AUG-18 09:00 KLSW-YLPR-006-T	L2201773-209 Tissue 28-AUG-18 09:00 KLSW-YLPR-007-T	L2201773-210 Tissue 28-AUG-18 09:00 KLSW-YLPR-008-T	L2201773-211 Tissue 28-AUG-18 09:00 KLSW-YLPR-009-T	L2201773-212 Tissue 28-AUG-18 09:00 KLSW-YLPR-010-T
TISSUE						
Physical Tests	% Moisture (%)	79.0	80.2	78.5	80.5	81.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0350	0.0422	0.0300	0.0145	0.0246
	Barium (Ba)-Total (mg/kg wwt)	0.043	0.029	0.043	0.022	0.026
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	295	612	934	1010	449
	Cesium (Cs)-Total (mg/kg wwt)	0.0153	0.0246	0.0147	0.0369	0.0175
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.036	0.017
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.144	0.126	0.142	0.150	0.124
	Iron (Fe)-Total (mg/kg wwt)	1.46	1.26	1.59	1.70	1.92
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	328	312	336	294	281
	Manganese (Mn)-Total (mg/kg wwt)	0.218	0.389	0.585	0.245	0.280
	Mercury (Hg)-Total (mg/kg wwt)	0.0609	0.0862	0.0650	0.346	0.166
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2470	2530	2850	2620	2310
	Potassium (K)-Total (mg/kg wwt)	4350	4220	4590	3710	3860
	Rubidium (Rb)-Total (mg/kg wwt)	7.84	10.5	7.07	10.7	6.88
	Selenium (Se)-Total (mg/kg wwt)	0.231	0.245	0.293	0.229	0.228
	Sodium (Na)-Total (mg/kg wwt)	253	225	236	440	249
	Strontium (Sr)-Total (mg/kg wwt)	0.035	0.088	0.122	0.113	0.049
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00408	0.00663	0.00683	0.00456	0.00308
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	0.00057	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.07	3.86	4.10	4.17	3.42
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0735	0.113	0.0779	0.449	0.212
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-213 Tissue 28-AUG-18 09:00 KLSW-YLPR-011-T	L2201773-214 Tissue 28-AUG-18 09:00 KLSW-YLPR-012-T	L2201773-215 Tissue 28-AUG-18 09:00 KLSW-YLPR-013-T	L2201773-216 Tissue 28-AUG-18 09:00 KLSW-YLPR-014-T	L2201773-217 Tissue 28-AUG-18 09:00 KLSW-YLPR-015-T
TISSUE						
Physical Tests	% Moisture (%)	78.6	78.9	80.1	79.2	81.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0334	0.0146	0.0271	0.0200	0.0346
	Barium (Ba)-Total (mg/kg wwt)	0.046	0.016	0.027	0.022	0.032
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	1000	592	457	650	640
	Cesium (Cs)-Total (mg/kg wwt)	0.0236	0.0390	0.0190	0.0482	0.0215
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.012	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.143	0.210	0.101	0.170	0.153
	Iron (Fe)-Total (mg/kg wwt)	1.92	1.82	1.40	1.72	1.46
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0087
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	328	339	304	325	281
	Manganese (Mn)-Total (mg/kg wwt)	0.552	0.229	0.258	0.327	0.272
	Mercury (Hg)-Total (mg/kg wwt)	0.108	0.177	0.116	0.159	0.0927
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2910	2580	2330	2620	2260
	Potassium (K)-Total (mg/kg wwt)	4460	4370	3800	4250	3500
	Rubidium (Rb)-Total (mg/kg wwt)	8.10	12.6	6.20	14.2	9.35
	Selenium (Se)-Total (mg/kg wwt)	0.311	0.226	0.286	0.194	0.226
	Sodium (Na)-Total (mg/kg wwt)	262	263	334	252	485
	Strontium (Sr)-Total (mg/kg wwt)	0.131	0.068	0.058	0.071	0.084
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00705	0.00463	0.00226	0.00607	0.00502
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.022
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.43	3.97	3.01	4.36	3.63
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.129	0.230	0.111	0.235	0.132
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-218 Tissue 28-AUG-18 09:00 KLSW-YLPR-016-T	L2201773-219 Tissue 28-AUG-18 09:00 KLSW-YLPR-017-T	L2201773-220 Tissue 28-AUG-18 09:00 KLSW-YLPR-018-T	L2201773-221 Tissue 28-AUG-18 09:00 KLSW-YLPR-019-T	L2201773-222 Tissue 28-AUG-18 09:00 KLSW-YLPR-020-T
TISSUE						
Physical Tests	% Moisture (%)	82.4	82.3	79.4	80.5	81.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0280	0.0184	0.0274	0.0201	0.0102
	Barium (Ba)-Total (mg/kg wwt)	0.037	0.012	0.032	0.026	0.015
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	809	353	878	985	553
	Cesium (Cs)-Total (mg/kg wwt)	0.0157	0.0366	0.0186	0.0341	0.0424
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.119	0.145	0.117	0.154	0.096
	Iron (Fe)-Total (mg/kg wwt)	1.16	1.32	1.87	1.71	0.99
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	300	292	343	347	301
	Manganese (Mn)-Total (mg/kg wwt)	0.433	0.166	0.343	0.322	0.184
	Mercury (Hg)-Total (mg/kg wwt)	0.0520	0.308	0.0954	0.273	0.418
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2400	2200	2870	2870	2530
	Potassium (K)-Total (mg/kg wwt)	3800	3710	4560	4240	4270
	Rubidium (Rb)-Total (mg/kg wwt)	6.57	10.9	7.49	10.2	12.2
	Selenium (Se)-Total (mg/kg wwt)	0.252	0.207	0.286	0.272	0.221
	Sodium (Na)-Total (mg/kg wwt)	186	179	270	430	166
	Strontium (Sr)-Total (mg/kg wwt)	0.096	0.041	0.104	0.109	0.055
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00299	0.00487	0.00389	0.00356	0.00428
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.29	3.45	4.52	4.18	3.65
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0704	0.417	0.108	0.297	0.438
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-223 Tissue 28-AUG-18 09:00 KLSW-YLPR-021-T	L2201773-224 Tissue 28-AUG-18 09:00 KLSW-YLPR-022-T	L2201773-225 Tissue 28-AUG-18 09:00 KLSW-YLPR-023-T	L2201773-226 Tissue 28-AUG-18 09:00 KLSW-YLPR-024-T	L2201773-227 Tissue 28-AUG-18 09:00 KLSW-YLPR-025-T
TISSUE						
Physical Tests	% Moisture (%)	81.5	79.5	82.7	79.9	78.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0414	0.0280	0.0690	0.198	0.0633
	Barium (Ba)-Total (mg/kg wwt)	0.050	0.052	0.047	0.033	0.079
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	1220	1320	761	931	1820
	Cesium (Cs)-Total (mg/kg wwt)	0.0262	0.0297	0.0177	0.0317	0.0188
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.011	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.135	0.162	0.130	0.182	0.158
	Iron (Fe)-Total (mg/kg wwt)	1.85	1.65	1.88	2.74	1.81
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	288	322	287	367	340
	Manganese (Mn)-Total (mg/kg wwt)	0.357	0.333	0.299	0.341	0.441
	Mercury (Hg)-Total (mg/kg wwt)	0.183	0.115	0.0842	0.151	0.0781
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2660	2660	2330	2620	2840
	Potassium (K)-Total (mg/kg wwt)	3910	3740	3650	3960	3690
	Rubidium (Rb)-Total (mg/kg wwt)	9.06	12.1	8.04	11.9	9.15
	Selenium (Se)-Total (mg/kg wwt)	0.306	0.246	0.272	0.260	0.257
	Sodium (Na)-Total (mg/kg wwt)	493	629	245	694	605
	Strontium (Sr)-Total (mg/kg wwt)	0.164	0.173	0.117	0.126	0.261
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00154	0.00345	0.00310	0.00303	0.00325
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.034	0.385	0.046	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00049	<0.00040	<0.00040	<0.00040	0.00044
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.67	4.25	3.47	4.73	4.43
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.223	0.139	0.104	0.189	0.0944
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-228	L2201773-229	L2201773-230	L2201773-231	L2201773-232
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	30-AUG-18	30-AUG-18	30-AUG-18	30-AUG-18	30-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLSW-YLPR-COMP1	KLSW-YLPR-COMP2	KLSW-YLPR-COMP3	KLSW-YLPR-COMP4	KLSW-YLPR-COMP5
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	79.6	80.7	79.4	79.9	77.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.82	1.10	0.86	1.13	1.15
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.112	0.0997	0.107	0.0995	0.106
	Barium (Ba)-Total (mg/kg wwt)	0.412	0.382	0.405	0.405	0.431
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0040	0.0036	0.0031	0.0038	0.0030
	Calcium (Ca)-Total (mg/kg wwt)	11300	11300	11500	11100	11600
	Cesium (Cs)-Total (mg/kg wwt)	0.0235	0.0220	0.0220	0.0196	0.0222
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.025	0.016	0.012	0.012
	Cobalt (Co)-Total (mg/kg wwt)	0.0049	0.0050	0.0046	0.0051	0.0059
	Copper (Cu)-Total (mg/kg wwt)	0.447	0.418	0.437	0.405	0.403
	Iron (Fe)-Total (mg/kg wwt)	12.8	10.5	11.1	11.4	12.0
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	401	413	406	372	431
	Manganese (Mn)-Total (mg/kg wwt)	2.92	3.46	3.01	3.05	3.18
	Mercury (Hg)-Total (mg/kg wwt)	0.0577	0.0556	0.0518	0.0548	0.0528
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0125	0.0115	0.0130	0.0136	0.0129
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	7780	7660	7840	7130	7770
	Potassium (K)-Total (mg/kg wwt)	3280	3150	3230	2970	3190
	Rubidium (Rb)-Total (mg/kg wwt)	7.59	7.53	7.71	6.43	6.85
	Selenium (Se)-Total (mg/kg wwt)	0.270	0.239	0.251	0.234	0.251
	Sodium (Na)-Total (mg/kg wwt)	826	775	792	729	837
	Strontium (Sr)-Total (mg/kg wwt)	2.32	2.17	2.14	2.22	2.30
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00569	0.00509	0.00608	0.00549	0.00595
	Tin (Sn)-Total (mg/kg wwt)	0.022	<0.020	<0.020	0.027	0.022
	Uranium (U)-Total (mg/kg wwt)	0.00051	0.00051	0.00069	0.00058	0.00059
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	21.2	21.4	21.9	20.2	20.8
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0666	0.0747	0.0587	0.0719	0.0692
Aggregate Organics	Lipid Content (% wwt)	1.7	1.8	1.8	1.6	0.9

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-233 Tissue 30-AUG-18 09:00 KLSW-YLPR-COMP6	L2201773-234 Tissue 30-AUG-18 09:00 KLSW-YLPR-COMP7	L2201773-235 Tissue 30-AUG-18 09:00 KLSW-YLPR-COMP8	L2201773-244 Tissue 25-AUG-18 09:00 KLCB-YLPR-013-T	
TISSUE						
Physical Tests	% Moisture (%)	77.2	78.3	80.0	78.0	
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.64	1.85	2.32	<0.40	
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	
	Arsenic (As)-Total (mg/kg wwt)	0.0946	0.127	0.122	0.169	
	Barium (Ba)-Total (mg/kg wwt)	0.430	0.469	0.504	0.022	
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	
	Cadmium (Cd)-Total (mg/kg wwt)	0.0038	0.0080	0.0041	0.0011	
	Calcium (Ca)-Total (mg/kg wwt)	11500	10800	11000	528	
	Cesium (Cs)-Total (mg/kg wwt)	0.0242	0.0217	0.0219	0.0338	
	Chromium (Cr)-Total (mg/kg wwt)	0.012	0.014	0.012	<0.010	
	Cobalt (Co)-Total (mg/kg wwt)	0.0049	0.0075	0.0060	<0.0040	
	Copper (Cu)-Total (mg/kg wwt)	0.451	0.533	0.447	0.143	
	Iron (Fe)-Total (mg/kg wwt)	11.8	14.5	13.8	2.11	
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0049	0.0047	<0.0040	
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	
	Magnesium (Mg)-Total (mg/kg wwt)	428	389	393	339	
	Manganese (Mn)-Total (mg/kg wwt)	3.12	3.42	3.63	0.333	
	Mercury (Hg)-Total (mg/kg wwt)	0.0581	0.0489	0.0533	0.0679	
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0133	0.0164	0.0141	<0.0040	
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	
	Phosphorus (P)-Total (mg/kg wwt)	8100	7430	7640	2730	
	Potassium (K)-Total (mg/kg wwt)	3230	3190	3150	4550	
	Rubidium (Rb)-Total (mg/kg wwt)	7.23	7.24	7.26	6.93	
	Selenium (Se)-Total (mg/kg wwt)	0.284	0.263	0.269	0.372	
	Sodium (Na)-Total (mg/kg wwt)	766	834	731	267	
	Strontium (Sr)-Total (mg/kg wwt)	2.47	2.42	2.43	0.107	
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	
	Thallium (Tl)-Total (mg/kg wwt)	0.00815	0.00622	0.00644	0.00265	
	Tin (Sn)-Total (mg/kg wwt)	0.098	0.041	<0.020	0.034	
	Uranium (U)-Total (mg/kg wwt)	0.00059	0.00076	0.00064	<0.00040	
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	
	Zinc (Zn)-Total (mg/kg wwt)	25.6	24.8	24.5	4.12	
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0735	0.0683	0.0741		
Aggregate Organics	Lipid Content (% wwt)	2.2	1.9		<0.5	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Duplicate	Calcium (Ca)-Total	DUP-H	L2201773-189, -190, -191, -192, -193, -194, -196, -197, -199, -200, -202, -203, -205, -206, -207, -208, -209, -210, -211, -212
Duplicate	Chromium (Cr)-Total	DUP-H	L2201773-211
Duplicate	Lead (Pb)-Total	DUP-H	L2201773-124, -125, -126, -127, -128, -129, -130, -131, -132, -133, -134, -135, -136, -137, -138, -139, -140, -141, -142, -143
Duplicate	Strontium (Sr)-Total	DUP-H	L2201773-189, -190, -191, -192, -193, -194, -196, -197, -199, -200, -202, -203, -205, -206, -207, -208, -209, -210, -211, -212
Duplicate	Strontium (Sr)-Total	DUP-H	L2201773-102, -91
Duplicate	Chromium (Cr)-Total	DUP-H,J	L2201773-27, -33, -42, -52, -53, -62, -63
Certified Reference Material	Thallium (Tl)-Total	MES	L2201773-71, -72, -73, -74, -75, -76, -77, -78, -79, -80, -81, -82, -83, -84, -86, -87, -90, -92, -94
Certified Reference Material	Thallium (Tl)-Total	MES	L2201773-102, -91

Qualifiers for Individual Parameters Listed:

Qualifier	Description
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.
DUP-H,J	Duplicate results outside ALS DQO, due to sample heterogeneity. Duplicate results and limits are expressed in terms of absolute difference.
MES	Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-WET-CVAFS-N-VA	Tissue	Mercury in Tissue by CVAFS (WET)	EPA 200.3, EPA 245.7

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Analysis is by atomic fluorescence spectrophotometry or atomic absorption spectrophotometry, adapted from US EPA Method 245.7.

HG-WET-MICR-CVAF-VA	Tissue	Mercury in Tissue by CVAFS Micro (WET)	EPA 200.3, EPA 245.7

This method is adapted from US EPA Method 200.3 "Sample Procedures for Spectrochemical Determination of Total Recoverable Elements in Biological Tissues" (1996). Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with repeated additions of hydrogen peroxide. Analysis is by atomic fluorescence spectrophotometry or atomic absorption spectrophotometry, adapted from US EPA Method 245.7.

LIPIDS-GRAV-VA	Tissue	Lipids in Tissue by Gravimetric	EPA 3570, 8290A

A portion of homogenized sample is extracted with dichloromethane. The extract is evaporated to dryness and the lipid content determined gravimetrically.

MEHG-WET-GCAF-VA	Tissue	Methylmercury in Tissue by GCAFS (Wet)	Liang et al. (1994)

This method follows the procedures published by Liang, Bloom and Horvat in Clinical Chemistry (Vol 40, No 4, 1994). Samples are homogenized and then digested in a methanolic potassium hydroxide solution. An aliquot of the digestate is analyzed by aqueous phase ethylation, purge and trap, desorption and GC separation. The separated species are then pyrolized to elemental Hg and quantified by cold vapour atomic fluorescence spectroscopy. Results are reported "as MeHg".

MET-WET-CCMS-N-VA	Tissue	Metals in Tissue by CRC ICPMS (WET)	EPA 200.3/6020A

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).

Method Limitation: This method employs a strong acid/peroxide digestion, and is intended to provide a conservative estimate of bio-available metals. Near complete recoveries are achieved for most toxicologically important metals, but elements associated with recalcitrant minerals may be only partially recovered.

MET-WET-MICR-HRMS-VA	Tissue	Metals in Tissue by HR-ICPMS Micro (WET)	EPA 200.3/200.8

Trace metals in tissue are analyzed by high resolution inductively coupled plasma mass spectrometry (HR-ICPMS) modified from US EPA Method 200.8, (Revision 5.5). The sample preparation procedure is modified from US EPA 200.3. Analytical results are reported on wet weight basis.

Method Limitation: This method employs a strong acid/peroxide digestion, and is intended to provide a conservative estimate of bio-available metals. Near complete recoveries are achieved for most toxicologically important metals, but elements associated with recalcitrant minerals may be only

Reference Information

partially recovered.

MOISTURE-TISS-VA Tissue % Moisture in Tissues Puget Sound WQ Authority, Apr 1997

This analysis is carried out gravimetrically by drying the sample at 105 C for a minimum of six hours.

** 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
VA	ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour 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.
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-adjusted weight of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

Greenstone Gold Mines GP INC.
ATTN: Mike Johns
1-70 Southgate Drive
Guelph ON N1G 4P5

Date Received: 12-JUN-19
Report Date: 31-JUL-19 09:50 (MT)
Version: FINAL

Client Phone: 519-780-8145

Certificate of Analysis

Lab Work Order #: L2290068

Project P.O. #: NOT SUBMITTED
Job Reference: 160961323
C of C Numbers:
Legal Site Desc:

<original signed by>

Amanda Loesch
Account Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2290068-1 Tissue 01-JUN-19 09:00 SWP3-YLPR-059-T	L2290068-2 Tissue 01-JUN-19 09:00 SWP3-YLPR-060-T	L2290068-3 Tissue 01-JUN-19 09:00 SWP3-YLPR-061-T	L2290068-4 Tissue 01-JUN-19 09:00 SWP3-YLPR-062-T	L2290068-5 Tissue 01-JUN-19 09:00 SWP3-YLPR-063-T
TISSUE						
Physical Tests	% Moisture (%)	78.7	78.0	78.7	78.2	79.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.173	0.123	0.114	0.0997	0.0484
	Barium (Ba)-Total (mg/kg wwt)	0.022	0.026	0.033	0.026	0.025
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	0.0027	0.0021	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	242	894	679	1030	499
	Cesium (Cs)-Total (mg/kg wwt)	0.0423	0.0380	0.0327	0.0265	0.0380
	Chromium (Cr)-Total (mg/kg wwt)	0.011	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.180	0.222	0.236	0.259	0.253
	Iron (Fe)-Total (mg/kg wwt)	1.58	2.07	2.12	2.28	2.44
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	342	376	365	378	368
	Manganese (Mn)-Total (mg/kg wwt)	0.191	0.271	0.312	0.352	0.324
	Mercury (Hg)-Total (mg/kg wwt)	0.0798	0.0625	0.0663	0.0653	0.0613
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2630	3310	3010	3260	2980
	Potassium (K)-Total (mg/kg wwt)	4630	4970	4710	4880	4960
	Rubidium (Rb)-Total (mg/kg wwt)	21.3	21.1	20.3	18.2	13.0
	Selenium (Se)-Total (mg/kg wwt)	0.141	0.143	0.135	0.127	0.150
	Sodium (Na)-Total (mg/kg wwt)	285	289	294	289	322
	Strontium (Sr)-Total (mg/kg wwt)	0.046	0.248	0.191	0.263	0.115
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00724	0.00744	0.00652	0.00535	0.00438
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.29	5.56	4.99	5.08	4.69
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0653	0.0657	0.0681	0.0799	0.0647
Aggregate Organics	Lipid Content (% wwt)	0.6	0.8	0.7	0.9	0.8

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2290068-6 Tissue 01-JUN-19 09:00 SWP3-YLPR-064-T	L2290068-7 Tissue 01-JUN-19 09:00 SWP3-YLPR-065-T	L2290068-8 Tissue 01-JUN-19 09:00 SWP3-YLPR-066-T	L2290068-9 Tissue 03-JUN-19 09:00 GMBY-YLPR-1-T	L2290068-10 Tissue 03-JUN-19 09:00 GMBY-YLPR-2-T
TISSUE						
Physical Tests	% Moisture (%)	78.4	77.9	79.0	78.4	79.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0761	0.108	0.183	0.0177	0.0168
	Barium (Ba)-Total (mg/kg wwt)	0.015	0.031	0.070	0.019	0.016
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	0.0023	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	440	799	222	193	309
	Cesium (Cs)-Total (mg/kg wwt)	0.0238	0.0343	0.0405	0.0319	0.0213
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.024	0.014	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.236	0.219	0.134	0.235	0.160
	Iron (Fe)-Total (mg/kg wwt)	1.92	2.03	1.45	1.81	1.50
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	363	347	345	326	317
	Manganese (Mn)-Total (mg/kg wwt)	0.226	0.300	0.201	0.205	0.233
	Mercury (Hg)-Total (mg/kg wwt)	0.0815	0.0559	0.0789	0.0836	0.0596
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2870	2900	2550	2590	2590
	Potassium (K)-Total (mg/kg wwt)	4740	4460	4550	4640	4600
	Rubidium (Rb)-Total (mg/kg wwt)	14.9	19.3	21.2	13.4	9.96
	Selenium (Se)-Total (mg/kg wwt)	0.108	0.132	0.140	0.235	0.272
	Sodium (Na)-Total (mg/kg wwt)	265	284	297	272	309
	Strontium (Sr)-Total (mg/kg wwt)	0.083	0.215	0.040	0.022	0.037
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00470	0.00678	0.00690	0.00528	0.00457
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.79	4.57	3.95	4.49	3.73
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0804	0.0669	0.0910	0.0724	0.0484
Aggregate Organics	Lipid Content (% wwt)	0.7	0.7	0.7	0.6	0.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L2290068-11	L2290068-12	L2290068-13	L2290068-14	L2290068-15
Description	Tissue	Tissue	Tissue	Tissue	Tissue
Sampled Date	03-JUN-19	03-JUN-19	03-JUN-19	03-JUN-19	03-JUN-19
Sampled Time	09:00	09:00	09:00	09:00	09:00
Client ID	GMBY-YLPR-3-T	GMBY-YLPR-4-T	GMBY-YLPR-5-T	GMBY-YLPR-6-T	GMBY-YLPR-7-T
Grouping / **Analyte**					
TISSUE					
Physical Tests % Moisture (%)	79.5	79.4	80.3	79.3	79.7
Metals Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Arsenic (As)-Total (mg/kg wwt)	0.0149	0.0178	0.0218	0.0165	0.0217
Barium (Ba)-Total (mg/kg wwt)	0.016	0.045	0.014	0.020	0.024
Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Calcium (Ca)-Total (mg/kg wwt)	290	1120	339	437	426
Cesium (Cs)-Total (mg/kg wwt)	0.0209	0.0326	0.0298	0.0272	0.0215
Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
Copper (Cu)-Total (mg/kg wwt)	0.149	0.159	0.148	0.165	0.157
Iron (Fe)-Total (mg/kg wwt)	1.71	1.62	1.59	2.38	1.73
Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium (Mg)-Total (mg/kg wwt)	307	345	315	324	333
Manganese (Mn)-Total (mg/kg wwt)	0.300	0.408	0.235	0.223	0.260
Mercury (Hg)-Total (mg/kg wwt)	0.0541	0.0623	0.0723	0.0658	0.0527
Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Phosphorus (P)-Total (mg/kg wwt)	2510	3170	2630	2630	2680
Potassium (K)-Total (mg/kg wwt)	4530	4900	4830	4760	4860
Rubidium (Rb)-Total (mg/kg wwt)	8.69	12.7	11.1	10.4	9.21
Selenium (Se)-Total (mg/kg wwt)	0.260	0.230	0.271	0.236	0.296
Sodium (Na)-Total (mg/kg wwt)	275	313	303	314	280
Strontium (Sr)-Total (mg/kg wwt)	0.036	0.183	0.042	0.064	0.055
Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
Thallium (Tl)-Total (mg/kg wwt)	0.00405	0.00437	0.00360	0.00413	0.00400
Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
Zinc (Zn)-Total (mg/kg wwt)	4.47	4.33	3.87	4.27	3.69
Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals Methylmercury (as MeHg) (mg/kg wwt)	0.0532	0.0545	0.0737	0.0661	0.0420
Aggregate Organics Lipid Content (% wwt)	0.6	0.5	<0.5	0.8	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2290068-16 Tissue 03-JUN-19 09:00 GMBY-YLPR-8-T	L2290068-17 Tissue 03-JUN-19 09:00 GMBY-YLPR-9-T	L2290068-18 Tissue 03-JUN-19 09:00 GMBY-YLPR-10-T	L2290068-19 Tissue 03-JUN-19 09:00 GMBY-YLPR-11-T	L2290068-20 Tissue 03-JUN-19 09:00 GMBY-YLPR-12-T
TISSUE						
Physical Tests	% Moisture (%)	80.0	79.6	80.5	79.7	79.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0182	0.0154	0.0203	0.0174	0.0169
	Barium (Ba)-Total (mg/kg wwt)	0.017	0.028	0.029	0.036	0.051
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	248	556	648	433	498
	Cesium (Cs)-Total (mg/kg wwt)	0.0327	0.0194	0.0323	0.0288	0.0250
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.011	<0.010	0.013
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.165	0.168	0.182	0.198	0.189
	Iron (Fe)-Total (mg/kg wwt)	1.64	2.19	2.13	1.70	2.77
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	339	339	309	339	355
	Manganese (Mn)-Total (mg/kg wwt)	0.255	0.321	0.390	0.327	0.301
	Mercury (Hg)-Total (mg/kg wwt)	0.0671	0.0512	0.0643	0.0650	0.0481
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2550	2940	2790	2640	2790
	Potassium (K)-Total (mg/kg wwt)	4770	4940	4820	4920	5190
	Rubidium (Rb)-Total (mg/kg wwt)	11.3	9.00	11.3	11.1	11.4
	Selenium (Se)-Total (mg/kg wwt)	0.218	0.290	0.221	0.216	0.257
	Sodium (Na)-Total (mg/kg wwt)	292	304	327	306	310
	Strontium (Sr)-Total (mg/kg wwt)	0.033	0.073	0.105	0.066	0.069
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00488	0.00373	0.00387	0.00554	0.00505
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	0.028	0.026	0.051
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.47	4.08	3.63	4.19	4.38
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0700	0.0456	0.0557	0.0663	0.0433
Aggregate Organics	Lipid Content (% wwt)	0.7	0.7	<0.5	0.6	0.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2290068-21 Tissue 03-JUN-19 09:00 GMBY-YLPR-13-T	L2290068-22 Tissue 03-JUN-19 09:00 GMBY-YLPR-14-T	L2290068-23 Tissue 03-JUN-19 09:00 GMBY-YLPR-15-T	L2290068-24 Tissue 03-JUN-19 09:00 GMBY-YLPR-16-T	L2290068-25 Tissue 03-JUN-19 09:00 GMBY-YLPR-17-T
TISSUE						
Physical Tests	% Moisture (%)	79.8	78.9	79.1	80.2	79.2
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0182	0.0148	0.0132	0.0151	0.0086
	Barium (Ba)-Total (mg/kg wwt)	0.056	0.041	0.012	0.032	0.047
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	487	1040	133	523	662
	Cesium (Cs)-Total (mg/kg wwt)	0.0227	0.0215	0.0236	0.0210	0.0225
	Chromium (Cr)-Total (mg/kg wwt)	0.020	<0.010	<0.010	<0.010	0.027
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.170	0.164	0.153	0.178	0.195
	Iron (Fe)-Total (mg/kg wwt)	2.51	1.47	1.33	1.52	2.43
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	325	367	336	332	325
	Manganese (Mn)-Total (mg/kg wwt)	0.302	0.428	0.156	0.280	0.509
	Mercury (Hg)-Total (mg/kg wwt)	0.0467	0.0482	0.0649	0.0481	0.0737
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2670	3050	2490	2630	2670
	Potassium (K)-Total (mg/kg wwt)	4890	5060	5030	4920	4760
	Rubidium (Rb)-Total (mg/kg wwt)	9.48	10.4	11.8	10.2	10.1
	Selenium (Se)-Total (mg/kg wwt)	0.293	0.295	0.271	0.243	0.208
	Sodium (Na)-Total (mg/kg wwt)	303	297	304	336	284
	Strontium (Sr)-Total (mg/kg wwt)	0.063	0.139	0.011	0.065	0.094
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00474	0.00620	0.00611	0.00362	0.00479
	Tin (Sn)-Total (mg/kg wwt)	0.056	<0.020	<0.020	0.034	0.044
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.18	4.68	3.69	3.94	4.35
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0482	0.0524	0.0656	0.0576	0.0766
Aggregate Organics	Lipid Content (% wwt)	<0.5	0.6	<0.5	0.6	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2290068-26 Tissue 03-JUN-19 09:00 GMBY-YLPR-18-T	L2290068-27 Tissue 03-JUN-19 09:00 GMBY-YLPR-19-T	L2290068-28 Tissue 03-JUN-19 09:00 GMBY-YLPR-20-T	L2290068-29 Tissue 01-JUN-19 09:00 SWP3-YLPR-C-01	L2290068-30 Tissue 01-JUN-19 09:00 SWP3-YLPR-C-02
TISSUE						
Physical Tests	% Moisture (%)	80.0	79.5	80.6	78.9	79.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	0.92	0.94
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0146	0.0175	0.0149	0.303	0.256
	Barium (Ba)-Total (mg/kg wwt)	0.035	0.023	0.027	0.516	0.452
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	0.0026	0.0023
	Calcium (Ca)-Total (mg/kg wwt)	528	404	530	12200	12200
	Cesium (Cs)-Total (mg/kg wwt)	0.0210	0.0326	0.0202	0.0086	0.0081
	Chromium (Cr)-Total (mg/kg wwt)	0.034	0.013	0.014	0.011	0.013
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0058	0.0053
	Copper (Cu)-Total (mg/kg wwt)	0.231	0.207	0.148	0.570	0.482
	Iron (Fe)-Total (mg/kg wwt)	2.88	1.76	1.45	17.1	16.0
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0055	0.0049
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	307	355	327	429	424
	Manganese (Mn)-Total (mg/kg wwt)	0.381	0.263	0.248	9.49	11.9
	Mercury (Hg)-Total (mg/kg wwt)	0.0535	0.0798	0.0540	0.0573	0.0564
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0156	0.0135
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2550	2620	2570	8330	8060
	Potassium (K)-Total (mg/kg wwt)	4870	4970	4650	3270	3240
	Rubidium (Rb)-Total (mg/kg wwt)	10.3	14.0	9.96	7.25	6.79
	Selenium (Se)-Total (mg/kg wwt)	0.237	0.244	0.271	0.171	0.175
	Sodium (Na)-Total (mg/kg wwt)	337	287	333	852	809
	Strontium (Sr)-Total (mg/kg wwt)	0.068	0.059	0.068	2.79	2.56
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00546	0.00533	0.00446	0.00394	0.00408
	Tin (Sn)-Total (mg/kg wwt)	0.062	<0.020	<0.020	0.034	0.045
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	0.00077	0.00048
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.11	3.97	3.50	27.5	25.6
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0601	0.0802	0.0301	0.0668	0.0660
Aggregate Organics	Lipid Content (% wwt)	<0.5	0.7	0.7	1.7	2.4

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2290068-31 Tissue 01-JUN-19 09:00 SWP3-YLPR-C-03	L2290068-32 Tissue 01-JUN-19 09:00 SWP3-YLPR-C-04	L2290068-33 Tissue 01-JUN-19 09:00 SWP3-YLPR-C-05	L2290068-34 Tissue 01-JUN-19 09:00 SWP3-YLPR-C-06	L2290068-35 Tissue 01-JUN-19 09:00 SWP3-YLPR-C-07
TISSUE						
Physical Tests	% Moisture (%)	79.5	78.3	78.0	77.2	79.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.77	0.50	1.04	1.10	1.46
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.315	0.231	0.282	0.307	0.342
	Barium (Ba)-Total (mg/kg wwt)	0.387	0.454	0.374	0.341	0.403
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0027	0.0022	0.0025	0.0021	0.0029
	Calcium (Ca)-Total (mg/kg wwt)	9960	12200	12800	11200	11800
	Cesium (Cs)-Total (mg/kg wwt)	0.0082	0.0091	0.0080	0.0070	0.0069
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.011	0.019	<0.010	0.013
	Cobalt (Co)-Total (mg/kg wwt)	0.0062	0.0051	0.0052	0.0058	0.0070
	Copper (Cu)-Total (mg/kg wwt)	0.517	0.527	0.531	0.494	0.602
	Iron (Fe)-Total (mg/kg wwt)	17.8	14.6	15.0	17.4	20.2
	Lead (Pb)-Total (mg/kg wwt)	0.0042	<0.0040	0.0047	0.0047	0.0082
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	426	443	497	454	461
	Manganese (Mn)-Total (mg/kg wwt)	6.88	9.07	7.81	7.88	7.01
	Mercury (Hg)-Total (mg/kg wwt)	0.0564	0.0564	0.0515	0.0533	0.0409
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0138	0.0129	0.0128	0.0150	0.0175
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	6980	8240	8840	7860	8280
	Potassium (K)-Total (mg/kg wwt)	3210	3220	3190	3560	3580
	Rubidium (Rb)-Total (mg/kg wwt)	7.02	8.32	7.12	6.87	7.69
	Selenium (Se)-Total (mg/kg wwt)	0.172	0.173	0.160	0.164	0.145
	Sodium (Na)-Total (mg/kg wwt)	812	830	812	860	932
	Strontium (Sr)-Total (mg/kg wwt)	2.21	2.63	2.81	2.51	2.37
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00421	0.00404	0.00416	0.00344	0.00343
	Tin (Sn)-Total (mg/kg wwt)	0.033	0.031	0.070	0.036	0.037
	Uranium (U)-Total (mg/kg wwt)	0.00055	<0.00040	0.00045	0.00044	0.00072
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	24.6	27.5	26.3	24.2	23.0
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0561	0.0710	0.0569	0.0608	0.0441
Aggregate Organics	Lipid Content (% wwt)	1.8	2.3	2.6	2.3	2.4

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2290068-36 Tissue 01-JUN-19 09:00 SWP3-YLPR-C-08	L2290068-37 Tissue 01-JUN-19 09:00 SWP3-YLPR-C-09	L2290068-38 Tissue 01-JUN-19 09:00 SWP3-YLPR-C-10	L2290068-39 Tissue 01-JUN-19 09:00 SWP3-YLPR-C-10 D	L2290068-40 Tissue 03-JUN-19 09:00 GMBY-YLPR-C-01
TISSUE						
Physical Tests	% Moisture (%)	78.0	77.4	78.6	78.8	79.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	4.11	0.88	0.90	0.83	2.14
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.258	0.280	0.255	0.231	0.0606
	Barium (Ba)-Total (mg/kg wwt)	0.360	0.326	0.347	0.324	0.734
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0016	0.0019	0.0018	0.0019	0.0144
	Calcium (Ca)-Total (mg/kg wwt)	14700	12300	12900	10900	10500
	Cesium (Cs)-Total (mg/kg wwt)	0.0098	0.0067	0.0104	0.0098	0.0205
	Chromium (Cr)-Total (mg/kg wwt)	0.020	0.034	0.022	0.017	0.027
	Cobalt (Co)-Total (mg/kg wwt)	0.0062	0.0041	0.0053	0.0045	0.0071
	Copper (Cu)-Total (mg/kg wwt)	0.525	0.510	0.642	0.561	0.443
	Iron (Fe)-Total (mg/kg wwt)	19.5	16.2	14.7	13.2	13.3
	Lead (Pb)-Total (mg/kg wwt)	0.0079	0.0054	0.0088	0.0064	0.0065
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	488	428	476	399	371
	Manganese (Mn)-Total (mg/kg wwt)	8.38	4.07	5.77	4.94	5.21
	Mercury (Hg)-Total (mg/kg wwt)	0.0356	0.0414	0.0509	0.0517	0.0287
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0173	0.0140	0.0192	0.0185	0.0181
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	9530	8010	8760	7820	7250
	Potassium (K)-Total (mg/kg wwt)	3480	3440	3830	3240	3150
	Rubidium (Rb)-Total (mg/kg wwt)	8.89	6.65	9.69	8.85	9.26
	Selenium (Se)-Total (mg/kg wwt)	0.139	0.145	0.163	0.154	0.228
	Sodium (Na)-Total (mg/kg wwt)	960	863	1010	830	842
	Strontium (Sr)-Total (mg/kg wwt)	3.03	2.73	2.72	2.42	1.63
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00461	0.00299	0.00493	0.00419	0.00622
	Tin (Sn)-Total (mg/kg wwt)	0.054	0.061	<0.020	<0.020	0.213
	Uranium (U)-Total (mg/kg wwt)	0.00061	0.00042	0.00046	<0.00040	0.00150
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	22.5	21.8	22.8	20.8	25.1
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0370	0.0364	0.0557	0.0507	0.0271
Aggregate Organics	Lipid Content (% wwt)	2.5	2.2	2.2	2.1	2.0

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2290068-41 Tissue 03-JUN-19 09:00 GMBY-YLPR-C-02	L2290068-42 Tissue 03-JUN-19 09:00 GMBY-YLPR-C-03	L2290068-43 Tissue 03-JUN-19 09:00 GMBY-YLPR-C-04	L2290068-44 Tissue 03-JUN-19 09:00 GMBY-YLPR-C-05	L2290068-45 Tissue 03-JUN-19 09:00 GMBY-YLPR-C-06
TISSUE						
Physical Tests	% Moisture (%)	79.4	77.4	79.1	79.2	78.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	2.09	2.17	1.67	1.73	2.21
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0722	0.0467	0.0554	0.0480	0.0465
	Barium (Ba)-Total (mg/kg wwt)	0.722	0.471	0.568	0.544	0.517
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0134	0.0143	0.0147	0.0134	0.0118
	Calcium (Ca)-Total (mg/kg wwt)	10100	12400	11500	10900	11600
	Cesium (Cs)-Total (mg/kg wwt)	0.0201	0.0160	0.0210	0.0202	0.0230
	Chromium (Cr)-Total (mg/kg wwt)	0.032	0.023	0.015	0.021	0.024
	Cobalt (Co)-Total (mg/kg wwt)	0.0075	0.0063	0.0059	0.0064	0.0060
	Copper (Cu)-Total (mg/kg wwt)	0.466	0.485	0.512	0.421	0.466
	Iron (Fe)-Total (mg/kg wwt)	13.8	12.2	12.4	11.9	12.2
	Lead (Pb)-Total (mg/kg wwt)	0.0066	0.0054	0.0063	0.0056	0.0067
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	0.11
	Magnesium (Mg)-Total (mg/kg wwt)	396	417	353	385	376
	Manganese (Mn)-Total (mg/kg wwt)	5.78	9.03	3.75	4.93	4.17
	Mercury (Hg)-Total (mg/kg wwt)	0.0348	0.0271	0.0258	0.0369	0.0283
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0187	0.0216	0.0201	0.0167	0.0205
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	7290	8810	8070	7650	8050
	Potassium (K)-Total (mg/kg wwt)	3110	3350	3250	3270	3220
	Rubidium (Rb)-Total (mg/kg wwt)	8.98	8.41	9.18	8.46	8.87
	Selenium (Se)-Total (mg/kg wwt)	0.249	0.206	0.231	0.214	0.233
	Sodium (Na)-Total (mg/kg wwt)	830	860	882	839	859
	Strontium (Sr)-Total (mg/kg wwt)	1.56	1.83	1.88	1.78	2.04
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00566	0.00583	0.00654	0.00591	0.00586
	Tin (Sn)-Total (mg/kg wwt)	0.246	0.123	0.183	0.177	0.152
	Uranium (U)-Total (mg/kg wwt)	0.00171	0.00182	0.00189	0.00148	0.00203
	Vanadium (V)-Total (mg/kg wwt)	0.021	<0.020	0.023	<0.020	0.024
	Zinc (Zn)-Total (mg/kg wwt)	24.4	23.8	23.5	21.3	21.3
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0333	0.0300	0.0260	0.0446	0.0289
Aggregate Organics	Lipid Content (% wwt)	2.3	2.0	2.1	1.8	2.4

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2290068-46 Tissue 03-JUN-19 09:00 GMBY-YLPR-C-07	L2290068-47 Tissue 03-JUN-19 09:00 GMBY-YLPR-C-08	L2290068-48 Tissue 03-JUN-19 09:00 GMBY-YLPR-C-09	L2290068-49 Tissue 03-JUN-19 09:00 GMBY-YLPR-C-10	L2290068-50 Tissue 03-JUN-19 09:00 GMBY-YLPR-C-10 D
TISSUE						
Physical Tests	% Moisture (%)	78.9	78.2	78.4	78.0	77.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	4.60	3.93	4.24	2.47	2.57
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0537	0.0475	0.0482	0.0364	0.0382
	Barium (Ba)-Total (mg/kg wwt)	0.498	0.599	0.533	0.425	0.441
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0189	0.0177	0.0170	0.0100	0.0104
	Calcium (Ca)-Total (mg/kg wwt)	11400	11000	11200	11300	12200
	Cesium (Cs)-Total (mg/kg wwt)	0.0252	0.0223	0.0217	0.0212	0.0215
	Chromium (Cr)-Total (mg/kg wwt)	0.022	0.022	0.035	0.014	0.054
	Cobalt (Co)-Total (mg/kg wwt)	0.0073	0.0079	0.0089	0.0066	0.0066
	Copper (Cu)-Total (mg/kg wwt)	0.534	0.530	0.563	0.461	0.469
	Iron (Fe)-Total (mg/kg wwt)	16.2	15.4	18.3	13.0	13.0
	Lead (Pb)-Total (mg/kg wwt)	0.0065	0.0091	0.0080	0.0052	0.0053
	Lithium (Li)-Total (mg/kg wwt)	0.11	0.12	0.12	0.11	0.12
	Magnesium (Mg)-Total (mg/kg wwt)	404	396	372	410	392
	Manganese (Mn)-Total (mg/kg wwt)	4.84	4.31	4.26	4.13	4.59
	Mercury (Hg)-Total (mg/kg wwt)	0.0292	0.0283	0.0262	0.0245	0.0240
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0246	0.0217	0.0248	0.0250	0.0256
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	0.718
	Phosphorus (P)-Total (mg/kg wwt)	8250	7980	8080	8170	8630
	Potassium (K)-Total (mg/kg wwt)	3320	3270	3290	3390	3490
	Rubidium (Rb)-Total (mg/kg wwt)	9.72	9.57	9.62	9.73	9.97
	Selenium (Se)-Total (mg/kg wwt)	0.220	0.234	0.211	0.202	0.212
	Sodium (Na)-Total (mg/kg wwt)	886	870	879	886	934
	Strontium (Sr)-Total (mg/kg wwt)	2.27	1.97	2.07	2.07	2.32
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00658	0.00711	0.00637	0.00556	0.00572
	Tin (Sn)-Total (mg/kg wwt)	0.146	0.160	0.111	0.066	0.078
	Uranium (U)-Total (mg/kg wwt)	0.00235	0.00412	0.00404	0.00245	0.00248
	Vanadium (V)-Total (mg/kg wwt)	0.027	0.046	0.041	0.024	0.026
	Zinc (Zn)-Total (mg/kg wwt)	23.6	21.0	20.3	20.3	20.7
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0278	0.0317	0.0271	0.0171	0.0236
Aggregate Organics	Lipid Content (% wwt)	2.3	1.9	1.9	2.1	1.8

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2290068-51 Tissue 03-JUN-19 09:00 GMBY-SPSH-C-01	L2290068-52 Tissue 03-JUN-19 09:00 GMBY-SPSH-C-02	L2290068-53 Tissue 03-JUN-19 09:00 GMBY-SPSH-C-03	L2290068-54 Tissue 03-JUN-19 09:00 GMBY-SPSH-C-04	L2290068-55 Tissue 03-JUN-19 09:00 GMBY-SPSH-C-05
TISSUE						
Physical Tests	% Moisture (%)	75.7	75.9	77.2	78.1	77.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.51	0.74	0.79	0.60	0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0878	0.0835	0.0692	0.0830	0.0842
	Barium (Ba)-Total (mg/kg wwt)	0.721	0.843	0.861	0.969	0.853
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0096	0.0076	0.0090	0.0077	0.0105
	Calcium (Ca)-Total (mg/kg wwt)	7860	9160	8260	9600	9240
	Cesium (Cs)-Total (mg/kg wwt)	0.0132	0.0119	0.0140	0.0140	0.0139
	Chromium (Cr)-Total (mg/kg wwt)	0.014	0.015	0.013	0.014	0.011
	Cobalt (Co)-Total (mg/kg wwt)	0.0058	0.0043	0.0055	0.0050	0.0052
	Copper (Cu)-Total (mg/kg wwt)	0.683	0.653	0.826	0.645	0.808
	Iron (Fe)-Total (mg/kg wwt)	12.3	12.0	14.2	12.5	13.2
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0046	0.0044	0.0043	0.0094
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	407	431	399	453	390
	Manganese (Mn)-Total (mg/kg wwt)	3.05	3.03	3.01	3.20	3.56
	Mercury (Hg)-Total (mg/kg wwt)	0.0657	0.0610	0.0596	0.0728	0.0686
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0155	0.0145	0.0164	0.0151	0.0153
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	6420	7140	6600	7220	7000
	Potassium (K)-Total (mg/kg wwt)	3440	3330	3420	3380	3420
	Rubidium (Rb)-Total (mg/kg wwt)	6.17	5.94	6.12	6.50	6.74
	Selenium (Se)-Total (mg/kg wwt)	0.345	0.377	0.410	0.360	0.344
	Sodium (Na)-Total (mg/kg wwt)	781	750	795	779	787
	Strontium (Sr)-Total (mg/kg wwt)	2.29	2.77	2.59	2.74	2.73
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00420	0.00554	0.00414	0.00495	0.00446
	Tin (Sn)-Total (mg/kg wwt)	0.103	0.072	0.128	0.093	0.086
	Uranium (U)-Total (mg/kg wwt)	0.00118	0.00140	0.00122	0.00122	0.00137
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	48.7	45.5	48.5	50.9	47.6
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0583	0.0545	0.0571	0.0590	0.0634
Aggregate Organics	Lipid Content (% wwt)	2.6	3.4	2.3	2.4	2.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2290068-56	L2290068-57	L2290068-58	L2290068-59	L2290068-60
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	03-JUN-19	03-JUN-19	03-JUN-19	03-JUN-19	03-JUN-19
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	GMBY-SPSH-C-06	GMBY-SPSH-C-07	GMBY-SPSH-C-08	GMBY-SPSH-C-09	GMBY-SPSH-C-10
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	77.9	77.2	78.3	76.9	77.2
Metals	Aluminum (Al)-Total (mg/kg wwt)	1.03	0.52	0.50	0.65	1.04
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	0.0069
	Arsenic (As)-Total (mg/kg wwt)	0.0883	0.0793	0.0892	0.0712	0.0832
	Barium (Ba)-Total (mg/kg wwt)	0.862	0.857	0.841	0.959	0.818
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0108	0.0105	0.0112	0.0089	0.0083
	Calcium (Ca)-Total (mg/kg wwt)	8960	9050	8500	10500	8050
	Cesium (Cs)-Total (mg/kg wwt)	0.0124	0.0129	0.0133	0.0127	0.0153
	Chromium (Cr)-Total (mg/kg wwt)	0.018	0.014	0.012	0.015	0.022
	Cobalt (Co)-Total (mg/kg wwt)	0.0057	0.0043	0.0069	0.0056	0.0065
	Copper (Cu)-Total (mg/kg wwt)	0.695	0.650	0.863	0.661	0.726
	Iron (Fe)-Total (mg/kg wwt)	14.7	12.2	13.5	12.6	17.6
	Lead (Pb)-Total (mg/kg wwt)	0.0051	<0.0040	0.0045	0.0065	0.0053
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	379	388	406	415	455
	Manganese (Mn)-Total (mg/kg wwt)	3.27	3.25	2.88	3.28	3.06
	Mercury (Hg)-Total (mg/kg wwt)	0.0694	0.0656	0.0697	0.0625	0.0741
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0155	0.0143	0.0181	0.0147	0.0183
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	6570	6860	6520	7800	6750
	Potassium (K)-Total (mg/kg wwt)	3170	3280	3270	3370	3570
	Rubidium (Rb)-Total (mg/kg wwt)	5.64	6.42	6.02	6.78	6.41
	Selenium (Se)-Total (mg/kg wwt)	0.362	0.360	0.417	0.371	0.322
	Sodium (Na)-Total (mg/kg wwt)	743	762	873	796	905
	Strontium (Sr)-Total (mg/kg wwt)	2.77	2.78	2.48	3.01	2.44
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00512	0.00448	0.00428	0.00528	0.00388
	Tin (Sn)-Total (mg/kg wwt)	0.086	0.118	0.099	0.159	0.174
	Uranium (U)-Total (mg/kg wwt)	0.00126	0.00113	0.00134	0.00165	0.00122
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	44.6	46.6	53.8	48.6	46.1
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	0.042
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0649	0.0524	0.0585	0.0505	0.0709
Aggregate Organics	Lipid Content (% wwt)	2.7	2.3	2.4	2.7	2.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2290068-61 Tissue 03-JUN-19 09:00 GMBY-SPSH-C-10 D	L2290068-62 Tissue 04-JUN-19 09:00 KLSW-SPSH-C-01	L2290068-63 Tissue 04-JUN-19 09:00 KLSW-SPSH-C-02	L2290068-64 Tissue 04-JUN-19 09:00 KLSW-SPSH-C-03	L2290068-65 Tissue 04-JUN-19 09:00 KLSW-SPSH-C-04
TISSUE						
Physical Tests	% Moisture (%)	77.5	77.9	76.8	76.6	77.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.63	2.37	1.40	1.24	1.39
	Antimony (Sb)-Total (mg/kg wwt)	0.0034	<0.0020	<0.0020	<0.0020	0.0045
	Arsenic (As)-Total (mg/kg wwt)	0.0806	0.139	0.220	0.151	0.296
	Barium (Ba)-Total (mg/kg wwt)	0.905	0.762	0.652	0.583	0.828
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0087	0.0097	0.0179	0.0096	0.0160
	Calcium (Ca)-Total (mg/kg wwt)	9600	8380	8170	6820	9050
	Cesium (Cs)-Total (mg/kg wwt)	0.0151	0.0146	0.0100	0.0123	0.0125
	Chromium (Cr)-Total (mg/kg wwt)	0.052	0.024	0.015	0.016	0.038
	Cobalt (Co)-Total (mg/kg wwt)	0.0059	0.0059	0.0077	0.0053	0.0090
	Copper (Cu)-Total (mg/kg wwt)	0.724	0.771	1.01	0.651	0.943
	Iron (Fe)-Total (mg/kg wwt)	13.4	15.1	15.7	14.2	15.6
	Lead (Pb)-Total (mg/kg wwt)	0.0058	0.0044	0.0046	<0.0040	0.0066
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	453	383	459	358	464
	Manganese (Mn)-Total (mg/kg wwt)	3.05	2.63	2.46	1.81	2.69
	Mercury (Hg)-Total (mg/kg wwt)	0.0785	0.0937	0.0829	0.0605	0.0874
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0159	0.0151	0.0201	0.0108	0.0173
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	7230	6420	6350	5310	7080
	Potassium (K)-Total (mg/kg wwt)	3340	3020	2940	2520	3710
	Rubidium (Rb)-Total (mg/kg wwt)	6.35	4.89	4.71	4.04	5.83
	Selenium (Se)-Total (mg/kg wwt)	0.348	0.284	0.277	0.219	0.358
	Sodium (Na)-Total (mg/kg wwt)	802	642	696	564	846
	Strontium (Sr)-Total (mg/kg wwt)	2.64	2.34	2.53	2.21	2.89
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00464	0.00351	0.00415	0.00327	0.00490
	Tin (Sn)-Total (mg/kg wwt)	0.048	0.150	0.122	0.110	0.103
	Uranium (U)-Total (mg/kg wwt)	0.00114	0.00093	0.00080	0.00042	0.00084
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	49.9	44.7	46.0	38.3	57.1
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0614	0.0905	0.0712	0.0810	0.0617
Aggregate Organics	Lipid Content (% wwt)	2.1	1.7	1.8	2.0	2.2

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2290068-66 Tissue 04-JUN-19 09:00 KLSW-SPSH-C-05	L2290068-67 Tissue 04-JUN-19 09:00 KLSW-SPSH-C-06	L2290068-68 Tissue 04-JUN-19 09:00 KLSW-SPSH-C-07	L2290068-69 Tissue 04-JUN-19 09:00 KLSW-SPSH-C-07 D	L2290068-70 Tissue 04-JUN-19 09:00 KLSW-SPSH-C-08
TISSUE						
Physical Tests	% Moisture (%)	77.5	78.4	77.4	76.9	78.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	2.51	2.75	1.25	1.31	3.97
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.163	0.170	0.185	0.181	0.249
	Barium (Ba)-Total (mg/kg wwt)	0.785	0.593	0.793	0.747	0.912
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0061	0.0106	0.0107	0.0107	0.0231
	Calcium (Ca)-Total (mg/kg wwt)	9480	7720	8850	7990	8780
	Cesium (Cs)-Total (mg/kg wwt)	0.0154	0.0166	0.0161	0.0157	0.0167
	Chromium (Cr)-Total (mg/kg wwt)	0.032	0.020	0.013	0.017	0.022
	Cobalt (Co)-Total (mg/kg wwt)	0.0080	0.0066	0.0073	0.0074	0.0085
	Copper (Cu)-Total (mg/kg wwt)	0.575	0.639	0.796	0.786	0.677
	Iron (Fe)-Total (mg/kg wwt)	13.3	14.7	14.7	14.5	18.4
	Lead (Pb)-Total (mg/kg wwt)	0.0045	0.0044	0.0060	0.0050	0.0094
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	499	384	473	444	408
	Manganese (Mn)-Total (mg/kg wwt)	2.50	2.08	3.07	2.79	2.90
	Mercury (Hg)-Total (mg/kg wwt)	0.107	0.0820	0.117	0.120	0.0657
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0133	0.0135	0.0156	0.0156	0.0126
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	6890	5760	6910	6160	6490
	Potassium (K)-Total (mg/kg wwt)	3260	2910	3270	3200	3250
	Rubidium (Rb)-Total (mg/kg wwt)	4.81	4.67	4.89	4.83	5.04
	Selenium (Se)-Total (mg/kg wwt)	0.278	0.250	0.287	0.281	0.297
	Sodium (Na)-Total (mg/kg wwt)	680	651	764	743	628
	Strontium (Sr)-Total (mg/kg wwt)	2.63	2.45	2.48	2.39	2.93
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00385	0.00335	0.00403	0.00352	0.00584
	Tin (Sn)-Total (mg/kg wwt)	0.148	0.103	<0.020	<0.020	0.223
	Uranium (U)-Total (mg/kg wwt)	0.00051	0.00067	0.00103	0.00094	0.00173
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	45.9	43.1	49.7	47.9	46.4
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0954	0.109	0.116	0.110	0.0693
Aggregate Organics	Lipid Content (% wwt)	2.0	1.9	2.2	2.3	1.4

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2290068-71 Tissue 04-JUN-19 09:00 KLSW-SPSH-C-09	L2290068-72 Tissue 06-JUN-19 09:00 KLCB-SPSH-C-01	L2290068-73 Tissue 06-JUN-19 09:00 KLCB-SPSH-C-02	L2290068-74 Tissue 06-JUN-19 09:00 KLCB-SPSH-C-03	L2290068-75 Tissue 06-JUN-19 09:00 KLCB-SPSH-C-04
TISSUE						
Physical Tests	% Moisture (%)	76.0	79.6	79.0	78.9	75.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	3.51	2.55	2.02	4.45	1.00
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.159	0.459	0.447	0.474	0.285
	Barium (Ba)-Total (mg/kg wwt)	0.785	0.780	0.698	0.850	0.668
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0075	0.0086	0.0078	0.0101	0.0080
	Calcium (Ca)-Total (mg/kg wwt)	8540	7390	7310	8970	9600
	Cesium (Cs)-Total (mg/kg wwt)	0.0135	0.0204	0.0164	0.0180	0.0151
	Chromium (Cr)-Total (mg/kg wwt)	0.030	0.025	0.037	0.039	0.027
	Cobalt (Co)-Total (mg/kg wwt)	0.0059	0.0099	0.0079	0.0110	0.0060
	Copper (Cu)-Total (mg/kg wwt)	0.642	0.663	0.575	0.626	0.667
	Iron (Fe)-Total (mg/kg wwt)	15.3	17.6	17.0	22.2	12.2
	Lead (Pb)-Total (mg/kg wwt)	0.0077	0.0064	0.0060	0.0084	0.0056
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	481	413	374	380	426
	Manganese (Mn)-Total (mg/kg wwt)	2.30	2.39	2.32	2.70	2.55
	Mercury (Hg)-Total (mg/kg wwt)	0.118	0.0680	0.0529	0.0560	0.0966
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0132	0.0139	0.0113	0.0126	0.0111
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	6810	5830	5560	6510	7430
	Potassium (K)-Total (mg/kg wwt)	3220	3250	3180	3100	3450
	Rubidium (Rb)-Total (mg/kg wwt)	4.71	5.15	5.04	4.96	5.22
	Selenium (Se)-Total (mg/kg wwt)	0.283	0.305	0.266	0.275	0.302
	Sodium (Na)-Total (mg/kg wwt)	666	649	578	573	801
	Strontium (Sr)-Total (mg/kg wwt)	2.27	2.73	2.85	3.30	3.12
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00352	0.00393	0.00412	0.00405	0.00319
	Tin (Sn)-Total (mg/kg wwt)	0.122	0.189	0.179	0.285	0.282
	Uranium (U)-Total (mg/kg wwt)	0.00085	0.00047	<0.00040	0.00078	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	57.0	45.8	41.3	46.2	44.7
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0814	0.0746	0.0679	0.0628	0.0827
Aggregate Organics	Lipid Content (% wwt)	2.4	1.8	2.2	2.3	2.3

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2290068-76 Tissue 06-JUN-19 09:00 KLCB-SPSH-C-05	L2290068-77 Tissue 06-JUN-19 09:00 KLCB-SPSH-C-06	L2290068-78 Tissue 06-JUN-19 09:00 KLCB-SPSH-C-07	L2290068-79 Tissue 08-JUN-19 09:00 KLCB-SPSH-C-08	L2290068-80 Tissue 08-JUN-19 09:00 KLCB-SPSH-C-09
Sample ID						
Description						
Sampled Date						
Sampled Time						
Client ID						
TISSUE						
Physical Tests	% Moisture (%)	77.3	74.8	77.5	78.2	76.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.59	0.80	1.26	1.32	1.86
	Antimony (Sb)-Total (mg/kg wwt)	0.0038	0.0042	0.0038	0.0066	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.337	0.319	0.252	0.388	0.375
	Barium (Ba)-Total (mg/kg wwt)	0.663	0.684	0.766	0.779	0.745
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0092	0.0116	0.0105	0.0087	0.0077
	Calcium (Ca)-Total (mg/kg wwt)	10600	8890	10600	9500	10400
	Cesium (Cs)-Total (mg/kg wwt)	0.0194	0.0188	0.0130	0.0239	0.0246
	Chromium (Cr)-Total (mg/kg wwt)	0.029	0.031	0.020	0.040	0.038
	Cobalt (Co)-Total (mg/kg wwt)	0.0059	0.0070	0.0062	0.0065	0.0065
	Copper (Cu)-Total (mg/kg wwt)	0.563	0.845	0.671	0.610	0.549
	Iron (Fe)-Total (mg/kg wwt)	10.5	12.7	14.4	13.6	14.9
	Lead (Pb)-Total (mg/kg wwt)	0.0041	0.0050	0.0045	0.0078	0.0067
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	432	415	420	371	375
	Manganese (Mn)-Total (mg/kg wwt)	2.20	2.52	2.74	2.49	2.48
	Mercury (Hg)-Total (mg/kg wwt)	0.102	0.121	0.0950	0.0605	0.0928
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0100	0.0134	0.0099	0.0111	0.0099
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	7750	6930	7830	7040	7340
	Potassium (K)-Total (mg/kg wwt)	3370	3250	3340	3460	3370
	Rubidium (Rb)-Total (mg/kg wwt)	4.73	4.76	5.35	5.34	4.96
	Selenium (Se)-Total (mg/kg wwt)	0.275	0.332	0.288	0.292	0.296
	Sodium (Na)-Total (mg/kg wwt)	837	782	807	782	808
	Strontium (Sr)-Total (mg/kg wwt)	4.04	3.26	3.36	4.10	4.33
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00297	0.00325	0.00372	0.00274	0.00278
	Tin (Sn)-Total (mg/kg wwt)	0.124	0.067	0.094	0.249	0.252
	Uranium (U)-Total (mg/kg wwt)	0.00040	<0.00040	0.00060	0.00041	0.00041
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	52.9	54.7	46.1	42.9	47.2
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	0.052	0.046	0.050	0.041
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0813	0.0825	0.0921	0.0528	0.109
Aggregate Organics	Lipid Content (% wwt)	1.8	2.7	2.1	2.6	2.7

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2290068-81 Tissue 07-JUN-19 09:00 KLBB-SPSH-C-01	L2290068-82 Tissue 07-JUN-19 09:00 KLBB-SPSH-C-02	L2290068-83 Tissue 07-JUN-19 09:00 KLBB-SPSH-C-03	L2290068-84 Tissue 07-JUN-19 09:00 KLBB-SPSH-C-04	L2290068-85 Tissue 07-JUN-19 09:00 KLBB-SPSH-C-05
TISSUE						
Physical Tests	% Moisture (%)	79.3	78.4	77.7	78.7	77.8
Metals	Aluminum (Al)-Total (mg/kg wwt)	2.57	2.17	1.88	3.10	3.6
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.483	0.566	0.593	0.583	0.527
	Barium (Ba)-Total (mg/kg wwt)	0.657	0.639	0.651	0.664	0.740
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0075	0.0076	0.0100	0.0095	0.0108
	Calcium (Ca)-Total (mg/kg wwt)	7110	7740	7400	7150	8970
	Cesium (Cs)-Total (mg/kg wwt)	0.0161	0.0177	0.0197	0.0168	0.0172
	Chromium (Cr)-Total (mg/kg wwt)	0.028	0.028	0.018	0.022	0.071
	Cobalt (Co)-Total (mg/kg wwt)	0.0077	0.0064	0.0075	0.0077	0.0096
	Copper (Cu)-Total (mg/kg wwt)	0.624	0.567	0.637	0.668	0.679
	Iron (Fe)-Total (mg/kg wwt)	14.5	14.0	13.6	14.5	22.1
	Lead (Pb)-Total (mg/kg wwt)	0.0071	0.0062	0.0075	0.0077	<0.010
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	352	356	360	341	430
	Manganese (Mn)-Total (mg/kg wwt)	2.12	2.46	2.17	2.42	2.73
	Mercury (Hg)-Total (mg/kg wwt)	0.0435	0.0426	0.0460	0.0542	1.17
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0126	0.0119	0.0130	0.0135	0.0138
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	5520	6110	5880	5680	7090
	Potassium (K)-Total (mg/kg wwt)	3050	3000	3020	3100	3530
	Rubidium (Rb)-Total (mg/kg wwt)	4.37	4.13	4.23	4.02	4.55
	Selenium (Se)-Total (mg/kg wwt)	0.265	0.239	0.261	0.269	0.279
	Sodium (Na)-Total (mg/kg wwt)	600	543	575	582	748
	Strontium (Sr)-Total (mg/kg wwt)	3.07	3.66	3.54	3.23	3.51
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00285	0.00299	0.00360	0.00437	0.00319
	Tin (Sn)-Total (mg/kg wwt)	0.294	0.185	0.215	0.203	0.275
	Uranium (U)-Total (mg/kg wwt)	0.00042	0.00048	<0.00040	0.00043	0.00049
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	41.7	43.0	42.1	44.0	47.0
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0543	0.0576	0.0667	0.0793	0.0649
Aggregate Organics	Lipid Content (% wwt)	2.5	2.8	2.8	3.1	2.7

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Duplicate	Manganese (Mn)-Total	DUP-H	L2290068-19, -20, -21, -22, -23, -24, -25, -26, -27, -28, -29, -30, -31, -32, -33, -34, -35, -36, -37, -38
Duplicate	Tin (Sn)-Total	DUP-H	L2290068-60
Method Blank	Copper (Cu)-Total	MB-LOR	L2290068-59, -61, -62, -63, -64, -65, -66, -67, -68, -69, -70, -71, -72, -73, -74, -75, -76, -77, -78
Certified Reference Material	Lead (Pb)-Total	MES	L2290068-79, -80, -81, -82, -83, -84

Qualifiers for Individual Parameters Listed:

Qualifier	Description
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.
MES	Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-WET-CVAFS-N-VA	Tissue	Mercury in Tissue by CVAFS (WET)	EPA 200.3, EPA 245.7

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Analysis is by atomic fluorescence spectrophotometry or atomic absorption spectrophotometry, adapted from US EPA Method 245.7.

HG-WET-MICR-CVAA-VA	Tissue	Mercury in Tissue by CVAAS (WET)	EPA 200.3, EPA 245.7

This method is adapted from US EPA Method 200.3 "Sample Procedures for Spectrochemical Determination of Total Recoverable Elements in Biological Tissues" (1996). Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with repeated additions of hydrogen peroxide. Analysis is by atomic absorption spectrophotometry, adapted from US EPA Method 245.7.

LIPIDS-GRAV-VA	Tissue	Lipids in Tissue by Gravimetric	EPA 3570, 8290A

A portion of homogenized sample is extracted with dichloromethane. The extract is evaporated to dryness and the lipid content determined gravimetrically.

MEHG-WET-GCAF-VA	Tissue	Methylmercury in Tissue by GCAFS (Wet)	Liang et al. (1994)

This method follows the procedures published by Liang, Bloom and Horvat in Clinical Chemistry (Vol 40, No 4, 1994). Samples are homogenized and then digested in a methanolic potassium hydroxide solution. An aliquot of the digestate is analyzed by aqueous phase ethylation, purge and trap, desorption and GC separation. The separated species are then pyrolized to elemental Hg and quantified by cold vapour atomic fluorescence spectroscopy. Results are reported "as MeHg".

MET-WET-CCMS-N-VA	Tissue	Metals in Tissue by CRC ICPMS (WET)	EPA 200.3/6020A

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).

Method Limitation: This method employs a strong acid/peroxide digestion, and is intended to provide a conservative estimate of bio-available metals. Near complete recoveries are achieved for most toxicologically important metals, but elements associated with recalcitrant minerals may be only partially recovered.

MET-WET-MICR-CCMS-VA	Tissue	Metals in Tissue by CRC ICPMS (WET)	EPA 200.3/6020B

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020B).

Method Limitation: This method employs a strong acid/peroxide digestion, and is intended to provide a conservative estimate of bio-available metals. Near complete recoveries are achieved for most toxicologically important metals, but elements associated with recalcitrant minerals may be only partially recovered.

MOISTURE-MICR-VA	Tissue	Moisture in Tissue	Puget Sound WQ Authority, Apr 1997

This analysis is carried out gravimetrically by drying the sample at <60 deg. C.

MOISTURE-TISS-VA	Tissue	% Moisture in Tissues	Puget Sound WQ Authority, Apr 1997

This analysis is carried out gravimetrically by drying the sample at 105 C for a minimum of six hours.

Reference Information

** 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
VA	ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour 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.
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-adjusted weight of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

ALS Environmental

www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

L2290068-COFC

COC Number: 19 -

Page of

Report To	Contact and company name below will appear on the final report
Company:	Greenstone Gold Mines Ltd. / Stantec
Contact:	Mike Johns
Phone:	519-780-8145
	Company address below will appear on the final report
Street:	1-70 Southgate Drive
City/Province:	Guelph, ON
Postal Code:	N1G 4P5
Invoice To	Same as Report To ☐ YES ☑ NO
	Copy of Invoice with Report ☐ YES ☐ NO
Company:	Greenstone Gold Mines Ltd.
Contact:	Accounts Payable

Report Format / Distribution	
Select Report Format:	☑ PDF ☑ EXCEL ☑ EDD (DIGITAL)
Quality Control (QC) Report with Report	☐ YES ☐ NO
☐ Compare Results to Criteria on Report - provide details below if box checked	
Select Distribution:	☑ EMAIL ☐ MAIL ☐ FAX
Email 1	environmental@ggmines.com
Email 2	Aaron.MacDonell@ggmines.com
Email 3	Mike.Johns@stantec.com, Nathan.Burnett@stantec.com

Invoice Distribution	
Select Invoice Distribution:	☑ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax	ap@premiergoldmines.com
Email 2	environmental@ggmines.com

Project Information	
ALS Account # / Quote #:	Q66285
Job #:	160961323
PO / AFE:	
LSD:	

Oil and Gas Required Fields (client use)	
AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Lab Work Order # (lab use only): L2290068

ALS Contact: Sampler: N. Burnett

Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)

Regular [R] ☑ Standard TAT if received by 3 pm - business days - no surcharges apply

PRIORITY (Business Days): 4 day [P4-20%] ☐ | 3 day [P3-25%] ☐ | 2 day [P2-50%] ☐

EMERGENCY: 1 Business day [E - 100%] ☐ | Same Day, Weekend or Statutory holiday [E2 -200% (Laboratory opening fees may apply)] ☐

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm

For tests that can not be performed according to the service level selected, you will be contacted.

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	Methyl Mercury Tissue GCAFS (WET) ***	Mercury Tissue CVAFS (WET) ****	Lipids in Tissue by Gravimetric ***	% Moisture Tissue **	Metals Tissue CRC ICPMS (WET) *	Lab to Create Duplicate	SUSPECTED HAZARD (see Special Instructions)
1	SWP3-YLPR-059-T	1-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
2	SWP3-YLPR-060-T	1-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
3	SWP3-YLPR-061-T	1-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
4	SWP3-YLPR-062-T	1-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
5	SWP3-YLPR-063-T	1-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
6	SWP3-YLPR-064-T	1-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
7	SWP3-YLPR-065-T	1-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
8	SWP3-YLPR-066-T	1-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
9	GMBY-YLPR-1-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
10	GMBY-YLPR-2-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
11	GMBY-YLPR-3-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
12	GMBY-YLPR-4-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
13	GMBY-YLPR-5-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
14	GMBY-YLPR-6-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
15	GMBY-YLPR-7-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
16	GMBY-YLPR-8-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
17	GMBY-YLPR-9-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
18	GMBY-YLPR-10-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
19	GMBY-YLPR-11-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
20	GMBY-YLPR-12-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
21	GMBY-YLPR-13-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
22	GMBY-YLPR-14-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	
23	GMBY-YLPR-15-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1	0	

L2290068

24	GMBY-YLPR-16-T	3-Jun-19	9:00	Tissue	1	1												0		
25	GMBY-YLPR-17-T	3-Jun-19	9:00	Tissue	1	1												0		
26	GMBY-YLPR-18-T	3-Jun-19	9:00	Tissue	1	1												0		
27	GMBY-YLPR-19-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
28	GMBY-YLPR-20-T	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
29	SWP3-YLPR-C-01	1-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
30	SWP3-YLPR-C-02	1-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
31	SWP3-YLPR-C-03	1-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
32	SWP3-YLPR-C-04	1-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
33	SWP3-YLPR-C-05	1-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
34	SWP3-YLPR-C-06	1-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
35	SWP3-YLPR-C-07	1-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
36	SWP3-YLPR-C-08	1-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
37	SWP3-YLPR-C-09	1-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
38	SWP3-YLPR-C-10	1-Jun-19	9:00	Tissue	1	1	1	1	1	1								Lab to Create Duplicat		
39	GMBY-YLPR-C-01	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
40	GMBY-YLPR-C-02	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
41	GMBY-YLPR-C-03	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
42	GMBY-YLPR-C-04	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
43	GMBY-YLPR-C-05	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
44	GMBY-YLPR-C-06	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
45	GMBY-YLPR-C-07	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
46	GMBY-YLPR-C-08	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
47	GMBY-YLPR-C-09	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
48	GMBY-YLPR-C-10	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								Lab to Create Duplicat		
49	GMBY-SPSH-C-01	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
50	GMBY-SPSH-C-02	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
51	GMBY-SPSH-C-03	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
52	GMBY-SPSH-C-04	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
53	GMBY-SPSH-C-05	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
54	GMBY-SPSH-C-06	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
55	GMBY-SPSH-C-07	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
56	GMBY-SPSH-C-08	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
57	GMBY-SPSH-C-09	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
58	GMBY-SPSH-C-10	3-Jun-19	9:00	Tissue	1	1	1	1	1	1								Lab to Create Duplicat		
59	KLSW-SPSH-C-01	4-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
60	KLSW-SPSH-C-02	4-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
61	KLSW-SPSH-C-03	4-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
62	KLSW-SPSH-C-04	4-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
63	KLSW-SPSH-C-05	4-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
64	KLSW-SPSH-C-06	4-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
65	KLSW-SPSH-C-07	4-Jun-19	9:00	Tissue	1	1	1	1	1	1								Lab to Create Duplicat		
66	KLSW-SPSH-C-08	4-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
67	KLSW-SPSH-C-09	4-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
68	KLCB-SPSH-C-01	6-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
69	KLCB-SPSH-C-02	6-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		

L2290068

70	KLCB-SPSH-C-03	6-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
71	KLCB-SPSH-C-04	6-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
72	KLCB-SPSH-C-05	6-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
73	KLCB-SPSH-C-06	6-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
74	KLCB-SPSH-C-07	6-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
75	KLCB-SPSH-C-08	8-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
76	KLCB-SPSH-C-09	8-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
77	KLBB-SPSH-C-01	7-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
78	KLBB-SPSH-C-02	7-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
79	KLBB-SPSH-C-03	7-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
80	KLBB-SPSH-C-04	7-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		
81	KLBB-SPSH-C-05	7-Jun-19	9:00	Tissue	1	1	1	1	1	1								0		

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System?
☐ YES ☐ NO

Are samples for human consumption/ use?
☐ YES ☐ NO

Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen ☐ SIF Observations Yes ☐ No ☐
Ice Packs ☐ Ice Cubes ☐ Custody seal intact Yes ☐ No ☐
Cooling Initiated ☐

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
-2.0							

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date: June 12/19	Time: 5pm	Received by:	Date:	Time:

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION WHITE - LABORATORY COPY YELLOW - CLIENT COPY JUNE 2015 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

Greenstone Gold Mines GP INC.
ATTN: Mike Johns
1-70 Southgate Drive
Guelph ON N1G 4P5

Date Received: 24-JUN-21
Report Date: 13-SEP-21 08:09 (MT)
Version: FINAL

Client Phone: 519-780-8145

Certificate of Analysis

Lab Work Order #: L2606251

Project P.O. #: 21-00200
Job Reference: 160961397
C of C Numbers:
Legal Site Desc:

<original signed by>

Christine Paradis
Project Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2606251-1 Fish Tissue 19-JUN-21 A3-01	L2606251-2 Fish Tissue 19-JUN-21 A3-02	L2606251-3 Fish Tissue 19-JUN-21 A3-03	L2606251-4 Fish Tissue 19-JUN-21 A3-04	L2606251-5 Fish Tissue 19-JUN-21 A3-05
TISSUE						
Physical Tests	% Moisture (%)	76.6	76.9	76.5	76.7	77.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	1.80	1.83	2.82	2.46	1.65
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.293	0.226	0.289	0.245	0.230
	Barium (Ba)-Total (mg/kg wwt)	0.608	0.622	0.518	0.461	0.441
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0023	0.0018	0.0015	0.0035	0.0016
	Calcium (Ca)-Total (mg/kg wwt)	12200	12600	11800	11600	13400
	Cesium (Cs)-Total (mg/kg wwt)	0.0119	0.0130	0.0108	0.0109	0.0102
	Chromium (Cr)-Total (mg/kg wwt)	0.035	0.030	0.023	0.026	0.098
	Cobalt (Co)-Total (mg/kg wwt)	0.0105	0.0098	0.0132	0.0139	0.0113
	Copper (Cu)-Total (mg/kg wwt)	0.564	0.515	0.598	0.516	0.540
	Iron (Fe)-Total (mg/kg wwt)	25.6	18.6	26.6	24.6	20.7
	Lead (Pb)-Total (mg/kg wwt)	0.0121	0.0081	0.0129	0.0100	0.0082
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	447	446	440	427	416
	Manganese (Mn)-Total (mg/kg wwt)	12.8	11.3	9.38	11.9	7.20
	Mercury (Hg)-Total (mg/kg wwt)	0.0756	0.0736	0.0688	0.0653	0.0656
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0179	0.0148	0.0191	0.0151	0.0171
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	0.057
	Phosphorus (P)-Total (mg/kg wwt)	8130	8190	8170	7750	8100
	Potassium (K)-Total (mg/kg wwt)	3470	3460	3790	3310	3250
	Rubidium (Rb)-Total (mg/kg wwt)	10.1	10.7	9.80	9.65	8.88
	Selenium (Se)-Total (mg/kg wwt)	0.212	0.192	0.194	0.173	0.172
	Sodium (Na)-Total (mg/kg wwt)	919	909	930	812	825
	Strontium (Sr)-Total (mg/kg wwt)	3.23	3.48	3.08	2.87	3.74
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00470	0.00439	0.00331	0.00316	0.00349
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00065	0.00072	0.00099	0.00095	0.00087
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	27.8	24.4	24.0	24.0	22.8
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0859	0.0734	0.0721	0.0804	0.0682
Aggregate Organics	Lipid Content (% wwt)	1.9	1.8	2.1	2.2	1.9

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2606251-6 Fish Tissue 19-JUN-21 A3-06	L2606251-7 Fish Tissue 19-JUN-21 A3-07	L2606251-8 Fish Tissue 19-JUN-21 A3-07 DUP	L2606251-9 Fish Tissue 16-JUN-21 A5-01	L2606251-10 Fish Tissue 16-JUN-21 A5-02
TISSUE						
Physical Tests	% Moisture (%)	75.4	77.1	77.0	78.2	77.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	1.67	2.24	1.99	1.91	1.76
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.249	0.341	0.340	0.433	0.377
	Barium (Ba)-Total (mg/kg wwt)	0.404	0.357	0.420	0.658	0.788
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0014	0.0020	0.0017	0.0066	0.0072
	Calcium (Ca)-Total (mg/kg wwt)	12800	10000	12900	12100	15600
	Cesium (Cs)-Total (mg/kg wwt)	0.0093	0.0092	0.0095	0.0240	0.0224
	Chromium (Cr)-Total (mg/kg wwt)	0.024	0.042	0.022	0.032	0.018
	Cobalt (Co)-Total (mg/kg wwt)	0.0099	0.0118	0.0104	0.0099	0.0089
	Copper (Cu)-Total (mg/kg wwt)	0.579	0.519	0.545	0.474	0.511
	Iron (Fe)-Total (mg/kg wwt)	20.5	25.0	24.9	16.6	16.5
	Lead (Pb)-Total (mg/kg wwt)	0.0099	0.0100	0.0085	0.0115	0.0197
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	420	391	441	433	471
	Manganese (Mn)-Total (mg/kg wwt)	6.20	8.05	8.97	6.93	9.85
	Mercury (Hg)-Total (mg/kg wwt)	0.0599	0.0587	0.0588	0.0577	0.0506
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0194	0.0173	0.0180	0.0165	0.0167
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	7880	6950	8230	8070	9540
	Potassium (K)-Total (mg/kg wwt)	3380	3470	3550	3320	3430
	Rubidium (Rb)-Total (mg/kg wwt)	9.74	8.98	9.21	11.1	11.4
	Selenium (Se)-Total (mg/kg wwt)	0.157	0.178	0.171	0.213	0.215
	Sodium (Na)-Total (mg/kg wwt)	852	855	913	1090	1130
	Strontium (Sr)-Total (mg/kg wwt)	3.58	2.57	3.20	2.44	2.77
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00299	0.00281	0.00312	0.00579	0.00581
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00091	0.00080	0.00078	0.00116	0.00118
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	21.2	19.7	22.1	25.0	26.4
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0745	0.0678	0.0693	0.0695	0.0556
Aggregate Organics	Lipid Content (% wwt)	2.6	2.2	2.2	1.5	1.5

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2606251-11 Fish Tissue 16-JUN-21 A5-03	L2606251-12 Fish Tissue 16-JUN-21 A5-04	L2606251-13 Fish Tissue 16-JUN-21 A5-05	L2606251-14 Fish Tissue 16-JUN-21 A5-06	L2606251-15 Fish Tissue 16-JUN-21 A5-07
TISSUE						
Physical Tests	% Moisture (%)	77.8	78.8	76.7	77.5	76.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	1.72	1.58	1.91	1.75	2.12
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.518	0.431	0.575	0.580	0.638
	Barium (Ba)-Total (mg/kg wwt)	0.599	0.575	0.410	0.536	0.429
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0045	0.0063	0.0058	0.0035	0.0040
	Calcium (Ca)-Total (mg/kg wwt)	12500	13200	12400	13400	13400
	Cesium (Cs)-Total (mg/kg wwt)	0.0236	0.0252	0.0277	0.0246	0.0285
	Chromium (Cr)-Total (mg/kg wwt)	0.016	0.015	0.019	0.057	0.034
	Cobalt (Co)-Total (mg/kg wwt)	0.0075	0.0095	0.0100	0.0081	0.0091
	Copper (Cu)-Total (mg/kg wwt)	0.483	0.521	0.589	0.456	0.555
	Iron (Fe)-Total (mg/kg wwt)	14.3	16.2	14.2	12.5	15.3
	Lead (Pb)-Total (mg/kg wwt)	0.0097	0.0119	0.0204	0.0080	0.0140
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	420	444	407	440	408
	Manganese (Mn)-Total (mg/kg wwt)	8.20	9.01	8.09	8.66	8.60
	Mercury (Hg)-Total (mg/kg wwt)	0.0519	0.0501	0.0433	0.0469	0.0411
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0193	0.0187	0.0237	0.0192	0.0222
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	8200	8400	8130	8470	8100
	Potassium (K)-Total (mg/kg wwt)	3360	3330	3430	3250	3400
	Rubidium (Rb)-Total (mg/kg wwt)	12.2	11.8	15.6	12.5	15.9
	Selenium (Se)-Total (mg/kg wwt)	0.184	0.188	0.152	0.161	0.162
	Sodium (Na)-Total (mg/kg wwt)	1100	1060	1110	1040	1060
	Strontium (Sr)-Total (mg/kg wwt)	2.77	2.81	2.95	3.00	3.02
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00589	0.00617	0.00696	0.00649	0.00697
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00075	0.00084	0.00085	0.00064	0.00076
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	23.4	23.7	21.5	21.0	22.2
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	0.089
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0556	0.0550	0.0543	0.0546	0.0446
Aggregate Organics	Lipid Content (% wwt)	1.5	1.6	2.5	1.8	2.6

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L2606251-16	L2606251-17	L2606251-18	L2606251-19	L2606251-20
Description	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue
Sampled Date	16-JUN-21	20-JUN-21	16-JUN-21	16-JUN-21	16-JUN-21
Sampled Time					
Client ID	A5-07 DUP	A1B-01	A1B-02	A1B-03	A1B-04
Grouping / **Analyte**					
TISSUE					
Physical Tests / % Moisture (%)	76.1	76.8	76.9	76.1	75.7
Metals / Aluminum (Al)-Total (mg/kg wwt)	2.44	2.06	1.51	2.89	1.56
Antimony (Sb)-Total (mg/kg wwt)	<0.0020	0.0025	<0.0020	<0.0020	<0.0020
Arsenic (As)-Total (mg/kg wwt)	0.582	0.0904	0.0672	0.0660	0.0520
Barium (Ba)-Total (mg/kg wwt)	0.356	0.795	0.690	0.835	0.829
Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
Cadmium (Cd)-Total (mg/kg wwt)	0.0044	0.0068	0.0057	0.0065	0.0064
Calcium (Ca)-Total (mg/kg wwt)	12500	11100	10300	11800	11900
Cesium (Cs)-Total (mg/kg wwt)	0.0291	0.0372	0.0402	0.0465	0.0365
Chromium (Cr)-Total (mg/kg wwt)	0.015	0.104	0.032	0.032	0.056
Cobalt (Co)-Total (mg/kg wwt)	0.0087	0.0078	0.0070	0.0089	0.0055
Copper (Cu)-Total (mg/kg wwt)	0.573	0.663	0.604	0.636	0.619
Iron (Fe)-Total (mg/kg wwt)	14.4	13.5	12.0	15.0	11.6
Lead (Pb)-Total (mg/kg wwt)	0.0127	0.0052	0.0046	0.0058	0.0047
Lithium (Li)-Total (mg/kg wwt)	<0.10	0.10	<0.10	0.13	0.11
Magnesium (Mg)-Total (mg/kg wwt)	385	392	370	395	386
Manganese (Mn)-Total (mg/kg wwt)	7.94	4.06	3.94	4.56	5.77
Mercury (Hg)-Total (mg/kg wwt)	0.0432	0.0468	0.0432	0.0390	0.0354
Molybdenum (Mo)-Total (mg/kg wwt)	0.0195	0.0261	0.0240	0.0254	0.0270
Nickel (Ni)-Total (mg/kg wwt)	<0.040	0.050	<0.040	<0.040	<0.040
Phosphorus (P)-Total (mg/kg wwt)	7480	7430	6810	7730	7770
Potassium (K)-Total (mg/kg wwt)	3460	3490	3610	3550	3460
Rubidium (Rb)-Total (mg/kg wwt)	16.0	9.28	9.51	9.49	9.05
Selenium (Se)-Total (mg/kg wwt)	0.160	0.189	0.185	0.169	0.158
Sodium (Na)-Total (mg/kg wwt)	1050	969	990	1040	964
Strontium (Sr)-Total (mg/kg wwt)	2.78	2.42	2.24	2.46	2.39
Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
Thallium (Tl)-Total (mg/kg wwt)	0.00698	0.00565	0.00541	0.00566	0.00532
Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
Uranium (U)-Total (mg/kg wwt)	0.00093	0.00131	0.00094	0.00203	0.00127
Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
Zinc (Zn)-Total (mg/kg wwt)	20.1	23.3	21.8	20.9	20.8
Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals / Methylmercury (as MeHg) (mg/kg wwt)	0.0467	0.0500	0.0325	0.0347	0.0357
Aggregate Organics / Lipid Content (% wwt)	2.5	2.2	2.0	2.4	3.4

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L2606251-21	L2606251-22	L2606251-23	L2606251-24	
Description	Fish Tissue	Fish Tissue	Fish Tissue	Fish Tissue	
Sampled Date	16-JUN-21	16-JUN-21	16-JUN-21	16-JUN-21	
Sampled Time					
Client ID	A1B-05	A1B-06	A1B-07	A1B-07 DUP	
Grouping	**Analyte**				
TISSUE					
Physical Tests	% Moisture (%)	76.5	77.2	76.6	77.0	
Metals	Aluminum (Al)-Total (mg/kg wwt)	1.22	3.07	3.63	3.21	
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	0.0025	<0.0020	
	Arsenic (As)-Total (mg/kg wwt)	0.0524	0.0779	0.0711	0.0719	
	Barium (Ba)-Total (mg/kg wwt)	0.778	0.707	0.929	0.980	
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	
	Cadmium (Cd)-Total (mg/kg wwt)	0.0042	0.0085	0.0068	0.0059	
	Calcium (Ca)-Total (mg/kg wwt)	10100	11000	11200	11500	
	Cesium (Cs)-Total (mg/kg wwt)	0.0386	0.0485	0.0535	0.0542	
	Chromium (Cr)-Total (mg/kg wwt)	0.023	0.047	0.030	0.094	
	Cobalt (Co)-Total (mg/kg wwt)	0.0054	0.0101	0.0090	0.0097	
	Copper (Cu)-Total (mg/kg wwt)	0.585	0.720	0.788	0.741	
	Iron (Fe)-Total (mg/kg wwt)	10.0	13.7	14.7	13.6	
	Lead (Pb)-Total (mg/kg wwt)	0.0049	0.0061	0.0068	0.0078	
	Lithium (Li)-Total (mg/kg wwt)	<0.10	0.11	0.11	0.11	
	Magnesium (Mg)-Total (mg/kg wwt)	322	381	369	372	
	Manganese (Mn)-Total (mg/kg wwt)	3.43	4.11	4.35	3.88	
	Mercury (Hg)-Total (mg/kg wwt)	0.0362	0.0436	0.0327	0.0350	
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0253	0.0321	0.0304	0.0315	
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	0.052	
	Phosphorus (P)-Total (mg/kg wwt)	6430	7340	7090	7390	
	Potassium (K)-Total (mg/kg wwt)	2980	3620	3460	3460	
	Rubidium (Rb)-Total (mg/kg wwt)	7.72	9.86	9.47	9.49	
	Selenium (Se)-Total (mg/kg wwt)	0.138	0.176	0.168	0.165	
	Sodium (Na)-Total (mg/kg wwt)	835	1030	964	993	
	Strontium (Sr)-Total (mg/kg wwt)	2.17	2.60	3.03	3.33	
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	
	Thallium (Tl)-Total (mg/kg wwt)	0.00436	0.00562	0.00574	0.00596	
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	
	Uranium (U)-Total (mg/kg wwt)	0.00113	0.00204	0.00177	0.00152	
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	
	Zinc (Zn)-Total (mg/kg wwt)	16.9	20.6	18.6	19.5	
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	0.073	<0.040	
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0346	0.0415	0.0305	0.0326	
Aggregate Organics	Lipid Content (% wwt)	3.2	2.8	3.3	2.9	

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-WET-CVAFS-N-VA	Tissue	Mercury in Tissue by CVAAS (WET)	EPA 200.3, EPA 245.7

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Analysis is by atomic fluorescence spectrophotometry or atomic absorption spectrophotometry, adapted from US EPA Method 245.7.

LIPIDS-GRAV-VA	Tissue	Lipids in Tissue by Gravimetric	EPA 3570, 8290A

A portion of homogenized sample is extracted with dichloromethane. The extract is evaporated to dryness and the lipid content determined gravimetrically.

MEHG-WET-MIC-GCAF-VA	Tissue	Methylmercury in Tissue by GCAFS (Wet)	Liang et al. (1994)

This method follows the procedures published by Liang, Bloom and Horvat in Clinical Chemistry (Vol 40, No 4, 1994). Samples are homogenized and then digested in a methanolic potassium hydroxide solution. An aliquot of the digestate is analyzed by aqueous phase ethylation, purge and trap, desorption and GC separation. The separated species are then pyrolized to elemental Hg and quantified by cold vapour atomic fluorescence spectroscopy. Results are reported "as MeHg".

MET-WET-CCMS-N-VA	Tissue	Metals in Tissue by CRC ICPMS (WET)	EPA 200.3/6020A

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).

Method Limitation: This method employs a strong acid/peroxide digestion, and is intended to provide a conservative estimate of bio-available metals. Near complete recoveries are achieved for most toxicologically important metals, but elements associated with recalcitrant minerals may be only partially recovered.

MOISTURE-TISS-VA	Tissue	% Moisture in Tissues	Puget Sound WQ Authority, Apr 1997

This analysis is carried out gravimetrically by drying the sample at 105 C for a minimum of six hours.

** 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
VA	ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour 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.
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-adjusted weight of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

Chain of Custody (COC) / Analytical Request Form

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

L2606251-COFC

COC Number: 17 - 9

Page 1 of 2

Report To	Contact and company name below will appear on the final report
Company:	Greenstone Gold Mines
Contact:	Mike Johns
Phone:	(514) 980-8145
	Company address below will appear on the final report
Street:	6 Twilight Bay
City/Province:	Geraldton, ON
Postal Code:	P0T 1M0
Invoice To	Same as Report To ☑ YES ☐ NO
	Copy of Invoice with Report ☑ YES ☐ NO
Company:	
Contact:	

Report Format / Distribution

Select Report Format: ☐ PDF ☑ EXCEL ☑ EDD (DIGITAL)

Quality Control (QC) Report with Report ☐ YES ☐ NO

☐ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1: environmental@ggmines.com

Email 2: Mike.Johns@Stantec.com

Email 3:

Invoice Distribution

Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1: ap@ggmines.com

Email 2: environmental@ggmines.com

Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)

Regular [R] ☑ Standard TAT if received by 3 pm - business days - no surcharges apply

Priority (Business Days)		Emergency	
	4 day [P4-20%] ☐		1 Business day [E - 100%] ☐
	3 day [P3-25%] ☐		Same Day, Weekend or Statutory holiday [E2 -200% (Laboratory opening fees may apply)] ☐
	2 day [P2-50%] ☐		

Date and Time Required for all E&P TATs:

For tests that can not be performed according to the service level selected, you will be contacted.

Project Information

ALS Account # / Quote #: 202185

Job #: 160961397

PO / AFE: *contact* Mike Johns *

LSD:

Oil and Gas Required Fields (client use)

AFE/Cost Center: | PO#:

Major/Minor Code: | Routing Code:

Requisitioner:

Location:

ALS Lab Work Order # (lab use only): L2606251

ALS Contact: Christine Perabis | Sampler: N. Burnett

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	Mercury in tissue by CVAAS (WET)	Lipids in tissue by gravimetric	Methylmercury in tissue by CVAFS (WET)	Metals in tissue by CRC ICPMS (WET)	Moisture in Tissue	Lab Duplicate *	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
	A3-01	19-Jun-21	—	fish tissue	1	X	X	X	X	X			
	A3-02		—		1								
	A3-03		—		1								
	A3-04		—		1								
	A3-05		—		1								
	A3-06		—		1								
	A3-07*		—		1								
	A5-01	16-Jun-21	—		1						X		
	A5-02		—		1								
	A5-03		—		1								
	A5-04		—		1								
	A5-05		—		1								

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☐ NO

Are samples for human consumption/ use? ☐ YES ☐ NO

Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)

As per communication with Mike Johns - email. Some methods and detection limits as Lab report - L2290068 from 2019. * Please run also duplicate sample on these as well.

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen ☐ | SIF Observations Yes ☐ No ☐

Ice Packs ☑ Ice Cubes ☐ | Custody seal intact Yes ☐ No ☐

Cooling Initiated ☑

INITIAL COOLER TEMPERATURES °C	FINAL COOLER TEMPERATURES °C
10.0	

SHIPMENT RELEASE (client use)		
Released by:	Date:	Time:

INITIAL SHIPMENT RECEPTION (lab use only)		
Received by: CB	Date: 06-24-21	Time: 3:00

FINAL SHIPMENT RECEPTION (lab use only)		
Received by:	Date:	Time:

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

NOV 2018 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

* Keep Frozen! *

Chain of Custody (COC) / Analytical Request Form

L2606251-COFC

COC Number: 17 - 4

Page 2 of 2

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Report To	Contact and company name below will appear on the final report
Company:	Greenstone Gold Mines
Contact:	Mike Johns
Phone:	(SM) 980-8145
	Company address below will appear on the final report
Street:	6 Twilight Bay
City/Province:	Geraldton, ON
Postal Code:	P0T 1M0
Invoice To	Same as Report To ☑ YES ☐ NO
	Copy of Invoice with Report ☑ YES ☐ NO
Company:	
Contact:	

Report Format / Distribution	
Select Report Format:	☐ PDF ☑ EXCEL ☑ EDD (DIGITAL)
Quality Control (QC) Report with Report	☐ YES ☐ NO
☐ Compare Results to Criteria on Report - provide details below if box checked	
Select Distribution:	☑ EMAIL ☐ MAIL ☐ FAX
Email 1	environmental@ggmines.com
Email 2	Mike.Johns@Stantec.com
Email 3	

Invoice Distribution	
Select Invoice Distribution:	☑ EMAIL ☐ MAIL ☐ FAX
Email 1	ap@ggmines.com
Email 2	environmental@ggmines.com

Oil and Gas Required Fields (client use)	
AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

Project Information	
ALS Account # / Quote #:	202885
Job #:	160961397
PO / AFE:	
LSD:	
ALS Lab Work Order # (lab use only):	
ALS Contact:	Christine Peradon
Sampler:	N. Burnett

Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)

Regular [R] ☑ Standard TAT if received by 3 pm - business days - no surcharges apply

PRIORITY (Business Days): 4 day [P4-20%] ☐ | 3 day [P3-25%] ☐ | 2 day [P2-50%] ☐

EMERGENCY: 1 Business day [E - 100%] ☐ | Same Day, Weekend or Statutory holiday [E2 -200% (Laboratory opening fees may apply)] ☐

Date and Time Required for all E&P TATs:

For tests that can not be performed according to the service level selected, you will be contacted.

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	Mercury in tissue by CVAFS (WET)	Lipids in tissue by Gravimetric	Methyl mercury in tissue by CVAFS (WET)	Metals in tissue by CRC ICPMS (WET)	Moisture in tissue	Lab Duplicate*	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
	A5-06	16-Jun-21	—	fish tissue	1	X	X	X	X	X			
	A5-07*	↓	—		1						X		
	A1B-01	20-Jun-21	—		1								
	A1B-02		—		1								
	A1B-03		—		1								
	A1B-04		—		1								
	A1B-05		—		1								
	A1B-06		—		1								
	A1B-07*		—	↓	1	↓	↓	↓	↓	↓	X		

Drinking Water (DW) Samples[1] (client use)	Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)
Are samples taken from a Regulated DW System? ☐ YES ☐ NO	As per communication with Mike Johns - email. Some methods and detection limits as Lab report - L2290068 from 2019. *Please run a lab duplicate on these samples as well
Are samples for human consumption/ use? ☐ YES ☐ NO	

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen	☐	SIF Observations	Yes ☐	No	☐
Ice Packs	☑ Ice Cubes ☐	Custody seal intact	Yes ☐	No	☐
Cooling Initiated	☑				

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
10.0							

SHIPMENT RELEASE (client use)		
Released by:	Date:	Time:

INITIAL SHIPMENT RECEPTION (lab use only)		
Received by: CB	Date: 06-21-21	Time: 3:00

FINAL SHIPMENT RECEPTION (lab use only)		
Received by:	Date:	Time:

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY — YELLOW - CLIENT COPY

NOV 2018 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

Your Project #: 160901057
Site Location: GGM - GERALDTON
Your C.O.C. #: n/a

Attention: Mike Johns

Stantec Consulting Ltd
300 Hagey Blvd
Suite 100
Waterloo, ON
CANADA N2L 0A4

Report Date: 2023/10/03
Report #: R7842948
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3L7246
Received: 2023/07/21, 08:42

Sample Matrix: Tissue
Samples Received: 62

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury in Tissue by CVAF - Wet Wt (1)	56	N/A	2023/08/28		
Mercury in Tissue by CVAF - Wet Wt (1)	6	N/A	2023/09/12		
Methyl Mercury in Tissue by GC - Wet Wt (1)	15	2023/08/31	2023/09/13		
Methyl Mercury in Tissue by GC - Wet Wt (1)	15	2023/09/07	2023/09/14		
Methyl Mercury in Tissue by GC - Wet Wt (1)	16	2023/09/08	2023/09/12		
Methyl Mercury in Tissue by GC - Wet Wt (1)	16	2023/09/08	2023/09/13		
Elements by ICPMS - Tissue Plug Wet Wt (1)	40	2023/08/23	2023/08/27	BBY WI-00033	Auto calc
Elements by ICPMS - Tissue Plug Wet Wt (1)	16	2023/08/23	2023/08/28	BBY WI-00033	Auto calc
Elements by ICPMS - Tissue Plug Wet Wt (1)	6	2023/09/09	2023/09/12	BBY WI-00033	Auto calc
Moisture in Tissue-Freeze Drying (1, 2)	34	2023/08/23	2023/08/24	BBY7SOP-00021	BCMOE BCLM Aug 2014
Moisture in Tissue-Freeze Drying (1, 2)	3	2023/08/23	2023/08/25	BBY7SOP-00021	BCMOE BCLM Aug 2014
Moisture in Tissue-Freeze Drying (1, 2)	1	2023/08/23	2023/08/26	BBY7SOP-00021	BCMOE BCLM Aug 2014
Moisture in Tissue-Freeze Drying (1, 2)	18	2023/08/25	2023/08/25	BBY7SOP-00021	BCMOE BCLM Aug 2014
Moisture in Tissue-Freeze Drying (1, 2)	5	2023/09/07	2023/09/08	BBY7SOP-00021	BCMOE BCLM Aug 2014
Moisture in Tissue-Freeze Drying (1, 2)	1	2023/09/07	2023/09/09	BBY7SOP-00021	BCMOE BCLM Aug 2014
Percent Lipid Content	20	2023/09/22	2023/09/22		In House
Percent Lipid Content	20	2023/09/24	2023/09/26		In House
Percent Lipid Content	18	2023/09/25	2023/09/27		In House

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report.

Your Project #: 160901057
Site Location: GGM - GERALDTON
Your C.O.C. #: n/a

Attention: Mike Johns

Stantec Consulting Ltd
300 Hagey Blvd
Suite 100
Waterloo, ON
CANADA N2L 0A4

Report Date: 2023/10/03
Report #: R7842948
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3L7246

Received: 2023/07/21, 08:42

Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Burnaby, 4606 Canada Way , Burnaby, BC, V5G 1K5

(2) Offsite analysis requires that subcontracted moisture be reported.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Julie Clement, Technical Account Manager
Email: Julie.CLEMENT@bureauveritas.com
Phone# (613)868-6079

==========

This report has been generated and distributed using a secure automated process.

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM912	WLM913	WLM914	WLM915	WLM916	WLM917		
Sampling Date		2023/06/07	2023/06/07	2023/06/07	2023/06/07	2023/06/07	2023/06/07		
COC Number		n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	A5-YLPR-01	A5-YLPR-02	A5-YLPR-04	A5-YLPR-05	A5-YLPR-06	A5-YLPR-07	RDL	QC Batch
Metals									
Total (Wet Wt) Aluminum (Al)	mg/kg	1.23	4.11	6.09	3.70	1.14	1.74	0.50	8926419
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0020	<0.0020	0.0042	0.0025	<0.0020	<0.0020	0.0020	8926419
Total (Wet Wt) Arsenic (As)	mg/kg	0.191	0.201	0.214	0.190	0.163	0.284	0.0050	8926419
Total (Wet Wt) Barium (Ba)	mg/kg	0.277	0.965	0.236	0.501	0.714	1.01	0.010	8926419
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	8926419
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0013	8926419
Total (Wet Wt) Boron (B)	mg/kg	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	8926419
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0042	0.0123	0.0068	0.0088	0.0071	0.0081	0.0013	8926419
Total (Wet Wt) Calcium (Ca)	mg/kg	5080	15000	1560	8190	17500	20400	4.0	8926419
Total (Wet Wt) Chromium (Cr)	mg/kg	0.027	0.064	0.068	0.057	0.032	0.045	0.025	8926419
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0088	0.0106	0.0104	0.0106	0.0095	0.0088	0.0013	8926419
Total (Wet Wt) Copper (Cu)	mg/kg	0.362	0.485	0.444	0.531	0.373	0.735	0.013	8926419
Total (Wet Wt) Iron (Fe)	mg/kg	9.69	24.8	23.7	18.8	13.4	16.8	0.25	8926419
Total (Wet Wt) Lead (Pb)	mg/kg	0.0109	0.0157	0.0130	0.0120	0.0121	0.0173	0.0013	8926419
Total (Wet Wt) Magnesium (Mg)	mg/kg	283	478	221	312	466	471	0.40	8926419
Total (Wet Wt) Manganese (Mn)	mg/kg	1.76	6.14	2.14	3.46	4.08	5.29	0.010	8926419
Total (Wet Wt) Molybdenum (Mo)	mg/kg	0.0118	0.0172	0.0091	0.0241	0.0150	0.0238	0.0080	8926419
Total (Wet Wt) Nickel (Ni)	mg/kg	0.018	0.044	0.037	0.033	0.030	0.042	0.010	8926419
Total (Wet Wt) Phosphorus (P)	mg/kg	4280	9620	2360	5840	10600	11500	2.0	8926419
Total (Wet Wt) Potassium (K)	mg/kg	3120	3240	3260	3090	3090	2980	2.5	8926419
Total (Wet Wt) Selenium (Se)	mg/kg	0.221	0.289	0.226	0.210	0.213	0.249	0.010	8926419
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0013	8926419
Total (Wet Wt) Sodium (Na)	mg/kg	864	867	815	871	924	890	2.5	8926419
Total (Wet Wt) Strontium (Sr)	mg/kg	0.855	3.04	0.387	1.50	3.41	3.88	0.013	8926419
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00362	0.00503	0.00360	0.00418	0.00641	0.00570	0.00040	8926419
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8926419
Total (Wet Wt) Titanium (Ti)	mg/kg	0.17	0.50	0.37	0.33	0.37	0.39	0.13	8926419
Total (Wet Wt) Uranium (U)	mg/kg	0.00077	0.00195	0.00167	0.00120	0.00135	0.00261	0.00040	8926419
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.021	0.020	8926419
Total (Wet Wt) Zinc (Zn)	mg/kg	19.8	26.2	14.4	20.7	23.2	31.4	0.20	8926419
Mercury (Hg)	mg/kg	0.0755	0.0556	0.0696	0.0636	0.0705	0.0530	0.0010	8926417

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM912	WLM913	WLM914	WLM915	WLM916	WLM917		
Sampling Date		2023/06/07	2023/06/07	2023/06/07	2023/06/07	2023/06/07	2023/06/07		
COC Number		n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	A5-YLPR-01	A5-YLPR-02	A5-YLPR-04	A5-YLPR-05	A5-YLPR-06	A5-YLPR-07	RDL	QC Batch
Miscellaneous Parameters									
Fat (gravimetric)	%	0.90	0.70	1.2	0.90	0.40	0.80	N/A	8933772
PHYSICAL PROPERTIES									
Moisture-Subcontracted	%	81	76	81	79	79	77	0.30	8926420

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM918	WLM919	WLM920	WLM921	WLM922	WLM923		
Sampling Date		2023/06/07	2023/06/11	2023/06/11	2023/06/11	2023/06/11	2023/06/11		
COC Number		n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	A5-YLPR-10	A1B-YLPR-01	A1B-YLPR-02	A1B-YLPR-03	A1B-YLPR-05	A1B-YLPR-06	RDL	QC Batch
Metals									
Total (Wet Wt) Aluminum (Al)	mg/kg	8.74	2.86	0.55	1.33	3.59	8.92	0.50	8926419
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	8926419
Total (Wet Wt) Arsenic (As)	mg/kg	0.195	0.0386	0.0399	0.0344	0.0469	0.0533	0.0050	8926419
Total (Wet Wt) Barium (Ba)	mg/kg	0.486	0.508	0.238	0.706	1.36	2.09	0.010	8926419
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	8926419
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0013	8926419
Total (Wet Wt) Boron (B)	mg/kg	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	8926419
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0067	0.0220	0.0045	0.0055	0.0173	0.0208	0.0013	8926419
Total (Wet Wt) Calcium (Ca)	mg/kg	5320	11500	3920	6360	11800	10800	4.0	8926419
Total (Wet Wt) Chromium (Cr)	mg/kg	0.039	0.042	0.028	0.030	0.035	0.048	0.025	8926419
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0130	0.0084	0.0068	0.0070	0.0084	0.0110	0.0013	8926419
Total (Wet Wt) Copper (Cu)	mg/kg	0.427	0.582	0.408	0.454	0.615	0.661	0.013	8926419
Total (Wet Wt) Iron (Fe)	mg/kg	35.6	17.4	5.55	7.98	22.0	42.3	0.25	8926419
Total (Wet Wt) Lead (Pb)	mg/kg	0.0164	0.0181	0.0052	0.0079	0.0132	0.0166	0.0013	8926419
Total (Wet Wt) Magnesium (Mg)	mg/kg	279	379	240	213	372	369	0.40	8926419
Total (Wet Wt) Manganese (Mn)	mg/kg	4.28	8.26	3.30	3.63	7.49	8.73	0.010	8926419
Total (Wet Wt) Molybdenum (Mo)	mg/kg	0.0138	0.0247	0.0160	0.0152	0.0218	0.0300	0.0080	8926419
Total (Wet Wt) Nickel (Ni)	mg/kg	0.028	0.037	0.023	0.031	0.033	0.040	0.010	8926419
Total (Wet Wt) Phosphorus (P)	mg/kg	4190	8010	3860	4090	7360	7310	2.0	8926419
Total (Wet Wt) Potassium (K)	mg/kg	3210	3360	3440	3150	3140	3120	2.5	8926419
Total (Wet Wt) Selenium (Se)	mg/kg	0.215	0.179	0.148	0.160	0.199	0.187	0.010	8926419
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0015	0.0013	8926419
Total (Wet Wt) Sodium (Na)	mg/kg	795	928	907	920	909	858	2.5	8926419
Total (Wet Wt) Strontium (Sr)	mg/kg	0.925	1.79	0.775	1.62	2.46	3.32	0.013	8926419
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00407	0.00482	0.00536	0.00298	0.00544	0.00547	0.00040	8926419
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8926419
Total (Wet Wt) Titanium (Ti)	mg/kg	0.55	0.39	<0.13	0.21	0.42	1.44	0.13	8926419
Total (Wet Wt) Uranium (U)	mg/kg	0.00165	0.00278	<0.00040	0.00052	0.00100	0.00182	0.00040	8926419
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.027	0.020	8926419
Total (Wet Wt) Zinc (Zn)	mg/kg	17.8	20.3	11.3	13.0	21.5	22.6	0.20	8926419
Mercury (Hg)	mg/kg	0.0553	0.0311	0.0431	0.0313	0.0290	0.0223	0.0010	8926417

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM918	WLM919	WLM920	WLM921	WLM922	WLM923		
Sampling Date		2023/06/07	2023/06/11	2023/06/11	2023/06/11	2023/06/11	2023/06/11		
COC Number		n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	A5-YLPR-10	A1B-YLPR-01	A1B-YLPR-02	A1B-YLPR-03	A1B-YLPR-05	A1B-YLPR-06	RDL	QC Batch
Miscellaneous Parameters									
Fat (gravimetric)	%	1.0	0.80	1.9	0.80	0.70	0.40	N/A	8933772
PHYSICAL PROPERTIES									
Moisture-Subcontracted	%	81	76	78	80	79	79	0.30	8926420

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM924	WLM925		WLM926		WLM927		
Sampling Date		2023/06/11	2023/06/11		2023/06/13		2023/06/13		
COC Number		n/a	n/a		n/a		n/a		
	UNITS	A1B-YLPR-07	A1B-YLPR-08	QC Batch	SMLK-YLPR-01	QC Batch	SMLK-YLPR-02	RDL	QC Batch
Metals									
Total (Wet Wt) Aluminum (Al)	mg/kg	3.15	6.29	8926419	1.90	8926419	1.03	0.50	8926419
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0020	<0.0020	8926419	<0.0020	8926419	<0.0020	0.0020	8926419
Total (Wet Wt) Arsenic (As)	mg/kg	0.0532	0.0440	8926419	0.0832	8926419	0.0801	0.0050	8926419
Total (Wet Wt) Barium (Ba)	mg/kg	0.714	2.42	8926419	0.878	8926419	0.404	0.010	8926419
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0020	<0.0020	8926419	<0.0020	8926419	<0.0020	0.0020	8926419
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0013	<0.0013	8926419	<0.0013	8926419	<0.0013	0.0013	8926419
Total (Wet Wt) Boron (B)	mg/kg	<0.20	<0.20	8926419	<0.20	8926419	<0.20	0.20	8926419
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0111	0.0076	8926419	0.0080	8926419	0.0067	0.0013	8926419
Total (Wet Wt) Calcium (Ca)	mg/kg	11600	11400	8926419	9010	8926419	4890	4.0	8926419
Total (Wet Wt) Chromium (Cr)	mg/kg	0.049	0.041	8926419	0.041	8926419	0.036	0.025	8926419
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0085	0.0100	8926419	0.0089	8926419	0.0074	0.0013	8926419
Total (Wet Wt) Copper (Cu)	mg/kg	0.534	0.606	8926419	0.591	8926419	0.433	0.013	8926419
Total (Wet Wt) Iron (Fe)	mg/kg	13.5	22.8	8926419	18.5	8926419	8.75	0.25	8926419
Total (Wet Wt) Lead (Pb)	mg/kg	0.0086	0.0134	8926419	0.0071	8926419	0.0089	0.0013	8926419
Total (Wet Wt) Magnesium (Mg)	mg/kg	317	363	8926419	301	8926419	265	0.40	8926419
Total (Wet Wt) Manganese (Mn)	mg/kg	5.76	10.9	8926419	5.61	8926419	2.50	0.010	8926419
Total (Wet Wt) Molybdenum (Mo)	mg/kg	0.0222	0.0381	8926419	0.0122	8926419	0.0093	0.0080	8926419
Total (Wet Wt) Nickel (Ni)	mg/kg	0.040	0.024	8926419	0.028	8926419	0.023	0.010	8926419
Total (Wet Wt) Phosphorus (P)	mg/kg	7350	7020	8926419	6240	8926419	4480	2.0	8926419
Total (Wet Wt) Potassium (K)	mg/kg	3060	3150	8926419	3220	8926419	3220	2.5	8926419
Total (Wet Wt) Selenium (Se)	mg/kg	0.159	0.168	8926419	0.195	8926419	0.196	0.010	8926419
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0013	<0.0013	8926419	<0.0013	8926419	<0.0013	0.0013	8926419
Total (Wet Wt) Sodium (Na)	mg/kg	907	963	8926419	833	8926419	816	2.5	8926419
Total (Wet Wt) Strontium (Sr)	mg/kg	2.08	3.58	8926419	1.38	8926419	0.675	0.013	8926419
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00416	0.00566	8926419	0.00476	8926419	0.00623	0.00040	8926419
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	<0.020	8926419	<0.020	8926419	<0.020	0.020	8926419
Total (Wet Wt) Titanium (Ti)	mg/kg	0.48	0.71	8926419	0.30	8926419	0.18	0.13	8926419
Total (Wet Wt) Uranium (U)	mg/kg	0.00116	0.00085	8926419	0.00052	8926419	0.00043	0.00040	8926419
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	0.021	8926419	<0.020	8926419	<0.020	0.020	8926419
Total (Wet Wt) Zinc (Zn)	mg/kg	17.6	19.6	8926419	21.4	8926419	17.1	0.20	8926419
Mercury (Hg)	mg/kg	0.0268	0.0174	8926417	0.0687	8926417	0.0420	0.0010	8926417

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM924	WLM925		WLM926		WLM927		
Sampling Date		2023/06/11	2023/06/11		2023/06/13		2023/06/13		
COC Number		n/a	n/a		n/a		n/a		
	UNITS	A1B-YLPR-07	A1B-YLPR-08	QC Batch	SMLK-YLPR-01	QC Batch	SMLK-YLPR-02	RDL	QC Batch
Miscellaneous Parameters									
Fat (gravimetric)	%	0.20	0.50	8933772	0.80	8937657	0.70	N/A	8933772
PHYSICAL PROPERTIES									
Moisture-Subcontracted	%	81	78	8926420	80	8926420	81	0.30	8926420

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM928	WLM929	WLM930			WLM930		
Sampling Date		2023/06/13	2023/06/13	2023/06/13			2023/06/13		
COC Number		n/a	n/a	n/a			n/a		
	UNITS	SMLK-YLPR-03	SMLK-YLPR-05	SMLK-YLPR-07	RDL	QC Batch	SMLK-YLPR-07 Lab-Dup	RDL	QC Batch
Metals									
Total (Wet Wt) Aluminum (Al)	mg/kg	2.89	2.92	1.55	0.50	8926419	1.57	0.50	8926419
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0020	<0.0020	<0.0020	0.0020	8926419	<0.0020	0.0020	8926419
Total (Wet Wt) Arsenic (As)	mg/kg	0.0674	0.114	0.0938	0.0050	8926419	0.0931	0.0050	8926419
Total (Wet Wt) Barium (Ba)	mg/kg	1.52	1.15	0.512	0.010	8926419	0.492	0.010	8926419
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0020	<0.0020	<0.0020	0.0020	8926419	<0.0020	0.0020	8926419
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0013	<0.0013	<0.0013	0.0013	8926419	<0.0013	0.0013	8926419
Total (Wet Wt) Boron (B)	mg/kg	<0.20	<0.20	<0.20	0.20	8926419	<0.20	0.20	8926419
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0148	0.0186	0.0085	0.0013	8926419	0.0099	0.0013	8926419
Total (Wet Wt) Calcium (Ca)	mg/kg	19300	13000	7220	4.0	8926419	7260	4.0	8926419
Total (Wet Wt) Chromium (Cr)	mg/kg	0.052	0.053	0.126	0.025	8926419	0.119	0.025	8926419
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0102	0.0117	0.0077	0.0013	8926419	0.0075	0.0013	8926419
Total (Wet Wt) Copper (Cu)	mg/kg	0.666	0.886	0.457	0.013	8926419	0.543	0.013	8926419
Total (Wet Wt) Iron (Fe)	mg/kg	18.3	23.2	13.2	0.25	8926419	13.4	0.25	8926419
Total (Wet Wt) Lead (Pb)	mg/kg	0.0284	0.0139	0.0081	0.0013	8926419	0.0107	0.0013	8926419
Total (Wet Wt) Magnesium (Mg)	mg/kg	494	408	298	0.40	8926419	311	0.40	8926419
Total (Wet Wt) Manganese (Mn)	mg/kg	14.2	8.98	3.67	0.010	8926419	3.83	0.010	8926419
Total (Wet Wt) Molybdenum (Mo)	mg/kg	0.0133	0.0239	0.0183	0.0080	8926419	0.0112	0.0080	8926419
Total (Wet Wt) Nickel (Ni)	mg/kg	0.042	0.035	0.035	0.010	8926419	0.038	0.010	8926419
Total (Wet Wt) Phosphorus (P)	mg/kg	11700	8690	5350	2.0	8926419	5620	2.0	8926419
Total (Wet Wt) Potassium (K)	mg/kg	3190	3280	3440	2.5	8926419	3590	2.5	8926419
Total (Wet Wt) Selenium (Se)	mg/kg	0.239	0.249	0.220	0.010	8926419	0.234	0.010	8926419
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0013	0.0013	<0.0013	0.0013	8926419	<0.0013	0.0013	8926419
Total (Wet Wt) Sodium (Na)	mg/kg	971	880	792	2.5	8926419	844	2.5	8926419
Total (Wet Wt) Strontium (Sr)	mg/kg	2.69	1.90	1.02	0.013	8926419	1.04	0.013	8926419
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00715	0.00674	0.00745	0.00040	8926419	0.00740	0.00040	8926419
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	<0.020	<0.020	0.020	8926419	<0.020	0.020	8926419
Total (Wet Wt) Titanium (Ti)	mg/kg	0.52	0.36	0.23	0.13	8926419	0.22	0.13	8926419
Total (Wet Wt) Uranium (U)	mg/kg	0.00175	0.00123	0.00077	0.00040	8926419	0.00048	0.00040	8926419
Total (Wet Wt) Vanadium (V)	mg/kg	0.026	0.024	<0.020	0.020	8926419	<0.020	0.020	8926419
Total (Wet Wt) Zinc (Zn)	mg/kg	32.6	26.8	21.0	0.20	8926419	20.4	0.20	8926419

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM928	WLM929	WLM930			WLM930		
Sampling Date		2023/06/13	2023/06/13	2023/06/13			2023/06/13		
COC Number		n/a	n/a	n/a			n/a		
	UNITS	**SMLK-YLPR-03**	**SMLK-YLPR-05**	**SMLK-YLPR-07**	**RDL**	**QC Batch**	**SMLK-YLPR-07 Lab-Dup**	**RDL**	**QC Batch**
Mercury (Hg)	mg/kg	0.0316	0.0326	0.0528	0.0010	8926417	0.0543	0.0010	8926417
Miscellaneous Parameters									
Fat (gravimetric)	%	0.40	1.3	1.1	N/A	8933772			
PHYSICAL PROPERTIES									
Moisture-Subcontracted	%	77	77	80	0.30	8926420	79	0.30	8926420

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM931		WLM932			WLM932		
Sampling Date		2023/06/13		2023/06/13			2023/06/13		
COC Number		n/a		n/a			n/a		
	UNITS	SMLK-YLPR-08	QC Batch	SMLK-YLPR-09	RDL	QC Batch	SMLK-YLPR-09 Lab-Dup	RDL	QC Batch
Metals									
Total (Wet Wt) Aluminum (Al)	mg/kg	1.39	8926419	2.01	0.50	8926424	2.04	0.50	8926424
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0020	8926419	0.0020	0.0020	8926424	<0.0020	0.0020	8926424
Total (Wet Wt) Arsenic (As)	mg/kg	0.0955	8926419	0.0781	0.0050	8926424	0.0800	0.0050	8926424
Total (Wet Wt) Barium (Ba)	mg/kg	0.329	8926419	0.644	0.010	8926424	0.634	0.010	8926424
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0020	8926419	<0.0020	0.0020	8926424	<0.0020	0.0020	8926424
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0013	8926419	<0.0013	0.0013	8926424	<0.0013	0.0013	8926424
Total (Wet Wt) Boron (B)	mg/kg	<0.20	8926419	<0.20	0.20	8926424	<0.20	0.20	8926424
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0054	8926419	0.0096	0.0013	8926424	0.0091	0.0013	8926424
Total (Wet Wt) Calcium (Ca)	mg/kg	4820	8926419	11400	4.0	8926424	11300	4.0	8926424
Total (Wet Wt) Chromium (Cr)	mg/kg	0.043	8926419	0.053	0.025	8926424	0.052	0.025	8926424
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0068	8926419	0.0072	0.0013	8926424	0.0068	0.0013	8926424
Total (Wet Wt) Copper (Cu)	mg/kg	0.453	8926419	0.590	0.013	8926424	0.574	0.013	8926424
Total (Wet Wt) Iron (Fe)	mg/kg	7.75	8926419	16.0	0.25	8926424	16.0	0.25	8926424
Total (Wet Wt) Lead (Pb)	mg/kg	0.0070	8926419	0.0069	0.0013	8926424	0.0083	0.0013	8926424
Total (Wet Wt) Magnesium (Mg)	mg/kg	272	8926419	373	0.40	8926424	362	0.40	8926424
Total (Wet Wt) Manganese (Mn)	mg/kg	2.22	8926419	5.44	0.010	8926424	5.22	0.010	8926424
Total (Wet Wt) Molybdenum (Mo)	mg/kg	0.0099	8926419	0.0195	0.0080	8926424	0.0207	0.0080	8926424
Total (Wet Wt) Nickel (Ni)	mg/kg	0.049	8926419	0.021	0.010	8926424	0.017	0.010	8926424
Total (Wet Wt) Phosphorus (P)	mg/kg	4420	8926419	7650	2.0	8926424	7400	2.0	8926424
Total (Wet Wt) Potassium (K)	mg/kg	3470	8926419	3450	2.5	8926424	3300	2.5	8926424
Total (Wet Wt) Selenium (Se)	mg/kg	0.205	8926419	0.203	0.010	8926424	0.203	0.010	8926424
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0013	8926419	<0.0013	0.0013	8926424	<0.0013	0.0013	8926424
Total (Wet Wt) Sodium (Na)	mg/kg	793	8926419	931	2.5	8926424	893	2.5	8926424
Total (Wet Wt) Strontium (Sr)	mg/kg	0.732	8926419	1.62	0.013	8926424	1.56	0.013	8926424
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00586	8926419	0.00455	0.00040	8926424	0.00451	0.00040	8926424
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	8926419	<0.020	0.020	8926424	<0.020	0.020	8926424
Total (Wet Wt) Titanium (Ti)	mg/kg	0.20	8926419	0.37	0.13	8926424	0.27	0.13	8926424
Total (Wet Wt) Uranium (U)	mg/kg	0.00058	8926419	0.00106	0.00040	8926424	0.00088	0.00040	8926424
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	8926419	<0.020	0.020	8926424	<0.020	0.020	8926424
Total (Wet Wt) Zinc (Zn)	mg/kg	14.6	8926419	21.9	0.20	8926424	21.0	0.20	8926424

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM931		WLM932			WLM932		
Sampling Date		2023/06/13		2023/06/13			2023/06/13		
COC Number		n/a		n/a			n/a		
	UNITS	**SMLK-YLPR-08**	**QC Batch**	**SMLK-YLPR-09**	**RDL**	**QC Batch**	**SMLK-YLPR-09 Lab-Dup**	**RDL**	**QC Batch**
Mercury (Hg)	mg/kg	0.0399	8926417	0.0331	0.0010	8926423	0.0337	0.0010	8926423
Miscellaneous Parameters									
Fat (gravimetric)	%	0.70	8933772	1.5	N/A	8937657			
PHYSICAL PROPERTIES									
Moisture-Subcontracted	%	80	8926420	77	0.30	8926425	76	0.30	8926425

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM933		WLM934	WLM935	WLM936	WLM937		
Sampling Date		2023/06/07		2023/06/07	2023/06/07	2023/06/07	2023/06/07		
COC Number		n/a		n/a	n/a	n/a	n/a		
	UNITS	A5-SPSH-01	QC Batch	A5-SPSH-02	A5-SPSH-03	A5-SPSH-04	A5-SPSH-05	RDL	QC Batch
Metals									
Total (Wet Wt) Aluminum (Al)	mg/kg	1.87	8926424	0.96	1.36	<0.50	0.64	0.50	8926424
Total (Wet Wt) Antimony (Sb)	mg/kg	0.0022	8926424	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	8926424
Total (Wet Wt) Arsenic (As)	mg/kg	0.219	8926424	0.203	0.241	0.112	0.175	0.0050	8926424
Total (Wet Wt) Barium (Ba)	mg/kg	1.67	8926424	1.14	0.984	0.441	1.48	0.010	8926424
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0020	8926424	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	8926424
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0013	8926424	<0.0013	<0.0013	<0.0013	<0.0013	0.0013	8926424
Total (Wet Wt) Boron (B)	mg/kg	<0.20	8926424	<0.20	<0.20	<0.20	<0.20	0.20	8926424
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0121	8926424	0.0092	0.0094	0.0059	0.0071	0.0013	8926424
Total (Wet Wt) Calcium (Ca)	mg/kg	13100	8926424	7060	6660	3400	19800	4.0	8926424
Total (Wet Wt) Chromium (Cr)	mg/kg	0.030	8926424	0.031	0.027	0.032	0.026	0.025	8926424
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0077	8926424	0.0066	0.0073	0.0065	0.0071	0.0013	8926424
Total (Wet Wt) Copper (Cu)	mg/kg	0.821	8926424	0.478	0.493	0.538	0.501	0.013	8926424
Total (Wet Wt) Iron (Fe)	mg/kg	22.9	8926424	11.3	14.5	9.49	14.8	0.25	8926424
Total (Wet Wt) Lead (Pb)	mg/kg	0.0161	8926424	0.0063	0.0065	0.0044	0.0099	0.0013	8926424
Total (Wet Wt) Magnesium (Mg)	mg/kg	474	8926424	359	370	265	561	0.40	8926424
Total (Wet Wt) Manganese (Mn)	mg/kg	4.20	8926424	2.39	2.64	1.11	5.15	0.010	8926424
Total (Wet Wt) Molybdenum (Mo)	mg/kg	0.0182	8926424	0.0134	0.0133	0.0098	0.0167	0.0080	8926424
Total (Wet Wt) Nickel (Ni)	mg/kg	0.024	8926424	0.019	0.023	0.029	0.024	0.010	8926424
Total (Wet Wt) Phosphorus (P)	mg/kg	8330	8926424	5620	5440	3630	11400	2.0	8926424
Total (Wet Wt) Potassium (K)	mg/kg	2790	8926424	2730	2870	3140	2960	2.5	8926424
Total (Wet Wt) Selenium (Se)	mg/kg	0.278	8926424	0.233	0.240	0.261	0.248	0.010	8926424
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0013	8926424	<0.0013	<0.0013	<0.0013	<0.0013	0.0013	8926424
Total (Wet Wt) Sodium (Na)	mg/kg	556	8926424	484	504	629	713	2.5	8926424
Total (Wet Wt) Strontium (Sr)	mg/kg	4.09	8926424	2.27	2.25	1.05	5.60	0.013	8926424
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00517	8926424	0.00392	0.00348	0.00220	0.00472	0.00040	8926424
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	8926424	<0.020	<0.020	<0.020	<0.020	0.020	8926424
Total (Wet Wt) Titanium (Ti)	mg/kg	0.31	8926424	0.19	0.21	<0.13	0.34	0.13	8926424
Total (Wet Wt) Uranium (U)	mg/kg	0.00069	8926424	0.00042	0.00040	<0.00040	0.00086	0.00040	8926424
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	8926424	<0.020	<0.020	<0.020	<0.020	0.020	8926424
Total (Wet Wt) Zinc (Zn)	mg/kg	57.3	8926424	41.2	41.9	29.7	51.8	0.20	8926424
Mercury (Hg)	mg/kg	0.0575	8926423	0.0737	0.0771	0.0960	0.0838	0.0010	8926423

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM933		WLM934	WLM935	WLM936	WLM937		
Sampling Date		2023/06/07		2023/06/07	2023/06/07	2023/06/07	2023/06/07		
COC Number		n/a		n/a	n/a	n/a	n/a		
	UNITS	A5-SPSH-01	QC Batch	A5-SPSH-02	A5-SPSH-03	A5-SPSH-04	A5-SPSH-05	RDL	QC Batch
Miscellaneous Parameters									
Fat (gravimetric)	%	1.7	8933772	1.6	1.1	0.70	4.6	N/A	8937657
PHYSICAL PROPERTIES									
Moisture-Subcontracted	%	78	8926425	79	78	82	77	0.30	8926425

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM938	WLM939	WLM940		WLM941		
Sampling Date		2023/06/07	2023/06/07	2023/06/07		2023/06/07		
COC Number		n/a	n/a	n/a		n/a		
	UNITS	A5-SPSH-06	A5-SPSH-08	A5-SPSH-09	QC Batch	A5-SPSH-10	RDL	QC Batch
Metals								
Total (Wet Wt) Aluminum (Al)	mg/kg	<0.50	<0.50	1.56	8926424	0.57	0.50	8926424
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0020	<0.0020	<0.0020	8926424	0.0030	0.0020	8926424
Total (Wet Wt) Arsenic (As)	mg/kg	0.155	0.159	0.177	8926424	0.335	0.0050	8926424
Total (Wet Wt) Barium (Ba)	mg/kg	0.548	0.450	1.26	8926424	0.439	0.010	8926424
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0020	<0.0020	<0.0020	8926424	<0.0020	0.0020	8926424
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0013	<0.0013	<0.0013	8926424	<0.0013	0.0013	8926424
Total (Wet Wt) Boron (B)	mg/kg	<0.20	<0.20	<0.20	8926424	<0.20	0.20	8926424
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0100	0.0036	0.0205	8926424	0.0087	0.0013	8926424
Total (Wet Wt) Calcium (Ca)	mg/kg	5200	5320	9100	8926424	4170	4.0	8926424
Total (Wet Wt) Chromium (Cr)	mg/kg	0.027	<0.025	<0.025	8926424	0.036	0.025	8926424
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0068	0.0049	0.0091	8926424	0.0088	0.0013	8926424
Total (Wet Wt) Copper (Cu)	mg/kg	0.477	0.526	0.621	8926424	0.797	0.013	8926424
Total (Wet Wt) Iron (Fe)	mg/kg	9.27	7.09	21.9	8926424	10.1	0.25	8926424
Total (Wet Wt) Lead (Pb)	mg/kg	0.0039	0.0025	0.0150	8926424	0.0047	0.0013	8926424
Total (Wet Wt) Magnesium (Mg)	mg/kg	315	338	344	8926424	291	0.40	8926424
Total (Wet Wt) Manganese (Mn)	mg/kg	1.59	1.18	2.22	8926424	1.42	0.010	8926424
Total (Wet Wt) Molybdenum (Mo)	mg/kg	0.0089	<0.0080	0.0162	8926424	0.0160	0.0080	8926424
Total (Wet Wt) Nickel (Ni)	mg/kg	0.019	0.012	0.020	8926424	0.024	0.010	8926424
Total (Wet Wt) Phosphorus (P)	mg/kg	4460	4420	6300	8926424	3970	2.0	8926424
Total (Wet Wt) Potassium (K)	mg/kg	3040	2920	2970	8926424	3130	2.5	8926424
Total (Wet Wt) Selenium (Se)	mg/kg	0.227	0.209	0.276	8926424	0.296	0.010	8926424
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0013	<0.0013	<0.0013	8926424	<0.0013	0.0013	8926424
Total (Wet Wt) Sodium (Na)	mg/kg	670	653	743	8926424	747	2.5	8926424
Total (Wet Wt) Strontium (Sr)	mg/kg	1.57	1.85	2.52	8926424	1.23	0.013	8926424
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00240	0.00188	0.00279	8926424	0.00170	0.00040	8926424
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	<0.020	<0.020	8926424	<0.020	0.020	8926424
Total (Wet Wt) Titanium (Ti)	mg/kg	0.17	0.16	0.24	8926424	0.13	0.13	8926424
Total (Wet Wt) Uranium (U)	mg/kg	<0.00040	<0.00040	0.00055	8926424	<0.00040	0.00040	8926424
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	<0.020	<0.020	8926424	<0.020	0.020	8926424
Total (Wet Wt) Zinc (Zn)	mg/kg	36.4	34.5	40.5	8926424	45.1	0.20	8926424
Mercury (Hg)	mg/kg	0.127	0.123	0.0990	8926423	0.110	0.0010	8926423

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM938	WLM939	WLM940		WLM941		
Sampling Date		2023/06/07	2023/06/07	2023/06/07		2023/06/07		
COC Number		n/a	n/a	n/a		n/a		
	UNITS	A5-SPSH-06	A5-SPSH-08	A5-SPSH-09	QC Batch	A5-SPSH-10	RDL	QC Batch
Miscellaneous Parameters								
Fat (gravimetric)	%	0.80	0.50	0.70	8937657	1.2	N/A	8939730
PHYSICAL PROPERTIES								
Moisture-Subcontracted	%	80	81	79	8926425	79	0.30	8926425

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM942	WLM943	WLM944	WLM945	WLM946		
Sampling Date		2023/06/10	2023/06/10	2023/06/10	2023/06/10	2023/06/10		
COC Number		n/a	n/a	n/a	n/a	n/a		
	UNITS	GMLK-SPSH-01	GMLK-SPSH-02	GMLK-SPSH-03	GMLK-SPSH-04	GMLK-SPSH-05	RDL	QC Batch
Metals								
Total (Wet Wt) Aluminum (Al)	mg/kg	1.81	1.19	0.65	2.93	<0.50	0.50	8926424
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0020	0.0021	0.0022	0.0087	<0.0020	0.0020	8926424
Total (Wet Wt) Arsenic (As)	mg/kg	0.104	0.0732	0.0751	0.0698	0.0582	0.0050	8926424
Total (Wet Wt) Barium (Ba)	mg/kg	1.14	0.918	0.696	0.835	1.25	0.010	8926424
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	8926424
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0013	8926424
Total (Wet Wt) Boron (B)	mg/kg	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	8926424
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0120	0.0122	0.0120	0.0133	0.0084	0.0013	8926424
Total (Wet Wt) Calcium (Ca)	mg/kg	9430	5320	5350	6970	14000	4.0	8926424
Total (Wet Wt) Chromium (Cr)	mg/kg	0.030	<0.025	0.034	0.039	0.035	0.025	8926424
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0081	0.0078	0.0068	0.0081	0.0055	0.0013	8926424
Total (Wet Wt) Copper (Cu)	mg/kg	0.704	0.584	3.31	0.603	0.555	0.013	8926424
Total (Wet Wt) Iron (Fe)	mg/kg	16.6	11.4	8.68	18.8	9.58	0.25	8926424
Total (Wet Wt) Lead (Pb)	mg/kg	0.0134	0.0081	0.0084	0.0077	0.0058	0.0013	8926424
Total (Wet Wt) Magnesium (Mg)	mg/kg	385	311	299	355	428	0.40	8926424
Total (Wet Wt) Manganese (Mn)	mg/kg	3.61	2.44	2.81	3.26	4.29	0.010	8926424
Total (Wet Wt) Molybdenum (Mo)	mg/kg	0.0270	0.0138	0.0171	0.0127	0.0141	0.0080	8926424
Total (Wet Wt) Nickel (Ni)	mg/kg	0.022	0.024	0.038	0.023	0.028	0.010	8926424
Total (Wet Wt) Phosphorus (P)	mg/kg	6040	4650	4670	5200	8690	2.0	8926424
Total (Wet Wt) Potassium (K)	mg/kg	2890	2940	2790	2680	3140	2.5	8926424
Total (Wet Wt) Selenium (Se)	mg/kg	0.278	0.229	0.223	0.231	0.252	0.010	8926424
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0013	8926424
Total (Wet Wt) Sodium (Na)	mg/kg	561	589	569	515	800	2.5	8926424
Total (Wet Wt) Strontium (Sr)	mg/kg	2.86	1.69	1.59	2.13	4.28	0.013	8926424
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00444	0.00275	0.00293	0.00297	0.00251	0.00040	8926424
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8926424
Total (Wet Wt) Titanium (Ti)	mg/kg	0.27	0.17	0.15	0.31	0.28	0.13	8926424
Total (Wet Wt) Uranium (U)	mg/kg	0.00071	0.00048	0.00047	0.00097	0.00088	0.00040	8926424
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8926424
Total (Wet Wt) Zinc (Zn)	mg/kg	53.6	38.8	36.7	34.5	54.3	0.20	8926424
Mercury (Hg)	mg/kg	0.0406	0.0402	0.0369	0.0336	0.0480	0.0010	8926423

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM942	WLM943	WLM944	WLM945	WLM946		
Sampling Date		2023/06/10	2023/06/10	2023/06/10	2023/06/10	2023/06/10		
COC Number		n/a	n/a	n/a	n/a	n/a		
	UNITS	GMLK-SPSH-01	GMLK-SPSH-02	GMLK-SPSH-03	GMLK-SPSH-04	GMLK-SPSH-05	RDL	QC Batch
Miscellaneous Parameters								
Fat (gravimetric)	%	4.2	1.1	1.4	1.3	1.0	N/A	8937657
PHYSICAL PROPERTIES								
Moisture-Subcontracted	%	79	80	81	78	76	0.30	8926425

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM947	WLM948	WLM949	WLM950	WLM951		
Sampling Date		2023/06/10	2023/06/10	2023/06/10	2023/06/10	2023/06/10		
COC Number		n/a	n/a	n/a	n/a	n/a		
	UNITS	GMLK-SPSH-06	GMLK-SPSH-07	GMLK-SPSH-08	GMLK-SPSH-09	GMLK-SPSH-10	RDL	QC Batch
Metals								
Total (Wet Wt) Aluminum (Al)	mg/kg	<0.50	5.38	<0.50	0.73	<0.50	0.50	8926424
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	8926424
Total (Wet Wt) Arsenic (As)	mg/kg	0.0778	0.109	0.0851	0.0681	0.0707	0.0050	8926424
Total (Wet Wt) Barium (Ba)	mg/kg	0.720	0.680	0.526	0.548	0.326	0.010	8926424
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	8926424
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0013	8926424
Total (Wet Wt) Boron (B)	mg/kg	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	8926424
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0071	0.0176	0.0064	0.0154	0.0072	0.0013	8926424
Total (Wet Wt) Calcium (Ca)	mg/kg	9640	5440	4580	5100	1010	4.0	8926424
Total (Wet Wt) Chromium (Cr)	mg/kg	0.025	0.041	<0.025	<0.025	0.028	0.025	8926424
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0072	0.0110	0.0047	0.0073	0.0041	0.0013	8926424
Total (Wet Wt) Copper (Cu)	mg/kg	0.615	0.662	0.463	0.592	0.880	0.013	8926424
Total (Wet Wt) Iron (Fe)	mg/kg	11.2	27.3	7.37	10.0	5.90	0.25	8926424
Total (Wet Wt) Lead (Pb)	mg/kg	0.0034	0.0085	0.0078	0.0046	0.0018	0.0013	8926424
Total (Wet Wt) Magnesium (Mg)	mg/kg	383	307	345	314	268	0.40	8926424
Total (Wet Wt) Manganese (Mn)	mg/kg	2.40	4.21	2.09	1.82	0.708	0.010	8926424
Total (Wet Wt) Molybdenum (Mo)	mg/kg	0.0141	0.0233	0.0124	0.0203	0.0081	0.0080	8926424
Total (Wet Wt) Nickel (Ni)	mg/kg	0.017	0.025	0.011	0.013	0.015	0.010	8926424
Total (Wet Wt) Phosphorus (P)	mg/kg	6410	4600	4380	4560	2380	2.0	8926424
Total (Wet Wt) Potassium (K)	mg/kg	3120	3200	3130	3140	3310	2.5	8926424
Total (Wet Wt) Selenium (Se)	mg/kg	0.307	0.363	0.268	0.345	0.319	0.010	8926424
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0013	8926424
Total (Wet Wt) Sodium (Na)	mg/kg	703	720	645	777	735	2.5	8926424
Total (Wet Wt) Strontium (Sr)	mg/kg	2.47	1.59	1.27	1.42	0.302	0.013	8926424
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00314	0.00248	0.00176	0.00196	0.00170	0.00040	8926424
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8926424
Total (Wet Wt) Titanium (Ti)	mg/kg	0.20	0.37	0.14	0.16	<0.13	0.13	8926424
Total (Wet Wt) Uranium (U)	mg/kg	0.00055	0.00131	0.00088	0.00138	<0.00040	0.00040	8926424
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8926424
Total (Wet Wt) Zinc (Zn)	mg/kg	43.8	37.5	37.6	38.5	31.0	0.20	8926424
Mercury (Hg)	mg/kg	0.0605	0.0516	0.0763	0.0764	0.124	0.0010	8926423

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM947	WLM948	WLM949	WLM950	WLM951		
Sampling Date		2023/06/10	2023/06/10	2023/06/10	2023/06/10	2023/06/10		
COC Number		n/a	n/a	n/a	n/a	n/a		
	UNITS	GMLK-SPSH-06	GMLK-SPSH-07	GMLK-SPSH-08	GMLK-SPSH-09	GMLK-SPSH-10	RDL	QC Batch
Miscellaneous Parameters								
Fat (gravimetric)	%	1.0	2.2	2.5	1.2	2.6	N/A	8937657
PHYSICAL PROPERTIES								
Moisture-Subcontracted	%	76	77	78	78	79	0.30	8926425

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM952		WLM953	WLM954	WLM955	WLM956		
Sampling Date		2023/06/08		2023/06/08	2023/06/08	2023/06/08	2023/06/08		
COC Number		n/a		n/a	n/a	n/a	n/a		
	UNITS	MHT-SPSH-01	QC Batch	MHT-SPSH-02	MHT-SPSH-03	MHT-SPSH-04	MHT-SPSH-05	RDL	QC Batch
Metals									
Total (Wet Wt) Aluminum (Al)	mg/kg	38.1	8926429	0.87	<0.50	0.52	0.91	0.50	8926429
Total (Wet Wt) Antimony (Sb)	mg/kg	0.0066	8926429	0.0034	<0.0020	0.0036	0.0032	0.0020	8926429
Total (Wet Wt) Arsenic (As)	mg/kg	0.841	8926429	0.692	0.447	0.457	0.671	0.0050	8926429
Total (Wet Wt) Barium (Ba)	mg/kg	0.911	8926429	1.36	0.330	0.563	0.588	0.010	8926429
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0020	8926429	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	8926429
Total (Wet Wt) Bismuth (Bi)	mg/kg	0.0014	8926429	<0.0013	<0.0013	<0.0013	<0.0013	0.0013	8926429
Total (Wet Wt) Boron (B)	mg/kg	<0.20	8926429	<0.20	<0.20	<0.20	<0.20	0.20	8926429
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0305	8926429	0.0206	0.0148	0.0092	0.0104	0.0013	8926429
Total (Wet Wt) Calcium (Ca)	mg/kg	12500	8926429	18500	5310	7290	7120	4.0	8926429
Total (Wet Wt) Chromium (Cr)	mg/kg	0.172	8926429	<0.025	<0.025	0.030	0.046	0.025	8926429
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0306	8926429	0.0067	0.0075	0.0070	0.0101	0.0013	8926429
Total (Wet Wt) Copper (Cu)	mg/kg	1.41	8926429	0.982	0.695	0.652	0.528	0.013	8926429
Total (Wet Wt) Iron (Fe)	mg/kg	112	8926429	16.2	10.2	8.66	11.7	0.25	8926429
Total (Wet Wt) Lead (Pb)	mg/kg	0.0387	8926429	0.0123	0.0028	0.0101	0.0095	0.0013	8926429
Total (Wet Wt) Magnesium (Mg)	mg/kg	750	8926429	567	549	401	413	0.40	8926429
Total (Wet Wt) Manganese (Mn)	mg/kg	4.04	8926429	3.55	1.67	2.71	2.41	0.010	8926429
Total (Wet Wt) Molybdenum (Mo)	mg/kg	0.0315	8926429	0.0186	0.0114	0.0157	0.0154	0.0080	8926429
Total (Wet Wt) Nickel (Ni)	mg/kg	0.092	8926429	0.037	0.019	0.027	0.041	0.010	8926429
Total (Wet Wt) Phosphorus (P)	mg/kg	8170	8926429	11400	4700	5880	5780	2.0	8926429
Total (Wet Wt) Potassium (K)	mg/kg	3090	8926429	3210	3300	3130	3040	2.5	8926429
Total (Wet Wt) Selenium (Se)	mg/kg	0.317	8926429	0.251	0.230	0.248	0.243	0.010	8926429
Total (Wet Wt) Silver (Ag)	mg/kg	0.0033	8926429	<0.0013	<0.0013	<0.0013	<0.0013	0.0013	8926429
Total (Wet Wt) Sodium (Na)	mg/kg	748	8926429	849	746	616	574	2.5	8926429
Total (Wet Wt) Strontium (Sr)	mg/kg	4.41	8926429	8.91	2.44	3.13	3.47	0.013	8926429
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00683	8926429	0.00278	0.00238	0.00267	0.00259	0.00040	8926429
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	8926429	<0.020	<0.020	<0.020	<0.020	0.020	8926429
Total (Wet Wt) Titanium (Ti)	mg/kg	1.86	8926429	0.33	0.15	0.17	0.20	0.13	8926429
Total (Wet Wt) Uranium (U)	mg/kg	0.00282	8926429	0.00078	0.00042	0.00043	0.00056	0.00040	8926429
Total (Wet Wt) Vanadium (V)	mg/kg	0.114	8926429	<0.020	<0.020	<0.020	<0.020	0.020	8926429
Total (Wet Wt) Zinc (Zn)	mg/kg	47.4	8926429	75.8	29.8	39.7	42.6	0.20	8926429
Mercury (Hg)	mg/kg	0.0699	8926428	0.0562	0.0657	0.0641	0.0594	0.0010	8926428

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM952		WLM953	WLM954	WLM955	WLM956		
Sampling Date		2023/06/08		2023/06/08	2023/06/08	2023/06/08	2023/06/08		
COC Number		n/a		n/a	n/a	n/a	n/a		
	UNITS	MHT-SPSH-01	QC Batch	MHT-SPSH-02	MHT-SPSH-03	MHT-SPSH-04	MHT-SPSH-05	RDL	QC Batch
Miscellaneous Parameters									
Fat (gravimetric)	%	1.5	8937657	1.3	1.2	1.3	1.4	N/A	8939730
PHYSICAL PROPERTIES									
Moisture-Subcontracted	%	73	8926430	72	78	76	76	0.30	8926430

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM957	WLM958	WLM959	WLM960	WLM961		
Sampling Date		2023/06/08	2023/06/08	2023/06/12	2023/06/12	2023/06/12		
COC Number		n/a	n/a	n/a	n/a	n/a		
	UNITS	MHT-SPSH-07	MHT-SPSH-08	HRT-SPSH-01	HRT-SPSH-02	HRT-SPSH-03	RDL	QC Batch
Metals								
Total (Wet Wt) Aluminum (Al)	mg/kg	0.89	0.73	25.1	1.47	7.77	0.50	8926429
Total (Wet Wt) Antimony (Sb)	mg/kg	0.0031	<0.0020	0.0044	0.0023	0.0029	0.0020	8926429
Total (Wet Wt) Arsenic (As)	mg/kg	0.647	0.498	0.576	0.417	0.336	0.0050	8926429
Total (Wet Wt) Barium (Ba)	mg/kg	0.462	1.36	0.912	1.32	0.465	0.010	8926429
Total (Wet Wt) Beryllium (Be)	mg/kg	0.0029	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	8926429
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0013	8926429
Total (Wet Wt) Boron (B)	mg/kg	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	8926429
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0140	0.0102	0.0194	0.0108	0.0167	0.0013	8926429
Total (Wet Wt) Calcium (Ca)	mg/kg	6500	17600	6260	12700	3330	4.0	8926429
Total (Wet Wt) Chromium (Cr)	mg/kg	0.052	<0.025	0.111	0.067	0.055	0.025	8926429
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0109	0.0058	0.0252	0.0098	0.0169	0.0013	8926429
Total (Wet Wt) Copper (Cu)	mg/kg	0.642	0.454	0.743	0.583	0.930	0.013	8926429
Total (Wet Wt) Iron (Fe)	mg/kg	14.0	13.9	71.8	11.7	32.6	0.25	8926429
Total (Wet Wt) Lead (Pb)	mg/kg	0.0093	0.0110	0.0326	0.0090	0.0127	0.0013	8926429
Total (Wet Wt) Magnesium (Mg)	mg/kg	371	515	392	454	608	0.40	8926429
Total (Wet Wt) Manganese (Mn)	mg/kg	1.92	4.03	3.12	3.29	2.78	0.010	8926429
Total (Wet Wt) Molybdenum (Mo)	mg/kg	0.0214	0.0156	0.0222	0.0235	0.0190	0.0080	8926429
Total (Wet Wt) Nickel (Ni)	mg/kg	0.032	0.014	0.068	0.033	0.029	0.010	8926429
Total (Wet Wt) Phosphorus (P)	mg/kg	5400	11200	5190	8430	3840	2.0	8926429
Total (Wet Wt) Potassium (K)	mg/kg	3110	2920	3140	3040	3280	2.5	8926429
Total (Wet Wt) Selenium (Se)	mg/kg	0.241	0.271	0.270	0.253	0.316	0.010	8926429
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0013	8926429
Total (Wet Wt) Sodium (Na)	mg/kg	601	752	611	618	781	2.5	8926429
Total (Wet Wt) Strontium (Sr)	mg/kg	3.34	6.54	2.76	4.33	1.26	0.013	8926429
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00276	0.00267	0.00271	0.00334	0.00318	0.00040	8926429
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	<0.020	<0.020	0.023	<0.020	0.020	8926429
Total (Wet Wt) Titanium (Ti)	mg/kg	0.21	0.31	1.02	0.33	0.36	0.13	8926429
Total (Wet Wt) Uranium (U)	mg/kg	0.00314	0.00087	0.00236	0.00138	0.00133	0.00040	8926429
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	<0.020	0.055	<0.020	0.024	0.020	8926429
Total (Wet Wt) Zinc (Zn)	mg/kg	45.6	64.6	39.7	60.0	39.8	0.20	8926429
Mercury (Hg)	mg/kg	0.0577	0.0767	0.0409	0.0441	0.0823	0.0010	8926428

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM957	WLM958	WLM959	WLM960	WLM961		
Sampling Date		2023/06/08	2023/06/08	2023/06/12	2023/06/12	2023/06/12		
COC Number		n/a	n/a	n/a	n/a	n/a		
	UNITS	MHT-SPSH-07	MHT-SPSH-08	HRT-SPSH-01	HRT-SPSH-02	HRT-SPSH-03	RDL	QC Batch
Miscellaneous Parameters								
Fat (gravimetric)	%	2.0	1.0	1.5	1.4	1.0	N/A	8939730
PHYSICAL PROPERTIES								
Moisture-Subcontracted	%	77	76	80	77	79	0.30	8926430

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM961			WLM962	WLM963	WLM964		
Sampling Date		2023/06/12			2023/06/12	2023/06/12	2023/06/12		
COC Number		n/a			n/a	n/a	n/a		
	UNITS	HRT-SPSH-03 Lab-Dup	RDL	QC Batch	HRT-SPSH-04	HRT-SPSH-05	HRT-SPSH-06	RDL	QC Batch
Metals									
Total (Wet Wt) Aluminum (Al)	mg/kg	7.67	0.50	8926429	89.4	<0.50	1.06	0.50	8926429
Total (Wet Wt) Antimony (Sb)	mg/kg	0.0025	0.0020	8926429	0.0139	<0.0020	<0.0020	0.0020	8926429
Total (Wet Wt) Arsenic (As)	mg/kg	0.335	0.0050	8926429	1.77	0.306	0.347	0.0050	8926429
Total (Wet Wt) Barium (Ba)	mg/kg	0.478	0.010	8926429	0.902	0.700	0.344	0.010	8926429
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0020	0.0020	8926429	<0.0020	<0.0020	<0.0020	0.0020	8926429
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0013	0.0013	8926429	<0.0013	<0.0013	<0.0013	0.0013	8926429
Total (Wet Wt) Boron (B)	mg/kg	<0.20	0.20	8926429	<0.20	<0.20	<0.20	0.20	8926429
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0168	0.0013	8926429	0.0293	0.0094	0.0145	0.0013	8926429
Total (Wet Wt) Calcium (Ca)	mg/kg	3240	4.0	8926429	9350	9500	4740	4.0	8926429
Total (Wet Wt) Chromium (Cr)	mg/kg	0.057	0.025	8926429	0.271	0.025	0.033	0.025	8926429
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0157	0.0013	8926429	0.0763	0.0051	0.0094	0.0013	8926429
Total (Wet Wt) Copper (Cu)	mg/kg	0.902	0.013	8926429	1.22	0.608	0.646	0.013	8926429
Total (Wet Wt) Iron (Fe)	mg/kg	31.3	0.25	8926429	219	10.0	12.8	0.25	8926429
Total (Wet Wt) Lead (Pb)	mg/kg	0.0176	0.0013	8926429	0.0855	0.0092	0.0053	0.0013	8926429
Total (Wet Wt) Magnesium (Mg)	mg/kg	607	0.40	8926429	382	433	302	0.40	8926429
Total (Wet Wt) Manganese (Mn)	mg/kg	2.70	0.010	8926429	6.98	2.79	1.09	0.010	8926429
Total (Wet Wt) Molybdenum (Mo)	mg/kg	0.0187	0.0080	8926429	0.0216	0.0113	0.0132	0.0080	8926429
Total (Wet Wt) Nickel (Ni)	mg/kg	0.027	0.010	8926429	0.236	0.012	0.030	0.010	8926429
Total (Wet Wt) Phosphorus (P)	mg/kg	3800	2.0	8926429	6180	6750	3760	2.0	8926429
Total (Wet Wt) Potassium (K)	mg/kg	3200	2.5	8926429	2920	3330	3320	2.5	8926429
Total (Wet Wt) Selenium (Se)	mg/kg	0.293	0.010	8926429	0.354	0.252	0.299	0.010	8926429
Total (Wet Wt) Silver (Ag)	mg/kg	0.0013	0.0013	8926429	<0.0013	<0.0013	<0.0013	0.0013	8926429
Total (Wet Wt) Sodium (Na)	mg/kg	753	2.5	8926429	782	771	819	2.5	8926429
Total (Wet Wt) Strontium (Sr)	mg/kg	1.24	0.013	8926429	2.91	3.50	1.62	0.013	8926429
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00295	0.00040	8926429	0.00474	0.00250	0.00195	0.00040	8926429
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	0.020	8926429	<0.020	<0.020	<0.020	0.020	8926429
Total (Wet Wt) Titanium (Ti)	mg/kg	0.38	0.13	8926429	3.33	0.26	0.16	0.13	8926429
Total (Wet Wt) Uranium (U)	mg/kg	0.00130	0.00040	8926429	0.00934	<0.00040	<0.00040	0.00040	8926429
Total (Wet Wt) Vanadium (V)	mg/kg	0.021	0.020	8926429	0.165	<0.020	<0.020	0.020	8926429
Total (Wet Wt) Zinc (Zn)	mg/kg	39.1	0.20	8926429	58.1	40.4	30.4	0.20	8926429

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM961			WLM962	WLM963	WLM964		
Sampling Date		2023/06/12			2023/06/12	2023/06/12	2023/06/12		
COC Number		n/a			n/a	n/a	n/a		
	UNITS	**HRT-SPSH-03 Lab-Dup**	**RDL**	**QC Batch**	**HRT-SPSH-04**	**HRT-SPSH-05**	**HRT-SPSH-06**	**RDL**	**QC Batch**
Mercury (Hg)	mg/kg	0.0818	0.0010	8926428	0.0732	0.121	0.116	0.0010	8926428
Miscellaneous Parameters									
Fat (gravimetric)	%				0.90	1.1	1.2	N/A	8939730
PHYSICAL PROPERTIES									
Moisture-Subcontracted	%	77	0.30	8926430	74	77	81	0.30	8926430

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM965	WLM966	WLM967		
Sampling Date		2023/06/12	2023/06/12	2023/06/12		
COC Number		n/a	n/a	n/a		
	UNITS	HRT-SPSH-07	HRT-SPSH-08	HRT-SPSH-09	RDL	QC Batch
Metals						
Total (Wet Wt) Aluminum (Al)	mg/kg	<0.50	<0.50	18.0	0.50	8926429
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0020	<0.0020	0.0036	0.0020	8926429
Total (Wet Wt) Arsenic (As)	mg/kg	0.274	0.291	0.603	0.0050	8926429
Total (Wet Wt) Barium (Ba)	mg/kg	0.255	0.276	0.643	0.010	8926429
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0020	<0.0020	<0.0020	0.0020	8926429
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0013	<0.0013	<0.0013	0.0013	8926429
Total (Wet Wt) Boron (B)	mg/kg	<0.20	<0.20	<0.20	0.20	8926429
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0123	0.0114	0.0113	0.0013	8926429
Total (Wet Wt) Calcium (Ca)	mg/kg	4800	5670	4770	4.0	8926429
Total (Wet Wt) Chromium (Cr)	mg/kg	0.027	<0.025	0.085	0.025	8926429
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0118	0.0065	0.0184	0.0013	8926429
Total (Wet Wt) Copper (Cu)	mg/kg	0.554	0.738	0.627	0.013	8926429
Total (Wet Wt) Iron (Fe)	mg/kg	8.07	11.5	54.0	0.25	8926429
Total (Wet Wt) Lead (Pb)	mg/kg	0.0045	0.0206	0.0228	0.0013	8926429
Total (Wet Wt) Magnesium (Mg)	mg/kg	437	309	329	0.40	8926429
Total (Wet Wt) Manganese (Mn)	mg/kg	1.38	1.90	1.88	0.010	8926429
Total (Wet Wt) Molybdenum (Mo)	mg/kg	0.0100	0.0175	0.0187	0.0080	8926429
Total (Wet Wt) Nickel (Ni)	mg/kg	0.019	0.018	0.042	0.010	8926429
Total (Wet Wt) Phosphorus (P)	mg/kg	4370	4900	4260	2.0	8926429
Total (Wet Wt) Potassium (K)	mg/kg	3150	3200	3000	2.5	8926429
Total (Wet Wt) Selenium (Se)	mg/kg	0.253	0.277	0.235	0.010	8926429
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0013	<0.0013	<0.0013	0.0013	8926429
Total (Wet Wt) Sodium (Na)	mg/kg	627	809	533	2.5	8926429
Total (Wet Wt) Strontium (Sr)	mg/kg	1.96	2.04	2.15	0.013	8926429
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00177	0.00229	0.00251	0.00040	8926429
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	<0.020	<0.020	0.020	8926429
Total (Wet Wt) Titanium (Ti)	mg/kg	0.14	0.16	0.59	0.13	8926429
Total (Wet Wt) Uranium (U)	mg/kg	<0.00040	<0.00040	0.00106	0.00040	8926429
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	<0.020	0.040	0.020	8926429
Total (Wet Wt) Zinc (Zn)	mg/kg	24.8	33.4	36.1	0.20	8926429
Mercury (Hg)	mg/kg	0.0956	0.110	0.0516	0.0010	8926428

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLM965	WLM966	WLM967		
Sampling Date		2023/06/12	2023/06/12	2023/06/12		
COC Number		n/a	n/a	n/a		
	UNITS	HRT-SPSH-07	HRT-SPSH-08	HRT-SPSH-09	RDL	QC Batch
Miscellaneous Parameters						
Fat (gravimetric)	%	1.8	1.2	2.0	N/A	8939730
PHYSICAL PROPERTIES						
Moisture-Subcontracted	%	77	78	80	0.30	8926430

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLN777	WLN777	WLN798		
Sampling Date		2023/06/07	2023/06/07	2023/06/11		
COC Number		n/a	n/a	n/a		
	UNITS	A5-YLPR-10 new/split	A5-YLPR-10 new/split Lab-Dup	A1B-YLPR-08 new/split	RDL	QC Batch
Metals						
Total (Wet Wt) Aluminum (Al)	mg/kg	2.30	1.75	3.60	0.50	8926436
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0020	<0.0020	<0.0020	0.0020	8926436
Total (Wet Wt) Arsenic (As)	mg/kg	0.185	0.208	0.0359	0.0050	8926436
Total (Wet Wt) Barium (Ba)	mg/kg	0.258	0.293	1.21	0.010	8926436
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0020	<0.0020	<0.0020	0.0020	8926436
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0013	<0.0013	<0.0013	0.0013	8926436
Total (Wet Wt) Boron (B)	mg/kg	<0.20	<0.20	<0.20	0.20	8926436
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0047	0.0051	0.0087	0.0013	8926436
Total (Wet Wt) Calcium (Ca)	mg/kg	6470	6890	6310	4.0	8926436
Total (Wet Wt) Chromium (Cr)	mg/kg	0.056	0.056	0.038	0.025	8926436
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0136	0.0136	0.0095	0.0013	8926436
Total (Wet Wt) Copper (Cu)	mg/kg	0.427	0.458	0.433	0.013	8926436
Total (Wet Wt) Iron (Fe)	mg/kg	12.3	12.6	14.0	0.25	8926436
Total (Wet Wt) Lead (Pb)	mg/kg	0.0053	0.0049	0.0065	0.0013	8926436
Total (Wet Wt) Magnesium (Mg)	mg/kg	275	307	298	0.40	8926436
Total (Wet Wt) Manganese (Mn)	mg/kg	2.42	2.63	3.29	0.010	8926436
Total (Wet Wt) Mercury (Hg)	mg/kg	0.069	0.077	0.030	0.013	8926436
Total (Wet Wt) Molybdenum (Mo)	mg/kg	0.0143	0.0175	0.0314	0.0080	8926436
Total (Wet Wt) Nickel (Ni)	mg/kg	0.023	0.022	0.025	0.010	8926436
Total (Wet Wt) Phosphorus (P)	mg/kg	4610	4930	4600	2.0	8926436
Total (Wet Wt) Potassium (K)	mg/kg	2950	3160	3140	2.5	8926436
Total (Wet Wt) Selenium (Se)	mg/kg	0.202	0.224	0.178	0.010	8926436
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0013	<0.0013	<0.0013	0.0013	8926436
Total (Wet Wt) Sodium (Na)	mg/kg	823	876	944	2.5	8926436
Total (Wet Wt) Strontium (Sr)	mg/kg	1.08	1.15	1.90	0.013	8926436
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00353	0.00397	0.00389	0.00040	8926436
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	<0.020	<0.020	0.020	8926436
Total (Wet Wt) Titanium (Ti)	mg/kg	0.30	0.30	0.41	0.13	8926436
Total (Wet Wt) Uranium (U)	mg/kg	<0.00040	<0.00040	<0.00040	0.00040	8926436
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	<0.020	<0.020	0.020	8926436

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLN777	WLN777	WLN798		
Sampling Date		2023/06/07	2023/06/07	2023/06/11		
COC Number		n/a	n/a	n/a		
	UNITS	**A5-YLPR-10 new/split**	**A5-YLPR-10 new/split Lab-Dup**	**A1B-YLPR-08 new/split**	**RDL**	**QC Batch**
Total (Wet Wt) Zinc (Zn)	mg/kg	17.7	18.8	14.8	0.20	8926436
Mercury (Hg)	mg/kg	0.0530	0.0581	0.0189	0.0010	8926434
PHYSICAL PROPERTIES						
Moisture-Subcontracted	%	81	80	81	0.30	8926437

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLN821			WLN828		
Sampling Date		2023/06/13			2023/06/07		
COC Number		n/a			n/a		
	UNITS	SMLK-YLPR-09 new/split	RDL	QC Batch	A5-SPSH-10 new/split	RDL	QC Batch
Metals							
Total (Wet Wt) Aluminum (Al)	mg/kg	1.58	0.50	8926436	<0.50	0.50	8926436
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0020	0.0020	8926436	<0.0020	0.0020	8926436
Total (Wet Wt) Arsenic (As)	mg/kg	0.0692	0.0050	8926436	0.280	0.0050	8926436
Total (Wet Wt) Barium (Ba)	mg/kg	0.532	0.010	8926436	0.964	0.010	8926436
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0020	0.0020	8926436	<0.0020	0.0020	8926436
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0013	0.0013	8926436	<0.0013	0.0013	8926436
Total (Wet Wt) Boron (B)	mg/kg	<0.20	0.20	8926436	<0.20	0.20	8926436
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0098	0.0013	8926436	0.0107	0.0013	8926436
Total (Wet Wt) Calcium (Ca)	mg/kg	9270	4.0	8926436	9130	4.0	8926436
Total (Wet Wt) Chromium (Cr)	mg/kg	0.055	0.025	8926436	<0.025	0.025	8926436
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0064	0.0013	8926436	0.0098	0.0013	8926436
Total (Wet Wt) Copper (Cu)	mg/kg	0.559	0.013	8926436	0.804	0.013	8926436
Total (Wet Wt) Iron (Fe)	mg/kg	14.7	0.25	8926436	11.8	0.25	8926436
Total (Wet Wt) Lead (Pb)	mg/kg	0.0066	0.0013	8926436	0.0094	0.0013	8926436
Total (Wet Wt) Magnesium (Mg)	mg/kg	334	0.40	8926436	414	0.40	8926436
Total (Wet Wt) Manganese (Mn)	mg/kg	5.11	0.010	8926436	2.56	0.010	8926436
Total (Wet Wt) Mercury (Hg)	mg/kg	0.041	0.013	8926436	0.139	0.013	8926436
Total (Wet Wt) Molybdenum (Mo)	mg/kg	0.0255	0.0080	8926436	0.0141	0.0080	8926436
Total (Wet Wt) Nickel (Ni)	mg/kg	0.025	0.010	8926436	0.030	0.010	8926436
Total (Wet Wt) Phosphorus (P)	mg/kg	6190	2.0	8926436	6130	2.0	8926436
Total (Wet Wt) Potassium (K)	mg/kg	3170	2.5	8926436	3080	2.5	8926436
Total (Wet Wt) Selenium (Se)	mg/kg	0.208	0.010	8926436	0.283	0.010	8926436
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0013	0.0013	8926436	<0.0013	0.0013	8926436
Total (Wet Wt) Sodium (Na)	mg/kg	873	2.5	8926436	1650	2.5	8926436
Total (Wet Wt) Strontium (Sr)	mg/kg	1.16	0.013	8926436	2.73	0.013	8926436
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00382	0.00040	8926436	0.00165	0.00040	8926436
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	0.020	8926436	<0.020	0.020	8926436
Total (Wet Wt) Titanium (Ti)	mg/kg	0.35	0.13	8926436	0.27	0.13	8926436
Total (Wet Wt) Uranium (U)	mg/kg	<0.00040	0.00040	8926436	<0.00040	0.00040	8926436
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	0.020	8926436	<0.020	0.020	8926436
Total (Wet Wt) Zinc (Zn)	mg/kg	20.3	0.20	8926436	53.0	0.20	8926436

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLN821			WLN828		
Sampling Date		2023/06/13			2023/06/07		
COC Number		n/a			n/a		
	UNITS	SMLK-YLPR-09 new/split	RDL	QC Batch	A5-SPSH-10 new/split	RDL	QC Batch
Mercury (Hg)	mg/kg	0.0251	0.0010	8926434	0.144	0.0010	8926434
Miscellaneous Parameters							
Fat (gravimetric)	%				0.70	N/A	8939730
PHYSICAL PROPERTIES							
Moisture-Subcontracted	%	78	0.30	8926437	78	0.30	8926437

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLN829			WLN830		
Sampling Date		2023/06/10			2023/06/10		
COC Number		n/a			n/a		
	UNITS	GMLK-SPSH-08 new/split	RDL	QC Batch	GMLK-SPSH-09 new/split	RDL	QC Batch
Metals							
Total (Wet Wt) Aluminum (Al)	mg/kg	1.00	0.50	8926436	6.94	0.50	8926436
Total (Wet Wt) Antimony (Sb)	mg/kg	<0.0020	0.0020	8926436	<0.0020	0.0020	8926436
Total (Wet Wt) Arsenic (As)	mg/kg	0.0812	0.0050	8926436	0.0653	0.0050	8926436
Total (Wet Wt) Barium (Ba)	mg/kg	0.329	0.010	8926436	1.07	0.010	8926436
Total (Wet Wt) Beryllium (Be)	mg/kg	<0.0020	0.0020	8926436	<0.0020	0.0020	8926436
Total (Wet Wt) Bismuth (Bi)	mg/kg	<0.0013	0.0013	8926436	<0.0013	0.0013	8926436
Total (Wet Wt) Boron (B)	mg/kg	<0.20	0.20	8926436	<0.20	0.20	8926436
Total (Wet Wt) Cadmium (Cd)	mg/kg	0.0076	0.0013	8926436	0.0227	0.0013	8926436
Total (Wet Wt) Calcium (Ca)	mg/kg	2980	4.0	8926436	4350	4.0	8926436
Total (Wet Wt) Chromium (Cr)	mg/kg	0.027	0.025	8926436	0.051	0.025	8926436
Total (Wet Wt) Cobalt (Co)	mg/kg	0.0065	0.0013	8926436	0.0120	0.0013	8926436
Total (Wet Wt) Copper (Cu)	mg/kg	0.528	0.013	8926436	0.649	0.013	8926436
Total (Wet Wt) Iron (Fe)	mg/kg	10.2	0.25	8926436	31.4	0.25	8926436
Total (Wet Wt) Lead (Pb)	mg/kg	0.0029	0.0013	8926436	0.0162	0.0013	8926436
Total (Wet Wt) Magnesium (Mg)	mg/kg	265	0.40	8926436	345	0.40	8926436
Total (Wet Wt) Manganese (Mn)	mg/kg	1.59	0.010	8926436	5.54	0.010	8926436
Total (Wet Wt) Mercury (Hg)	mg/kg	0.087	0.013	8926436	0.077	0.013	8926436
Total (Wet Wt) Molybdenum (Mo)	mg/kg	0.0100	0.0080	8926436	0.0246	0.0080	8926436
Total (Wet Wt) Nickel (Ni)	mg/kg	0.019	0.010	8926436	0.048	0.010	8926436
Total (Wet Wt) Phosphorus (P)	mg/kg	3110	2.0	8926436	3910	2.0	8926436
Total (Wet Wt) Potassium (K)	mg/kg	3070	2.5	8926436	3160	2.5	8926436
Total (Wet Wt) Selenium (Se)	mg/kg	0.317	0.010	8926436	0.389	0.010	8926436
Total (Wet Wt) Silver (Ag)	mg/kg	<0.0013	0.0013	8926436	<0.0013	0.0013	8926436
Total (Wet Wt) Sodium (Na)	mg/kg	645	2.5	8926436	809	2.5	8926436
Total (Wet Wt) Strontium (Sr)	mg/kg	0.780	0.013	8926436	1.41	0.013	8926436
Total (Wet Wt) Thallium (Tl)	mg/kg	0.00125	0.00040	8926436	0.00151	0.00040	8926436
Total (Wet Wt) Tin (Sn)	mg/kg	<0.020	0.020	8926436	<0.020	0.020	8926436
Total (Wet Wt) Titanium (Ti)	mg/kg	0.18	0.13	8926436	0.44	0.13	8926436
Total (Wet Wt) Uranium (U)	mg/kg	<0.00040	0.00040	8926436	<0.00040	0.00040	8926436
Total (Wet Wt) Vanadium (V)	mg/kg	<0.020	0.020	8926436	<0.020	0.020	8926436
Total (Wet Wt) Zinc (Zn)	mg/kg	32.6	0.20	8926436	45.0	0.20	8926436

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

RESULTS OF ANALYSES OF TISSUE

Bureau Veritas ID		WLN829			WLN830		
Sampling Date		2023/06/10			2023/06/10		
COC Number		n/a			n/a		
	UNITS	GMLK-SPSH-08 new/split	RDL	QC Batch	GMLK-SPSH-09 new/split	RDL	QC Batch
Mercury (Hg)	mg/kg	0.0655	0.0010	8926434	0.0556	0.0010	8926434
Miscellaneous Parameters							
Fat (gravimetric)	%	0.70	N/A	8939730			
PHYSICAL PROPERTIES							
Moisture-Subcontracted	%	80	0.30	8926437	79	0.30	8926437

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

MERCURY BY COLD VAPOUR AA (TISSUE)

Bureau Veritas ID		WLM912	WLM913	WLM914	WLM915	WLM916	WLM917	WLM918		
Sampling Date		2023/06/07	2023/06/07	2023/06/07	2023/06/07	2023/06/07	2023/06/07	2023/06/07		
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	A5-YLPR-01	A5-YLPR-02	A5-YLPR-04	A5-YLPR-05	A5-YLPR-06	A5-YLPR-07	A5-YLPR-10	RDL	QC Batch
ELEMENTS										
Total (Wet Wt) Methyl Mercury	ng/g	85	75	81	71	84	83	54	1	8926421

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		WLM919	WLM920	WLM921	WLM922	WLM923	WLM924		
Sampling Date		2023/06/11	2023/06/11	2023/06/11	2023/06/11	2023/06/11	2023/06/11		
COC Number		n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	A1B-YLPR-01	A1B-YLPR-02	A1B-YLPR-03	A1B-YLPR-05	A1B-YLPR-06	A1B-YLPR-07	RDL	QC Batch
ELEMENTS									
Total (Wet Wt) Methyl Mercury	ng/g	28	39	28	31	24	<1	1	8926421

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		WLM925	WLM925	WLM926		WLM927	WLM928		
Sampling Date		2023/06/11	2023/06/11	2023/06/13		2023/06/13	2023/06/13		
COC Number		n/a	n/a	n/a		n/a	n/a		
	UNITS	A1B-YLPR-08	A1B-YLPR-08 Lab-Dup	SMLK-YLPR-01	QC Batch	SMLK-YLPR-02	SMLK-YLPR-03	RDL	QC Batch
ELEMENTS									
Total (Wet Wt) Methyl Mercury	ng/g	26	23	56	8926421	42	32	1	8926422

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas ID		WLM929	WLM930	WLM931	WLM932	WLM933	WLM934		
Sampling Date		2023/06/13	2023/06/13	2023/06/13	2023/06/13	2023/06/07	2023/06/07		
COC Number		n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	SMLK-YLPR-05	SMLK-YLPR-07	SMLK-YLPR-08	SMLK-YLPR-09	A5-SPSH-01	A5-SPSH-02	RDL	QC Batch
ELEMENTS									
Total (Wet Wt) Methyl Mercury	ng/g	50	48	31	38	64	59	1	8926422

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

MERCURY BY COLD VAPOUR AA (TISSUE)

Bureau Veritas ID		WLM935	WLM936	WLM937	WLM938	WLM938	WLM939	WLM940		
Sampling Date		2023/06/07	2023/06/07	2023/06/07	2023/06/07	2023/06/07	2023/06/07	2023/06/07		
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	A5-SPSH-03	A5-SPSH-04	A5-SPSH-05	A5-SPSH-06	A5-SPSH-06 Lab-Dup	A5-SPSH-08	A5-SPSH-09	RDL	QC Batch
ELEMENTS										
Total (Wet Wt) Methyl Mercury	ng/g	74	83	110	100	95	130	140	1	8926422

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas ID		WLM941		WLM942	WLM943	WLM944	WLM945		
Sampling Date		2023/06/07		2023/06/10	2023/06/10	2023/06/10	2023/06/10		
COC Number		n/a		n/a	n/a	n/a	n/a		
	UNITS	A5-SPSH-10	QC Batch	GMLK-SPSH-01	GMLK-SPSH-02	GMLK-SPSH-03	GMLK-SPSH-04	RDL	QC Batch
ELEMENTS									
Total (Wet Wt) Methyl Mercury	ng/g	7	8926422	40	36	44	38	1	8926426

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		WLM946	WLM947	WLM948	WLM949	WLM950		
Sampling Date		2023/06/10	2023/06/10	2023/06/10	2023/06/10	2023/06/10		
COC Number		n/a	n/a	n/a	n/a	n/a		
	UNITS	GMLK-SPSH-05	GMLK-SPSH-06	GMLK-SPSH-07	GMLK-SPSH-08	GMLK-SPSH-09	RDL	QC Batch
ELEMENTS								
Total (Wet Wt) Methyl Mercury	ng/g	51	89	60	91	75	1	8926426

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		WLM950	WLM951	WLM952	WLM953	WLM954	WLM955		
Sampling Date		2023/06/10	2023/06/10	2023/06/08	2023/06/08	2023/06/08	2023/06/08		
COC Number		n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	GMLK-SPSH-09 Lab-Dup	GMLK-SPSH-10	MHT-SPSH-01	MHT-SPSH-02	MHT-SPSH-03	MHT-SPSH-04	RDL	QC Batch
ELEMENTS									
Total (Wet Wt) Methyl Mercury	ng/g	82	120	81	110	87	62	1	8926426

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

MERCURY BY COLD VAPOUR AA (TISSUE)

Bureau Veritas ID		WLM956	WLM957		WLM958	WLM959	WLM960		
Sampling Date		2023/06/08	2023/06/08		2023/06/08	2023/06/12	2023/06/12		
COC Number		n/a	n/a		n/a	n/a	n/a		
	UNITS	MHT-SPSH-05	MHT-SPSH-07	QC Batch	MHT-SPSH-08	HRT-SPSH-01	HRT-SPSH-02	RDL	QC Batch
ELEMENTS									
Total (Wet Wt) Methyl Mercury	ng/g	52	63	8926426	110	48	39	1	8926432

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		WLM961	WLM962	WLM963	WLM964	WLM965	WLM966		
Sampling Date		2023/06/12	2023/06/12	2023/06/12	2023/06/12	2023/06/12	2023/06/12		
COC Number		n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	HRT-SPSH-03	HRT-SPSH-04	HRT-SPSH-05	HRT-SPSH-06	HRT-SPSH-07	HRT-SPSH-08	RDL	QC Batch
ELEMENTS									
Total (Wet Wt) Methyl Mercury	ng/g	120	120	100	130	97	99	1	8926432

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		WLM967	WLN777	WLN798	WLN821		
Sampling Date		2023/06/12	2023/06/07	2023/06/11	2023/06/13		
COC Number		n/a	n/a	n/a	n/a		
	UNITS	HRT-SPSH-09	A5-YLPR-10 new/split	A1B-YLPR-08 new/split	SMLK-YLPR-09 new/split	RDL	QC Batch
ELEMENTS							
Total (Wet Wt) Methyl Mercury	ng/g	55	65	24	36	1	8926432

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		WLN821	WLN828	WLN829		
Sampling Date		2023/06/13	2023/06/07	2023/06/10		
COC Number		n/a	n/a	n/a		
	UNITS	SMLK-YLPR-09 new/split Lab-Dup	A5-SPSH-10 new/split	GMLK-SPSH-08 new/split	RDL	QC Batch
ELEMENTS						
Total (Wet Wt) Methyl Mercury	ng/g	42	130	56	1	8926432

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

MERCURY BY COLD VAPOUR AA (TISSUE)

Bureau Veritas ID		WLN830		
Sampling Date		2023/06/10		
COC Number		n/a		
	UNITS	GMLK-SPSH-09 new/split	RDL	QC Batch
ELEMENTS				
Total (Wet Wt) Methyl Mercury	ng/g	89	1	8926432

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

TEST SUMMARY

Bureau Veritas ID: WLM912
Sample ID: A5-YLPR-01
Matrix: Tissue
Collected: 2023/06/07
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926421	2023/09/14	2023/09/14	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/23	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM913
Sample ID: A5-YLPR-02
Matrix: Tissue
Collected: 2023/06/07
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926421	2023/09/14	2023/09/14	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM914
Sample ID: A5-YLPR-04
Matrix: Tissue
Collected: 2023/06/07
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926421	2023/09/14	2023/09/14	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM915
Sample ID: A5-YLPR-05
Matrix: Tissue
Collected: 2023/06/07
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926421	2023/09/14	2023/09/14	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/23	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM916
Sample ID: A5-YLPR-06
Matrix: Tissue
Collected: 2023/06/07
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

TEST SUMMARY

Bureau Veritas ID: WLM916 **Collected:** 2023/06/07
Sample ID: A5-YLPR-06 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926421	2023/09/14	2023/09/14	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM917 **Collected:** 2023/06/07
Sample ID: A5-YLPR-07 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926421	2023/09/14	2023/09/14	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM918 **Collected:** 2023/06/07
Sample ID: A5-YLPR-10 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926421	2023/09/14	2023/09/14	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM919 **Collected:** 2023/06/11
Sample ID: A1B-YLPR-01 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926421	2023/09/14	2023/09/14	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM920 **Collected:** 2023/06/11
Sample ID: A1B-YLPR-02 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926421	2023/09/14	2023/09/14	Renegie Lampong-Inactive

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WLM920 **Collected:** 2023/06/11
Sample ID: A1B-YLPR-02 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM921 **Collected:** 2023/06/11
Sample ID: A1B-YLPR-03 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926421	2023/09/14	2023/09/14	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM922 **Collected:** 2023/06/11
Sample ID: A1B-YLPR-05 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926421	2023/09/14	2023/09/14	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM923 **Collected:** 2023/06/11
Sample ID: A1B-YLPR-06 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926421	2023/09/14	2023/09/14	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM924 **Collected:** 2023/06/11
Sample ID: A1B-YLPR-07 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926421	2023/09/14	2023/09/14	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WLM924
Sample ID: A1B-YLPR-07
Matrix: Tissue

Collected: 2023/06/11
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM925
Sample ID: A1B-YLPR-08
Matrix: Tissue

Collected: 2023/06/11
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926421	2023/09/14	2023/09/14	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM925 Dup
Sample ID: A1B-YLPR-08
Matrix: Tissue

Collected: 2023/06/11
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926421	2023/09/14	2023/09/14	Renegie Lampong-Inactive

Bureau Veritas ID: WLM926
Sample ID: SMLK-YLPR-01
Matrix: Tissue

Collected: 2023/06/13
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926421	2023/09/14	2023/09/14	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM927
Sample ID: SMLK-YLPR-02
Matrix: Tissue

Collected: 2023/06/13
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926422	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

TEST SUMMARY

Bureau Veritas ID: WLM928
Sample ID: SMLK-YLPR-03
Matrix: Tissue

Collected: 2023/06/13
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926422	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM929
Sample ID: SMLK-YLPR-05
Matrix: Tissue

Collected: 2023/06/13
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926422	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM930
Sample ID: SMLK-YLPR-07
Matrix: Tissue

Collected: 2023/06/13
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926422	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM930 Dup
Sample ID: SMLK-YLPR-07
Matrix: Tissue

Collected: 2023/06/13
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda

Bureau Veritas ID: WLM931
Sample ID: SMLK-YLPR-08
Matrix: Tissue

Collected: 2023/06/13
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926417	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926422	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926419	2023/08/23	2023/08/27	Megan Mak

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WLM931 **Collected:** 2023/06/13
Sample ID: SMLK-YLPR-08 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture in Tissue-Freeze Drying	BAL/BAL	8926420	2023/08/25	2023/08/25	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM932 **Collected:** 2023/06/13
Sample ID: SMLK-YLPR-09 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926422	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/25	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM932 Dup **Collected:** 2023/06/13
Sample ID: SMLK-YLPR-09 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/25	Cyrhea Goda

Bureau Veritas ID: WLM933 **Collected:** 2023/06/07
Sample ID: A5-SPSH-01 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926422	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8933772	2023/09/22	2023/09/22	Harnoor Kaur

Bureau Veritas ID: WLM934 **Collected:** 2023/06/07
Sample ID: A5-SPSH-02 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926422	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

TEST SUMMARY

Bureau Veritas ID: WLM935
Sample ID: A5-SPSH-03
Matrix: Tissue

Collected: 2023/06/07
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926422	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM936
Sample ID: A5-SPSH-04
Matrix: Tissue

Collected: 2023/06/07
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926422	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM937
Sample ID: A5-SPSH-05
Matrix: Tissue

Collected: 2023/06/07
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926422	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM938
Sample ID: A5-SPSH-06
Matrix: Tissue

Collected: 2023/06/07
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926422	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM938 Dup
Sample ID: A5-SPSH-06
Matrix: Tissue

Collected: 2023/06/07
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926422	2023/09/13	2023/09/13	Renegie Lampong-Inactive

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

TEST SUMMARY

Bureau Veritas ID: WLM939
Sample ID: A5-SPSH-08
Matrix: Tissue

Collected: 2023/06/07
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926422	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM940
Sample ID: A5-SPSH-09
Matrix: Tissue

Collected: 2023/06/07
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926422	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM941
Sample ID: A5-SPSH-10
Matrix: Tissue

Collected: 2023/06/07
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926422	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLM942
Sample ID: GMLK-SPSH-01
Matrix: Tissue

Collected: 2023/06/10
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM943
Sample ID: GMLK-SPSH-02
Matrix: Tissue

Collected: 2023/06/10
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

TEST SUMMARY

Bureau Veritas ID: WLM943
Sample ID: GMLK-SPSH-02
Matrix: Tissue
Collected: 2023/06/10
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM944
Sample ID: GMLK-SPSH-03
Matrix: Tissue
Collected: 2023/06/10
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM945
Sample ID: GMLK-SPSH-04
Matrix: Tissue
Collected: 2023/06/10
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM946
Sample ID: GMLK-SPSH-05
Matrix: Tissue
Collected: 2023/06/10
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM947
Sample ID: GMLK-SPSH-06
Matrix: Tissue
Collected: 2023/06/10
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WLM947 **Collected:** 2023/06/10
Sample ID: GMLK-SPSH-06 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM948 **Collected:** 2023/06/10
Sample ID: GMLK-SPSH-07 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM949 **Collected:** 2023/06/10
Sample ID: GMLK-SPSH-08 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM950 **Collected:** 2023/06/10
Sample ID: GMLK-SPSH-09 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM950 Dup **Collected:** 2023/06/10
Sample ID: GMLK-SPSH-09 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

TEST SUMMARY

Bureau Veritas ID: WLM951
Sample ID: GMLK-SPSH-10
Matrix: Tissue

Collected: 2023/06/10
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926423	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926424	2023/08/23	2023/08/27	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926425	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM952
Sample ID: MHT-SPSH-01
Matrix: Tissue

Collected: 2023/06/08
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/26	Cyrhea Goda
Percent Lipid Content		8937657	2023/09/24	2023/09/26	Harnoor Kaur

Bureau Veritas ID: WLM953
Sample ID: MHT-SPSH-02
Matrix: Tissue

Collected: 2023/06/08
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLM954
Sample ID: MHT-SPSH-03
Matrix: Tissue

Collected: 2023/06/08
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLM955
Sample ID: MHT-SPSH-04
Matrix: Tissue

Collected: 2023/06/08
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WLM955 **Collected:** 2023/06/08
Sample ID: MHT-SPSH-04 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLM956 **Collected:** 2023/06/08
Sample ID: MHT-SPSH-05 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLM957 **Collected:** 2023/06/08
Sample ID: MHT-SPSH-07 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926426	2023/09/12	2023/09/12	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLM958 **Collected:** 2023/06/08
Sample ID: MHT-SPSH-08 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLM959 **Collected:** 2023/06/12
Sample ID: HRT-SPSH-01 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

TEST SUMMARY

Bureau Veritas ID: WLM959 **Collected:** 2023/06/12
Sample ID: HRT-SPSH-01 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLM960 **Collected:** 2023/06/12
Sample ID: HRT-SPSH-02 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLM961 **Collected:** 2023/06/12
Sample ID: HRT-SPSH-03 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLM961 Dup **Collected:** 2023/06/12
Sample ID: HRT-SPSH-03 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/25	Cyrhea Goda

Bureau Veritas ID: WLM962 **Collected:** 2023/06/12
Sample ID: HRT-SPSH-04 **Shipped:**
Matrix: Tissue **Received:** 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

TEST SUMMARY

Bureau Veritas ID: WLM963
Sample ID: HRT-SPSH-05
Matrix: Tissue

Collected: 2023/06/12
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLM964
Sample ID: HRT-SPSH-06
Matrix: Tissue

Collected: 2023/06/12
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLM965
Sample ID: HRT-SPSH-07
Matrix: Tissue

Collected: 2023/06/12
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLM966
Sample ID: HRT-SPSH-08
Matrix: Tissue

Collected: 2023/06/12
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLM967
Sample ID: HRT-SPSH-09
Matrix: Tissue

Collected: 2023/06/12
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926428	N/A	2023/08/28	John Choo

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

TEST SUMMARY

Bureau Veritas ID: WLM967
Sample ID: HRT-SPSH-09
Matrix: Tissue

Collected: 2023/06/12
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926429	2023/08/23	2023/08/28	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926430	2023/08/23	2023/08/24	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLN777
Sample ID: A5-YLPR-10 new/split
Matrix: Tissue

Collected: 2023/06/07
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926434	N/A	2023/09/12	Chamila Jayasinghe
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926436	2023/09/09	2023/09/12	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926437	2023/09/07	2023/09/09	Cyrhea Goda

Bureau Veritas ID: WLN777 Dup
Sample ID: A5-YLPR-10 new/split
Matrix: Tissue

Collected: 2023/06/07
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926434	N/A	2023/09/12	Chamila Jayasinghe
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926436	2023/09/09	2023/09/12	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926437	2023/09/07	2023/09/08	Cyrhea Goda

Bureau Veritas ID: WLN798
Sample ID: A1B-YLPR-08 new/split
Matrix: Tissue

Collected: 2023/06/11
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926434	N/A	2023/09/12	Chamila Jayasinghe
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926436	2023/09/09	2023/09/12	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926437	2023/09/07	2023/09/08	Cyrhea Goda

Bureau Veritas ID: WLN821
Sample ID: SMLK-YLPR-09 new/split
Matrix: Tissue

Collected: 2023/06/13
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926434	N/A	2023/09/12	Chamila Jayasinghe
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926436	2023/09/09	2023/09/12	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926437	2023/09/07	2023/09/08	Cyrhea Goda

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: WLN821 Dup
Sample ID: SMLK-YLPR-09 new/split
Matrix: Tissue
Collected: 2023/06/13
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive

Bureau Veritas ID: WLN828
Sample ID: A5-SPSH-10 new/split
Matrix: Tissue
Collected: 2023/06/07
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926434	N/A	2023/09/12	Chamila Jayasinghe
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926436	2023/09/09	2023/09/12	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926437	2023/09/07	2023/09/08	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLN829
Sample ID: GMLK-SPSH-08 new/split
Matrix: Tissue
Collected: 2023/06/10
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926434	N/A	2023/09/12	Chamila Jayasinghe
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926436	2023/09/09	2023/09/12	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926437	2023/09/07	2023/09/08	Cyrhea Goda
Percent Lipid Content		8939730	2023/09/25	2023/09/27	Harnoor Kaur

Bureau Veritas ID: WLN830
Sample ID: GMLK-SPSH-09 new/split
Matrix: Tissue
Collected: 2023/06/10
Shipped:
Received: 2023/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury in Tissue by CVAF - Wet Wt	CV/AF	8926434	N/A	2023/09/12	Chamila Jayasinghe
Methyl Mercury in Tissue by GC - Wet Wt	CV	8926432	2023/09/13	2023/09/13	Renegie Lampong-Inactive
Elements by ICPMS - Tissue Plug Wet Wt	ICP/MS	8926436	2023/09/09	2023/09/12	Megan Mak
Moisture in Tissue-Freeze Drying	BAL/BAL	8926437	2023/09/07	2023/09/08	Cyrhea Goda

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

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

Package 1	1.0°C

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8926417	Mercury (Hg)	2023/08/28	93	80 - 120	<0.0010	mg/kg	2.8	40	72	N/A
8926419	Total (Wet Wt) Aluminum (Al)	2023/08/27	112	80 - 120	<0.50	mg/kg	1.3	40		
8926419	Total (Wet Wt) Antimony (Sb)	2023/08/27	103	80 - 120	<0.0020	mg/kg	NC	40	113	N/A
8926419	Total (Wet Wt) Arsenic (As)	2023/08/27	103	80 - 120	<0.0050	mg/kg	0.81	40	91	N/A
8926419	Total (Wet Wt) Barium (Ba)	2023/08/27	103	80 - 120	<0.010	mg/kg	3.9	40		
8926419	Total (Wet Wt) Beryllium (Be)	2023/08/27	110	80 - 120	<0.0020	mg/kg	NC	40		
8926419	Total (Wet Wt) Bismuth (Bi)	2023/08/27	102	80 - 120	<0.0013	mg/kg	NC	40		
8926419	Total (Wet Wt) Boron (B)	2023/08/27	109	80 - 120	<0.20	mg/kg	NC	40		
8926419	Total (Wet Wt) Cadmium (Cd)	2023/08/27	99	80 - 120	<0.0013	mg/kg	15	40	89	N/A
8926419	Total (Wet Wt) Calcium (Ca)	2023/08/27	104	80 - 120	<4.0	mg/kg	0.59	60	96	N/A
8926419	Total (Wet Wt) Chromium (Cr)	2023/08/27	100	80 - 120	<0.025	mg/kg	6.4	40		
8926419	Total (Wet Wt) Cobalt (Co)	2023/08/27	98	80 - 120	<0.0013	mg/kg	2.4	40	85	N/A
8926419	Total (Wet Wt) Copper (Cu)	2023/08/27	98	80 - 120	<0.013	mg/kg	17	40	88	N/A
8926419	Total (Wet Wt) Iron (Fe)	2023/08/27	104	80 - 120	<0.25	mg/kg	1.5	40	93	N/A
8926419	Total (Wet Wt) Lead (Pb)	2023/08/27	101	80 - 120	<0.0013	mg/kg	28	40	83	N/A
8926419	Total (Wet Wt) Magnesium (Mg)	2023/08/27	100	80 - 120	<0.40	mg/kg	4.4	40		
8926419	Total (Wet Wt) Manganese (Mn)	2023/08/27	106	80 - 120	<0.010	mg/kg	4.2	40	93	N/A
8926419	Total (Wet Wt) Molybdenum (Mo)	2023/08/27	103	80 - 120	<0.0080	mg/kg	NC	40	89	N/A
8926419	Total (Wet Wt) Nickel (Ni)	2023/08/27	100	80 - 120	<0.010	mg/kg	7.4	40		
8926419	Total (Wet Wt) Phosphorus (P)	2023/08/27	104	80 - 120	2.1, RDL=2.0 (1)	mg/kg	4.9	40	95	N/A
8926419	Total (Wet Wt) Potassium (K)	2023/08/27	103	80 - 120	<2.5	mg/kg	4.2	40	97	N/A
8926419	Total (Wet Wt) Selenium (Se)	2023/08/27	96	80 - 120	<0.010	mg/kg	6.1	40	82	N/A
8926419	Total (Wet Wt) Silver (Ag)	2023/08/27	102	80 - 120	<0.0013	mg/kg	NC	40	89	N/A
8926419	Total (Wet Wt) Sodium (Na)	2023/08/27	100	80 - 120	<2.5	mg/kg	6.3	40	94	N/A
8926419	Total (Wet Wt) Strontium (Sr)	2023/08/27	107	80 - 120	<0.013	mg/kg	2.2	60	103	N/A
8926419	Total (Wet Wt) Thallium (Tl)	2023/08/27	102	80 - 120	<0.00040	mg/kg	0.67	40	93	N/A
8926419	Total (Wet Wt) Tin (Sn)	2023/08/27	104	80 - 120	<0.020	mg/kg	NC	40	112	N/A
8926419	Total (Wet Wt) Titanium (Ti)	2023/08/27	104	80 - 120	<0.13	mg/kg	4.6	40		
8926419	Total (Wet Wt) Uranium (U)	2023/08/27	105	80 - 120	<0.00040	mg/kg	NC	40	98	N/A
8926419	Total (Wet Wt) Vanadium (V)	2023/08/27	101	80 - 120	<0.020	mg/kg	NC	40	85	N/A
8926419	Total (Wet Wt) Zinc (Zn)	2023/08/27	100	80 - 120	<0.20	mg/kg	2.9	40	90	N/A

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8926420	Moisture-Subcontracted	2023/08/25					0.50	20		
8926421	Total (Wet Wt) Methyl Mercury	2023/09/14	87	80 - 120	<1	ng/g	11	40	102	N/A
8926422	Total (Wet Wt) Methyl Mercury	2023/09/13	81	80 - 120	<1	ng/g	5.8	40	116	80 - 120
8926423	Mercury (Hg)	2023/08/28	105	80 - 120	<0.0010	mg/kg	1.7	40	72	N/A
8926424	Total (Wet Wt) Aluminum (Al)	2023/08/27	110	80 - 120	<0.50	mg/kg	1.8	40		
8926424	Total (Wet Wt) Antimony (Sb)	2023/08/27	110	80 - 120	<0.0020	mg/kg	1.0	40	90	75 - 125
8926424	Total (Wet Wt) Arsenic (As)	2023/08/27	109	80 - 120	<0.0050	mg/kg	2.4	40	90	75 - 125
8926424	Total (Wet Wt) Barium (Ba)	2023/08/27	109	80 - 120	<0.010	mg/kg	1.5	40		
8926424	Total (Wet Wt) Beryllium (Be)	2023/08/27	104	80 - 120	<0.0020	mg/kg	NC	40		
8926424	Total (Wet Wt) Bismuth (Bi)	2023/08/27	105	80 - 120	<0.0013	mg/kg	NC	40		
8926424	Total (Wet Wt) Boron (B)	2023/08/27	106	80 - 120	<0.20	mg/kg	NC	40		
8926424	Total (Wet Wt) Cadmium (Cd)	2023/08/27	105	80 - 120	<0.0013	mg/kg	5.1	40	87	75 - 125
8926424	Total (Wet Wt) Calcium (Ca)	2023/08/27	107	80 - 120	<4.0	mg/kg	0.75	60	86	75 - 125
8926424	Total (Wet Wt) Chromium (Cr)	2023/08/27	107	80 - 120	<0.025	mg/kg	2.2	40		
8926424	Total (Wet Wt) Cobalt (Co)	2023/08/27	104	80 - 120	<0.0013	mg/kg	4.9	40	84	75 - 125
8926424	Total (Wet Wt) Copper (Cu)	2023/08/27	104	80 - 120	<0.013	mg/kg	2.7	40	88	75 - 125
8926424	Total (Wet Wt) Iron (Fe)	2023/08/27	109	80 - 120	<0.25	mg/kg	0.30	40	91	75 - 125
8926424	Total (Wet Wt) Lead (Pb)	2023/08/27	102	80 - 120	<0.0013	mg/kg	19	40	81	75 - 125
8926424	Total (Wet Wt) Magnesium (Mg)	2023/08/27	102	80 - 120	<0.40	mg/kg	3.0	40		
8926424	Total (Wet Wt) Manganese (Mn)	2023/08/27	108	80 - 120	<0.010	mg/kg	4.2	40	89	75 - 125
8926424	Total (Wet Wt) Molybdenum (Mo)	2023/08/27	108	80 - 120	<0.0080	mg/kg	6.2	40	87	75 - 125
8926424	Total (Wet Wt) Nickel (Ni)	2023/08/27	106	80 - 120	<0.010	mg/kg	18	40		
8926424	Total (Wet Wt) Phosphorus (P)	2023/08/27	104	80 - 120	<2.0 (1)	mg/kg	3.2	40	92	75 - 125
8926424	Total (Wet Wt) Potassium (K)	2023/08/27	102	80 - 120	<2.5	mg/kg	4.4	40	94	75 - 125
8926424	Total (Wet Wt) Selenium (Se)	2023/08/27	108	80 - 120	<0.010	mg/kg	0.074	40	84	75 - 125
8926424	Total (Wet Wt) Silver (Ag)	2023/08/27	106	80 - 120	<0.0013	mg/kg	NC	40	87	75 - 125
8926424	Total (Wet Wt) Sodium (Na)	2023/08/27	107	80 - 120	<2.5	mg/kg	4.2	40	94	75 - 125
8926424	Total (Wet Wt) Strontium (Sr)	2023/08/27	107	80 - 120	<0.013	mg/kg	3.7	60	90	75 - 125
8926424	Total (Wet Wt) Thallium (Tl)	2023/08/27	106	80 - 120	<0.00040	mg/kg	0.88	40	84	75 - 125
8926424	Total (Wet Wt) Tin (Sn)	2023/08/27	103	80 - 120	<0.020	mg/kg	NC	40	90	75 - 125
8926424	Total (Wet Wt) Titanium (Ti)	2023/08/27	110	80 - 120	<0.13	mg/kg	32	40		

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8926424	Total (Wet Wt) Uranium (U)	2023/08/27	108	80 - 120	<0.00040	mg/kg	19	40	91	75 - 125
8926424	Total (Wet Wt) Vanadium (V)	2023/08/27	107	80 - 120	<0.020	mg/kg	NC	40	83	75 - 125
8926424	Total (Wet Wt) Zinc (Zn)	2023/08/27	105	80 - 120	<0.20	mg/kg	4.0	40	87	75 - 125
8926425	Moisture-Subcontracted	2023/08/25					0.65	20		
8926426	Total (Wet Wt) Methyl Mercury	2023/09/12	100	80 - 120	<1	ng/g	9.7	40	101	N/A
8926428	Mercury (Hg)	2023/08/28	93	80 - 120	<0.0010	mg/kg	0.66	40	71	59 - 141
8926429	Total (Wet Wt) Aluminum (Al)	2023/08/28	99	80 - 120	<0.50	mg/kg	1.3	40		
8926429	Total (Wet Wt) Antimony (Sb)	2023/08/28	102	80 - 120	<0.0020	mg/kg	13	40	121	N/A
8926429	Total (Wet Wt) Arsenic (As)	2023/08/28	98	80 - 120	<0.0050	mg/kg	0.17	40	89	N/A
8926429	Total (Wet Wt) Barium (Ba)	2023/08/28	97	80 - 120	<0.010	mg/kg	2.8	40		
8926429	Total (Wet Wt) Beryllium (Be)	2023/08/28	96	80 - 120	<0.0020	mg/kg	NC	40		
8926429	Total (Wet Wt) Bismuth (Bi)	2023/08/28	95	80 - 120	<0.0013	mg/kg	NC	40		
8926429	Total (Wet Wt) Boron (B)	2023/08/28	97	80 - 120	<0.20	mg/kg	NC	40		
8926429	Total (Wet Wt) Cadmium (Cd)	2023/08/28	96	80 - 120	<0.0013	mg/kg	0.24	40	88	N/A
8926429	Total (Wet Wt) Calcium (Ca)	2023/08/28	101	80 - 120	<4.0	mg/kg	3.0	60	100	N/A
8926429	Total (Wet Wt) Chromium (Cr)	2023/08/28	95	80 - 120	<0.025	mg/kg	3.3	40		
8926429	Total (Wet Wt) Cobalt (Co)	2023/08/28	94	80 - 120	<0.0013	mg/kg	6.8	40	83	N/A
8926429	Total (Wet Wt) Copper (Cu)	2023/08/28	93	80 - 120	<0.013	mg/kg	3.0	40	87	N/A
8926429	Total (Wet Wt) Iron (Fe)	2023/08/28	99	80 - 120	<0.25	mg/kg	4.2	40	89	N/A
8926429	Total (Wet Wt) Lead (Pb)	2023/08/28	93	80 - 120	<0.0013	mg/kg	33	40	94	N/A
8926429	Total (Wet Wt) Magnesium (Mg)	2023/08/28	98	80 - 120	<0.40	mg/kg	0.22	40		
8926429	Total (Wet Wt) Manganese (Mn)	2023/08/28	96	80 - 120	<0.010	mg/kg	3.0	40	89	N/A
8926429	Total (Wet Wt) Molybdenum (Mo)	2023/08/28	97	80 - 120	<0.0080	mg/kg	1.6	40	87	N/A
8926429	Total (Wet Wt) Nickel (Ni)	2023/08/28	94	80 - 120	<0.010	mg/kg	6.5	40		
8926429	Total (Wet Wt) Phosphorus (P)	2023/08/28	99	80 - 120	<2.0 (1)	mg/kg	1.3	40	92	N/A
8926429	Total (Wet Wt) Potassium (K)	2023/08/28	99	80 - 120	<2.5	mg/kg	2.6	40	94	N/A
8926429	Total (Wet Wt) Selenium (Se)	2023/08/28	98	80 - 120	<0.010	mg/kg	7.4	40	86	N/A
8926429	Total (Wet Wt) Silver (Ag)	2023/08/28	96	80 - 120	<0.0013	mg/kg	6.2	40	89	N/A
8926429	Total (Wet Wt) Sodium (Na)	2023/08/28	105	80 - 120	<2.5	mg/kg	3.6	40	98	N/A
8926429	Total (Wet Wt) Strontium (Sr)	2023/08/28	94	80 - 120	<0.013	mg/kg	1.4	60	101	N/A
8926429	Total (Wet Wt) Thallium (Tl)	2023/08/28	96	80 - 120	<0.00040	mg/kg	7.5	40	85	N/A

QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8926429	Total (Wet Wt) Tin (Sn)	2023/08/28	96	80 - 120	<0.020	mg/kg	NC	40	82	N/A
8926429	Total (Wet Wt) Titanium (Ti)	2023/08/28	97	80 - 120	<0.13	mg/kg	5.4	40		
8926429	Total (Wet Wt) Uranium (U)	2023/08/28	97	80 - 120	<0.00040	mg/kg	2.3	40	94	N/A
8926429	Total (Wet Wt) Vanadium (V)	2023/08/28	96	80 - 120	<0.020	mg/kg	15	40	86	N/A
8926429	Total (Wet Wt) Zinc (Zn)	2023/08/28	96	80 - 120	<0.20	mg/kg	1.8	40	89	N/A
8926430	Moisture-Subcontracted	2023/08/25					1.9	20		
8926432	Total (Wet Wt) Methyl Mercury	2023/09/13	106	80 - 120	<1	ng/g	18	40	81	N/A
8926434	Mercury (Hg)	2023/09/12	83	80 - 120	<0.0010	mg/kg	9.1	40	67	N/A
8926436	Total (Wet Wt) Aluminum (Al)	2023/09/12	102	80 - 120	<0.50	mg/kg	27	40		
8926436	Total (Wet Wt) Antimony (Sb)	2023/09/12	105	80 - 120	<0.0020	mg/kg	NC	40	84	N/A
8926436	Total (Wet Wt) Arsenic (As)	2023/09/12	106	80 - 120	<0.0050	mg/kg	11	40	101	N/A
8926436	Total (Wet Wt) Barium (Ba)	2023/09/12	103	80 - 120	<0.010	mg/kg	13	40		
8926436	Total (Wet Wt) Beryllium (Be)	2023/09/12	92	80 - 120	<0.0020	mg/kg	NC	40		
8926436	Total (Wet Wt) Bismuth (Bi)	2023/09/12	99	80 - 120	<0.0013	mg/kg	NC	40		
8926436	Total (Wet Wt) Boron (B)	2023/09/12	100	80 - 120	<0.20	mg/kg	NC	40		
8926436	Total (Wet Wt) Cadmium (Cd)	2023/09/12	100	80 - 120	<0.0013	mg/kg	8.2	40	98	N/A
8926436	Total (Wet Wt) Calcium (Ca)	2023/09/12	101	80 - 120	<4.0	mg/kg	6.2	60	97	N/A
8926436	Total (Wet Wt) Chromium (Cr)	2023/09/12	104	80 - 120	<0.025	mg/kg	1.0	40		
8926436	Total (Wet Wt) Cobalt (Co)	2023/09/12	103	80 - 120	<0.0013	mg/kg	0.44	40	95	N/A
8926436	Total (Wet Wt) Copper (Cu)	2023/09/12	103	80 - 120	<0.013	mg/kg	6.9	40	99	N/A
8926436	Total (Wet Wt) Iron (Fe)	2023/09/12	110	80 - 120	<0.25	mg/kg	2.3	40	102	N/A
8926436	Total (Wet Wt) Lead (Pb)	2023/09/12	101	80 - 120	<0.0013	mg/kg	7.8	40	112	N/A
8926436	Total (Wet Wt) Magnesium (Mg)	2023/09/12	99	80 - 120	<0.40	mg/kg	11	40		
8926436	Total (Wet Wt) Manganese (Mn)	2023/09/12	101	80 - 120	<0.010	mg/kg	8.3	40	98	N/A
8926436	Total (Wet Wt) Mercury (Hg)	2023/09/12	100	80 - 120	<0.013	mg/kg	12	40	87	N/A
8926436	Total (Wet Wt) Molybdenum (Mo)	2023/09/12	106	80 - 120	<0.0080	mg/kg	20	40	96	N/A
8926436	Total (Wet Wt) Nickel (Ni)	2023/09/12	104	80 - 120	<0.010	mg/kg	5.6	40		
8926436	Total (Wet Wt) Phosphorus (P)	2023/09/12	97	80 - 120	<2.0	mg/kg	6.9	40	96	N/A
8926436	Total (Wet Wt) Potassium (K)	2023/09/12	98	80 - 120	<2.5	mg/kg	6.9	40	103	N/A
8926436	Total (Wet Wt) Selenium (Se)	2023/09/12	108	80 - 120	<0.010	mg/kg	10	40	102	N/A
8926436	Total (Wet Wt) Silver (Ag)	2023/09/12	104	80 - 120	<0.0013	mg/kg	NC	40	98	N/A

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8926436	Total (Wet Wt) Sodium (Na)	2023/09/12	102	80 - 120	<2.5	mg/kg	6.2	40	107	N/A
8926436	Total (Wet Wt) Strontium (Sr)	2023/09/12	98	80 - 120	<0.013	mg/kg	6.2	60	98	N/A
8926436	Total (Wet Wt) Thallium (Tl)	2023/09/12	101	80 - 120	<0.00040	mg/kg	12	40	98	N/A
8926436	Total (Wet Wt) Tin (Sn)	2023/09/12	107	80 - 120	<0.020	mg/kg	NC	40	100	N/A
8926436	Total (Wet Wt) Titanium (Ti)	2023/09/12	107	80 - 120	<0.13	mg/kg	1.6	40		
8926436	Total (Wet Wt) Uranium (U)	2023/09/12	101	80 - 120	<0.00040	mg/kg	NC	40	95	N/A
8926436	Total (Wet Wt) Vanadium (V)	2023/09/12	101	80 - 120	<0.020	mg/kg	NC	40	84	N/A
8926436	Total (Wet Wt) Zinc (Zn)	2023/09/12	107	80 - 120	<0.20	mg/kg	5.6	40	97	N/A
8926437	Moisture-Subcontracted	2023/09/08					0.37	20		
8933772	Fat (gravimetric)	2023/09/22			0	%				
8937657	Fat (gravimetric)	2023/09/26			0	%				
8939730	Fat (gravimetric)	2023/09/27			0	%				

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Method Blank exceeds acceptance limits for (Phosphorus). Sample values for (Phosphorus) are >10x the concentration of the method blank and the contamination is considered irrelevant.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3L7246
Report Date: 2023/10/03

Stantec Consulting Ltd
Client Project #: 160901057
Site Location: GGM - GERALDTON
Sampler Initials: NB

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

<original signed by>

Cristina Carriere, Senior Scientific Specialist

<original signed by>

David Huang, BBY Scientific Specialist

Bureau Veritas Proprietary Software
Logiciel Propriétaire de Bureau Veritas

Automated Statchk

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

www.BVNA.com

6740 Campobello Road, Mississauga, Ontario L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5779 Toll Free: 800-563-6266

CHAIN OF CUSTODY RECORD

ENV COC - 00014v3

21-Jul-23 08:42
BV Labs - Lake Zurich
C3L7246

SPJ FZ-46

Invoice Information	Invoice to (requires report) ☑	Report Information (if differs from invoice)		Project Information	
Company:	Stantec Consulting Ltd	Company:		Quotation #:	C33414
Contact Name:	Mike Johns	Contact Name:		P.O. #/ AFE#:	
Street Address:	100-300 Hagey Blvd	Street Address:		Project #:	160901057
City:	Waterloo Prov: ON Postal Code: N2L 0A4	City:	Prov: Postal Code:	Site #:	
Phone:	519-400-6412 (nathan Burnett)	Phone:		Site Location:	GGM - Geraldton
Email:	nathan.burnett@stantec.com	Email:		Site Location Province:	Ontario
Copies:		Copies:		Sampled By:	N. Burnett

Regulatory Criteria

REG 153: ☐ Table 1 ☐ Table 2 ☐ Table 3 ☐ Table _____ ☐ Res/Park ☐ Ind/Comm ☐ Agri/other ☐ Med/Fine ☐ Course ☐ For RSC

OTHER: ☐ CCME ☐ Reg 558* ☐ Reg 406, Table: _____ *min 3 day TAT ☐ MISA ☐ PWQO ☐ Sanitary Sewer Bylaw ☐ Storm Sewer Bylaw Municipality _____ ☐ Other:

Include Criteria on Certificate of Analysis (check if yes): ☐

SAMPLES MUST BE KEPT COOL (<10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

Regular Turnaround Time (TAT): ☑ 5 to 7 Day ☐ 10 Day

Rush Turnaround Time (TAT) Surcharges apply: ☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 4 Day

Date Required: YY MM DD

	Sample Identification	Date Sampled YY	MM	DD	Time (24hr) HH	MM	Matrix	FIELD FILTERED	FIELD PRESERVED	LAB FILTRATION REQUIRED	Sample Homogenization	Metals - Mining Metals Package for Tissue	% Lipids	% Moisture	Hg by CVAF (wet)	Methylmercury (dry or wet)	10	11	12	13	14	15	16	17	18	19	20	# OF CONTAINERS SUBMITTED	HOLD - DO NOT ANALYZE	Comments
1	A5-YLPR-01	23	06	07	-	-	Tissue				X	X	X	X	X	X	#1 of Duplicate ★		#Homogenize, split sample and analyze accordingly ★		Discuss with K. Szozda	If unclear	★ Insufficient tissue for analysis	Duplicates to be sent to Flett Research (methylmercury) as third duplicates.				1		Please contact Katherine Szozda
2	A5-YLPR-02	23	06	07	-	-	Tissue				X	X	X	X	X	X												1		BV PM - Ottawa
3	A5-YLPR-04	23	06	07	-	-	Tissue				X	X	X	X	X	X												1		for sample prep and instructions
4	A5-YLPR-05	23	06	07	-	-	Tissue				X	X	X	X	X	X												1		Please contact Katherine Szozda
5	A5-YLPR-06	23	06	07	-	-	Tissue				X	X	X	X	X	X												1		BV PM - Ottawa
6	A5-YLPR-07	23	06	07	-	-	Tissue				X	X	X	X	X	X												1		for sample prep and instructions
7	A5-YLPR-10	23	06	07	-	-	Tissue				X	X	X	X	X	X	X											1		Please contact Katherine Szozda
8	A1B-YLPR-01	23	06	11	-	-	Tissue				X	X	X	X	X	X												1		BV PM - Ottawa
9	A1B-YLPR-02	23	06	11	-	-	Tissue				X	X	X	X	X	X												1		for sample prep and instructions
10	A1B-YLPR-03	23	06	11	-	-	Tissue				X	X	X	X	X	X												1		Please contact Katherine Szozda
11	A1B-YLPR-05	23	06	11	-	-	Tissue				X	X	X	X	X	X												1		BV PM - Ottawa
12	A1B-YLPR-06	23	06	11	-	-	Tissue				X	X	X	X	X	X												1		for sample prep and instructions

*UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS AND CONDITIONS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM. TERMS-AND-CONDITIONS OR BY CALLING THE LABORATORY LISTED ABOVE TO OBTAIN A COPY

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present		✓				
Seal intact						
Cooling media present	✓					

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present						
Seal intact						
Cooling media present						

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present						
Seal intact						
Cooling media present						

Temperature reading by:

Relinquished by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Received by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Special instructions
1 <original signed by>	23	07	20	8	40	1 <original signed by>	23	07	21	08	42	
2						2						

www.BVNA.com

6740 Campobello Road, Mississauga, Ontario L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5779 Toll Free: 800-563-6266

CHAIN OF CUSTODY RECORD

ENV COC - 00014v3

Invoice Information	Invoice to (requires report) ☑	Report Information (if differs from invoice)		Project Information	
Company :	Stantec Consulting Ltd	Company:		Quotation #:	C33414
Contact Name:	Mike Johns	Contact Name:		P.O. #/ AFE#:	
Street Address:	100-300 Hagey Blvd	Street Address:		Project #:	160901057
City: Waterloo Prov: ON Postal Code: N2L 0A4		City: Prov: Postal Code:		Site #:	
Phone:	519-400-6412 (nathan Burnett)	Phone:		Site Location:	GGM - Geraldton
Email:	nathan.burnett@stantec.com	Email:		Site Location Province:	Ontario
Copies:		Copies:		Sampled By:	N. Burnett

LAB USE ONLY - PLACE STICKER HERE

Rush Confirmation #:

Regulatory Criteria

REG 153: ☐ Table 1 ☐ Table 2 ☐ Table 3 ☐ Table _____ ☐ Res/Park ☐ Ind/Comm ☐ Agri/other ☐ Med/Fine ☐ Course ☐ For RSC

OTHER: ☐ CCME ☐ Reg 558* *min 3 day TAT ☐ MISA ☐ PWQO ☐ Reg 406, Table: _____ ☐ Sanitary Sewer Bylaw ☐ Storm Sewer Bylaw Municipality _____ ☐ Other:

Include Criteria on Certificate of Analysis (check if yes): ☐

SAMPLES MUST BE KEPT COOL (<10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

Regular Turnaround Time (TAT)

☑ 5 to 7 Day ☐ 10 Day

Rush Turnaround Time (TAT) Surcharges apply

☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 4 Day

Date Required: YY MM DD

		Sample Identification	Date Sampled YY	MM	DD	Time (24hr) HH	MM	Matrix	1 FIELD FILTERED	2 FIELD PRESERVED	3 LAB FILTRATION REQUIRED	4 Sample Homogenization	5 Metals - Mining Metals Package for Tissue	6 % Lipids	7 % Moisture	8 Hg by CVAF (wet)	9 Methylmercury (dry or wet)	10 *Lead analysis*	11 *see page 1 of CoC for instructions*	12	13	14	15	16	17	18	19	20	21 # OF CONTAINERS SUBMITTED	22 HOLD - DO NOT ANALYZE	Comments
13	10	A1B-YLPR-07	23	06	11	–	–	Tissue				X	X	X	X	X	X											1		Please contact Katherine Szozda
14	9	A1B-YLPR-08	23	06	11	–	–	Tissue				X	X	X	X	X	X	X										1		BV PM - Ottawa
15	8	SmLK-YLPR-01	23	06	13	–	–	Tissue				X	X	X	X	X	X											1		for sample prep and instructions
16	7	SmLK-YLPR-02	23	06	13	–	–	Tissue				X	X	X	X	X	X											1		Please contact Katherine Szozda
17	6	SmLK-YLPR-03	23	06	13	–	–	Tissue				X	X	X	X	X	X											1		BV PM - Ottawa
18	5	SmLK-YLPR-05	23	06	13	–	–	Tissue				X	X	X	X	X	X											1		for sample prep and instructions
19	4	SmLK-YLPR-07	23	06	13	–	–	Tissue				X	X	X	X	X	X											1		Please contact Katherine Szozda
20	3	SmLK-YLPR-08	23	06	13	–	–	Tissue				X	X	X	X	X	X											1		BV PM - Ottawa
21	2	SmLK-YLPR-09	23	06	13	–	–	Tissue				X	X	X	X	X	X	X										1		for sample prep and instructions
22	11	AS-SPSH-01	23	06	07	–	–	Tissue				X	X	X	X	X	X											1		Please contact Katherine Szozda
23	12	AS-SPSH-02	23	06	07	–	–	Tissue				X	X	X	X	X	X											1		BV PM - Ottawa
24	13	AS-SPSH-03	23	06	07	–	–	Tissue				X	X	X	X	X	X											1		for sample prep and instructions

*UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS AND CONDITIONS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/TERMS-AND-CONDITIONS OR BY CALLING THE LABORATORY LISTED ABOVE TO OBTAIN A COPY

LAB USE ONLY	Yes	No	°C				Temperature reading by:
Seal present							
Seal intact							
Cooling media present	✓		0	1	2		

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present						
Seal intact						
Cooling media present						

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present						
Seal intact						
Cooling media present						

Relinquished by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Received by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Special instructions
1 <original signed by>	23	09	26	8	40	1 <original signed by>						
2						2						

www.BVNA.com
6740 Campobello Road, Mississauga, Ontario L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5779 Toll Free: 800-563-6266

CHAIN OF CUSTODY RECORD

ENV COC - 00014v3

Invoice Information	Invoice to (requires report) ☑	Report Information (if differs from invoice)		Project Information	
Company :	Stantec Consulting Ltd	Company:		Quotation #:	C33414
Contact Name:	Mike Johns	Contact Name:		P.O. #/ AFE#:	
Street Address:	100-300 Hagey Blvd	Street Address:		Project #:	160901057
City:	Waterloo Prov: ON Postal Code: N2L 0A4	City:	Prov: Postal Code:	Site #:	
Phone:	519-400-6412 (nathan Burnett)	Phone:		Site Location:	GGM - Geraldton
Email:	nathan.burnett@stantec.com	Email:		Site Location Province:	Ontario
Copies:		Copies:		Sampled By:	N. Burnett

LAB USE ONLY - PLACE STICKER HERE

Rush Confirmation #:

Regulatory Criteria

REG 153: ☐ Table 1 ☐ Table 2 ☐ Table 3 ☐ Table _____ ☐ Res/Park ☐ Ind/Comm ☐ Agri/other ☐ Med/Fine ☐ Course ☐ For RSC

OTHER: ☐ CCME ☐ Reg 558* *min 3 day TAT ☐ MISA ☐ PWQO ☐ Reg 406, Table: _____ ☐ Sanitary Sewer Bylaw ☐ Storm Sewer Bylaw Municipality _____ ☐ Other:

Include Criteria on Certificate of Analysis (check if yes): ☐

SAMPLES MUST BE KEPT COOL (<10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

Regular Turnaround Time (TAT)

☑ 5 to 7 Day ☐ 10 Day

Rush Turnaround Time (TAT) Surcharges apply

☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 4 Day

Date Required: YY MM DD

Comments

	Sample Identification	Date Sampled YY	MM	DD	Time (24hr) HH	MM	Matrix	FIELD FILTERED	FIELD PRESERVED	LAB FILTRATION REQUIRED	Sample Homogenization	Metals - Mining Metals Package for Tissue	% Lipids	% Moisture	Hg by CVAF (wet)	Methylmercury (dry or wet)	10	11	12	13	14	15	16	17	18	19	20	# OF CONTAINERS SUBMITTED	HOLD - DO NOT ANALYZE	Comments
																	Lab Duplicate*		see page 1 of COC for instructions											
25	A5-SPSH-04	23	06	09	–	–	Tissue				X	X	X	X	X	X												1		Please contact Katherine Szozda
26	A5-SPSH-05	23	06	09	–	–	Tissue				X	X	X	X	X	X												1		BV PM - Ottawa
27	A5-SPSH-06	23	06	09	–	–	Tissue				X	X	X	X	X	X												1		for sample prep and instructions
28	A5-SPSH-08	23	06	09	–	–	Tissue				X	X	X	X	X	X												1		Please contact Katherine Szozda
29	A5-SPSH-09	23	06	07	–	–	Tissue				X	X	X	X	X	X												1		BV PM - Ottawa
30	A5-SPSH-10	23	06	07	–	–	Tissue				X	X	X	X	X	X	X											1		for sample prep and instructions
31	GMLK-SPSH-01	23	06	10	–	–	Tissue				X	X	X	X	X	X												1		Please contact Katherine Szozda
32	GMLK-SPSH-02	23	06	10	–	–	Tissue				X	X	X	X	X	X												1		BV PM - Ottawa
33	GMLK-SPSH-03	23	06	10	–	–	Tissue				X	X	X	X	X	X												1		for sample prep and instructions
34	GMLK-SPSH-04	23	06	10	–	–	Tissue				X	X	X	X	X	X												1		Please contact Katherine Szozda
35	GMLK-SPSH-05	23	06	10	–	–	Tissue				X	X	X	X	X	X												1		BV PM - Ottawa
36	GMLK-SPSH-06	23	06	10	–	–	Tissue				X	X	X	X	X	X	[illegible]											1		for sample prep and instructions

UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS AND CONDITIONS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/TERMS-AND-CONDITIONS OR BY CALLING THE LABORATORY LISTED ABOVE TO OBTAIN A COPY.

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present		✓				
Seal intact						
Cooling media present	✓					

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present						
Seal intact						
Cooling media present						

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present						
Seal intact						
Cooling media present						

0 1 2

Temperature reading by: 1 2 3

Relinquished by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Received by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Special instructions
1 <original signed by>	23	07	24	8	40	1 <original signed by>	~~YY~~	07	24	08	42	
2						2	WY	07	24			

www.BVNA.com

6740 Campobello Road, Mississauga, Ontario L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5779 Toll Free: 800-563-6266

CHAIN OF CUSTODY RECORD

ENV COC - 00014v3

Invoice Information	Invoice to (requires report) ☑	Report Information (if differs from invoice)		Project Information		
Company :	Stantec Consulting Ltd	Company:		Quotation #:	C33414	LAB USE ONLY - PLACE STICKER HERE
Contact Name:	Mike Johns	Contact Name:		P.O. #/ AFE#:		
Street Address:	100-300 Hagey Blvd	Street Address:		Project #:	160901057	
City: Waterloo Prov: ON Postal Code: N2L 0A4		City: Prov: Postal Code:		Site #:		
Phone:	519-400-6412 (nathan Burnett)	Phone:		Site Location:	GGM - Geraldton	Rush Confirmation #:
Email:	nathan.burnett@stantec.com	Email:		Site Location Province:	Ontario	
Copies:		Copies:		Sampled By:	N. Burnett	

Regulatory Criteria

REG 153: ☐ Table 1 ☐ Table 2 ☐ Table 3 ☐ Table ____ ☐ Res/Park ☐ Ind/Comm ☐ Agri/other ☐ Med/Fine ☐ Course ☐ For RSC

OTHER: ☐ CCME ☐ Reg 558* *min 3 day TAT ☐ MISA ☐ PWQO ☐ Reg 406, Table: ____ ☐ Sanitary Sewer Bylaw ☐ Storm Sewer Bylaw Municipality ____ ☐ Other:

Include Criteria on Certificate of Analysis (check if yes): ☐

SAMPLES MUST BE KEPT COOL (<10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

Regular Turnaround Time (TAT)

☑ 5 to 7 Day ☐ 10 Day

Rush Turnaround Time (TAT) Surcharges apply

☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 4 Day

Date Required: YY MM DD

Comments

		Sample Identification	Date Sampled YY	MM	DD	Time (24hr) HH	MM	Matrix	FIELD FILTERED	FIELD PRESERVED	LAB FILTRATION REQUIRED	Sample Homogenization	Metals - Mining Metals Package for Tissue	% Lipids	% Moisture	Hg by CVAF (wet)	Methylmercury (dry or wet)	Lab Duplicate ✱	See page 1 of COC for instructions.	# OF CONTAINERS SUBMITTED	HOLD - DO NOT ANALYZE	Comments
37	1	GMLK-SPSH-07	23	06	10	–	–	Tissue				X	X	X	X	X	X			1		Please contact Katherine Szozda
38	2	GMLK-SPSH-08	23	06	10	–	–	Tissue				X	X	X	X	X	X	X		1		BV PM - Ottawa
39	3	GMLK-SPSH-09	23	06	10	–	–	Tissue				X	X	X	X	X	X	X		1		for sample prep and instructions
40	4	GMLK-SPSH-10	23	06	10	–	–	Tissue				X	X	X	X	X	X			1		Please contact Katherine Szozda
41	5	MHT-SPSH-01	23	06	08	–	–	Tissue				X	X	X	X	X	X			1		BV PM - Ottawa
42	6	MHT-SPSH-02	23	06	08	–	–	Tissue				X	X	X	X	X	X			1		for sample prep and instructions
43	7	MHT-SPSH-03	23	06	08	–	–	Tissue				X	X	X	X	X	X			1		Please contact Katherine Szozda
44	8	MHT-SPSH-04	23	06	08	–	–	Tissue				X	X	X	X	X	X			1		BV PM - Ottawa
45	9	MHT-SPSH-05	23	06	08	–	–	Tissue				X	X	X	X	X	X			1		for sample prep and instructions
46	10	MHT-SPSH-07	23	06	08	–	–	Tissue				X	X	X	X	X	X			1		Please contact Katherine Szozda
47	11	MHT-SPSH-08	23	06	08	–	–	Tissue				X	X	X	X	X	X			1		BV PM - Ottawa
48	12	HRT-SPSH-01	23	06	[illegible]	12	–	Tissue				X	X	X	X	X	X			1		for sample prep and instructions

UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS AND CONDITIONS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/TERMS_AND_CONDITIONS.PDF OR BY CALLING THE LABORATORY LISTED ABOVE TO OBTAIN A COPY.

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present		✓				
Seal intact		✓				
Cooling media present	✓			0	1	2

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present						
Seal intact						
Cooling media present						

LAB USE ONLY	Yes	No	°C	1	2	3	Temperature reading by:
Seal present							
Seal intact							
Cooling media present							

Relinquished by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Received by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Special instructions
1 <original signed by>	23	07	21	8	40	1 <original signed by>	[illegible]	07	[illegible]	08	42	
2						2						

www.BVNA.com

6740 Campobello Road, Mississauga, Ontario L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5779 Toll Free: 800 563-6266

CHAIN OF CUSTODY RECORD

ENV COC - 00014v3

Invoice Information	Invoice to (requires report) ☑	Report Information (if differs from invoice)		Project Information		LAB USE ONLY - PLACE STICKER HERE
Company:	Stantec Consulting Ltd	Company:		Quotation #:	C33414	
Contact Name:	Mike Johns	Contact Name:		P.O. #/ AFE#:		
Street Address:	100-300 Hagey Blvd	Street Address:		Project #:	160901057	
City: Waterloo Prov: ON Postal Code: N2L 0A4		City: Prov: Postal Code:		Site #:		
Phone:	519-400-6412 (nathan Burnett)	Phone:		Site Location:	GGM - Geraldton	Rush Confirmation #:
Email:	nathan.burnett@stantec.com	Email:		Site Location Province:	Ontario	
Copies:		Copies:		Sampled By:	N. Burnett	

Regulatory Criteria

REG 153: ☐ Table 1 ☐ Table 2 ☐ Table 3 ☐ Table ____ ☐ Res/Park ☐ Ind/Comm ☐ Agri/other ☐ Med/Fine ☐ Course ☐ For RSC

OTHER: ☐ CCME ☐ Reg 558* *min 3 day TAT ☐ MISA ☐ PWQO ☐ Reg 406, Table: ____ ☐ Sanitary Sewer Bylaw ☐ Storm Sewer Bylaw Municipality ____ ☐ Other:

Include Criteria on Certificate of Analysis (check if yes): ☐

Regular Turnaround Time (TAT)

☑ 5 to 7 Day ☐ 10 Day

Rush Turnaround Time (TAT) Surcharges apply

☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 4 Day

Date Required: YY MM DD

SAMPLES MUST BE KEPT COOL (<10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

	Sample Identification	Date Sampled YY	MM	DD	Time (24hr) HH	MM	Matrix	FIELD FILTERED	FIELD PRESERVED	LAB FILTRATION REQUIRED	Sample Homogenization	Metals - Mining Metals Package for Tissue	% Lipids	% Moisture	Hg by CVAF (wet)	Methylmercury (dry or wet)	# OF CONTAINERS SUBMITTED	HOLD - DO NOT ANALYZE	Comments
49	HRT-SPSH-02	23	06	12	-	-	Tissue				X	X	X	X	X	X	1		Please contact Katherine Szozda
50	HRT-SPSH-03	23	06	12	-	-	Tissue				X	X	X	X	X	X	1		BV PM - Ottawa
51	HRT-SPSH-04	23	06	12	-	-	Tissue				X	X	X	X	X	X	1		for sample prep and instructions
52	HRT-SPSH-05	23	06	12	-	-	Tissue				X	X	X	X	X	X	1		Please contact Katherine Szozda
53	HRT-SPSH-06	23	06	12	-	-	Tissue				X	X	X	X	X	X	1		BV PM - Ottawa
54	HRT-SPSH-07	23	06	12	-	-	Tissue				X	X	X	X	X	X	1		for sample prep and instructions
55	HRT-SPSH-08	23	06	12	-	-	Tissue				X	X	X	X	X	X	1		Please contact Katherine Szozda
56	HRT-SPSH-09	23	06	12	-	-	Tissue				X	X	X	X	X	X	1		BV PM - Ottawa
57							Tissue				X	X	X	X	X	X	1		for sample prep and instructions
58							Tissue				X	X	X	X	X	X	1		Please contact Katherine Szozda
59							Tissue				X	X	X	X	X	X	1		BV PM - Ottawa
60							Tissue				X	X	X	X	X	X	1		for sample prep and instructions

UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS AN ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS AND CONDITIONS WHICH ARE AVAILABLE AT WWW.BUREAUVERITAS.COM/TERMS-AND-CONDITIONS. SIGNATURE OF THIS DOCUMENT IS REQUIRED TO ANALYZE TO OBTAIN SCOPE.

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present		✓				
Seal intact						
Cooling media present	✓					
				0	1	2

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present						
Seal intact						
Cooling media present						

LAB USE ONLY	Yes	No	°C	1	2	3	Temperature reading by:
Seal present							
Seal intact							
Cooling media present							

Relinquished by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Received by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Special instructions
1 <original signed by>	23	07	21	8	40	1 <original signed by>	~~TUE~~	~~07~~	~~22~~	~~08~~	~~42~~	
2						2	WED	07	26			

Appendix E.4 Kenogamisis Lake Catch and Effort Results

Table E4: Summary of Catch Records from Kenogamisis Lake and Gamsby Lake from 2018 and 2023

Sampling Area	**Year**	Method	Total Effort	Unit	Method Notes	Total Catch	Species Diversity	CPUE	CPUE Unit	Lake Whitefish	Cisco	Northern Pike	White Sucker	Longnose Sucker	Shorthead Redhorse	Spottail Shiner	Yellow Perch	Walleye
Kenogamisis Lake	2018	Gill Net	34.7	Gang hours	ON2, 2 gangs	44	5	30.5	fish/gang/day	2		3				1	30	8
			269.8	Gang hours	NA1, 2 gangs	248	7	22.1	fish/gang/day	21	28	6	57		1		41	94
	2023	Gill Net	1088.2	Gang hours	NA1, 2 gangs	602	5	13.3	fish/gang/day	17	14		209				61	301
		Angling	16	Angling hours	2 anglers trolling lures	37	1	4.6	fish/angler/hour									37
Gamsby Lake	2018	Gill Net	1135.3	Gang hours	NA1, 2 gangs	780	8	16.5	fish/gang/day	43	12	48	291	2	8		104	272
	2023	Gill Net	995	Gang hours	NA1, 2 gangs	257	6	6.2	fish/gang/day	26		29	85		1		27	89
		Angling	4	Angling hours	2 anglers trolling lures	1	1	0.5	fish/angler/hour									1

Appendix E.5 Kenogamisis Lake Fish Morphometric Data

E5: Summary of Walleye Morphometric Data Collected from Kenogamisis Lake and Gamsby Lake, 2018 and 2023

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Collection Method	Mesh Size	Species	Standard Length (cm)	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Sex	Age (years)	Tissue Sample Weight (g)	Liver Weight (g)	Gonad Weight (g)	Total Eggs	External Condition	Internal Condition
Kenogamisis Lake	Southwest Arm	KLSW-GN-01	KLSW-WALL-001	9/20/2023	Gill Net	NA1	Walleye	29.5	34.9	32.4	369.60	F		18.70	4.62	7.66		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-02	KLSW-WALL-002	9/20/2023	Gill Net	NA1	Walleye	28.7	33.1	31.0	296.00	M		19.42	2.27	6.86		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-02	KLSW-WALL-003	9/20/2023	Gill Net	NA1	Walleye	32.2	37.9	35.1	420.00	M		17.71	3.53	11.47		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-02	KLSW-WALL-004	9/20/2023	Gill Net	NA1	Walleye	33.2	38.8	36.1	425.00	F		21.73	4.19	3.04		-	-
Kenogamisis Lake	Southwest Arm	KSLW-ANG-01	KLSW-WALL-005	9/20/2023	Angling	-	Walleye	34.5	40.1	37.6	525.00	M		22.18	4.07	23.41		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-04	KLSW-WALL-006	9/21/2023	Gill Net	NA1	Walleye	32	37.5	35.2	375.00	M		17.25	3.76	11.3		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-05	KLSW-WALL-007	9/21/2023	Gill Net	NA1	Walleye	30	35.6	33.1	325.00	M		16.44	3.2	10.36		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-05	KLSW-WALL-010	9/21/2023	Gill Net	NA1	Walleye	27.5	32.1	30.1	300.00	M		16.19	3.18	10.37		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-10	KLSW-WALL-012	9/22/2023	Gill Net	NA1	Walleye	31	36.3	33.8	400.00	M		18.25	5.53	17.16		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-10	KLSW-WALL-013	9/22/2023	Gill Net	NA1	Walleye	29.5	34.4	32.1	300.00	M		17.07	2.91	8.96		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-10	KLSW-WALL-014	9/22/2023	Gill Net	NA1	Walleye	29	33.9	31.4	275.00	M		17.62	2.49	6.35		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-10	KLSW-WALL-015	9/22/2023	Gill Net	NA1	Walleye	29	33.4	31.1	300.00	M		19.85	3.23	7.25		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-09	KLSW-WALL-016	9/22/2023	Gill Net	NA1	Walleye	32.1	37.2	35.0	350.00	M		15.69	4.29	8.64		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-09	KLSW-WALL-018	9/22/2023	Gill Net	NA1	Walleye	26.8	30.5	28.7	200.00	M		15.58	1.84	4.7		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-08	KLSW-WALL-019	9/22/2023	Gill Net	NA1	Walleye	33.3	39.1	36.9	400.00	M		13.60	4	8.91		Missing right pectoral	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-08	KLSW-WALL-021	9/22/2023	Gill Net	NA1	Walleye	28.3	33.0	31.0	250.00	F		15.35	4.24	6.36		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-07	KLSW-WALL-023	9/22/2023	Gill Net	NA1	Walleye	32	37.3	34.8	450.00	M		16.13	4.91	15.64		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-07	KLSW-WALL-024	9/22/2023	Gill Net	NA1	Walleye	31.5	36.6	34.6	375.00	M		18.11	3.91	7.37		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-11	KLSW-WALL-025	9/23/2023	Gill Net	NA1	Walleye	35	39.5	37.0	450.00	F		13.39	5.03	8.43		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-11	KLSW-WALL-026	9/23/2023	Gill Net	NA1	Walleye	26.8	31.2	29.0	200.00	F		16.09	2.06	7.07		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-11	KLSW-WALL-028	9/23/2023	Gill Net	NA1	Walleye	41.5	48.5	45.8	950.00	F		16.45	19.24	27.61		-	-

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Collection Method	Mesh Size	Species	Standard Length (cm)	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Sex	Age (years)	Tissue Sample Weight (g)	Liver Weight (g)	Gonad Weight (g)	Total Eggs	External Condition	Internal Condition
Kenogamisis Lake	Southwest Arm	KLSW-GN-11	KLSW-WALL-029	9/23/2023	Gill Net	NA1	Walleye	37	42.4	39.5	650.00	M		18.70	6.03	27		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-11	KLSW-WALL-030	9/23/2023	Gill Net	NA1	Walleye	33.3	38.4	36.1	425.00	F		17.39	6.51	10.21		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-12	KLSW-WALL-033	9/23/2023	Gill Net	NA1	Walleye	52.5	60.3	57.0	1920.00	F		18.82	27.17	61.23		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-12	KLSW-WALL-034	9/23/2023	Gill Net	NA1	Walleye	31.2	36.5	34.3	375.00	F		16.74	8.66	11.35		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-12	KLSW-WALL-037	9/23/2023	Gill Net	NA1	Walleye	28.5	33.1	31.0	250.00	M		15.13	2.26	5.61		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-13	KLSW-WALL-039	9/23/2023	Gill Net	NA1	Walleye	59	66.2	63.4	3550.00	F		20.61	101.12	207.27		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-18	KLSW-WALL-042	9/24/2023	Gill Net	NA1	Walleye	32	37.6	35.2	450.00	M		17.83	5.34	15.06		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-18	KLSW-WALL-043	9/24/2023	Gill Net	NA1	Walleye	30.5	36.6	34.4	360.00	F		19.89	4.55	8.28		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-18	KLSW-WALL-044	9/24/2023	Gill Net	NA1	Walleye	31.5	36.8	34.8	330.00	M		17.45	3.31	9.95		Tumor left side	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-18	KLSW-WALL-045	9/24/2023	Gill Net	NA1	Walleye	31.5	37.0	34.7	390.00	M		21.65	4.53	12.89		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-22	KLSW-WALL-046	9/25/2023	Gill Net	NA1	Walleye	37.5	44.9	42.1	750.00	F		14.87	17.36	26.81		-	-
Kenogamisis Lake	Southwest Arm	KLSW-ANG-02	KLSW-WALL-047	9/25/2023	Angling	-	Walleye	36.4	42.9	40.4	625.00	F		14.67	10.39	27.31		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-33	KLSW-WALL-048	10/1/2023	Gill Net	NA1	Walleye	38.8	44.3	42.1	600.00	F		20.86	6.17	10.22		heavy tumours near anal fin and face and opercular	
Kenogamisis Lake	Southwest Arm	KLSW-GN-33	KLSW-WALL-049	10/1/2023	Gill Net	NA1	Walleye	59.5	67.4	64.0	3100.00	F		22.26	53.42	173.04		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-31	KLSW-WALL-050	10/1/2023	Gill Net	NA1	Walleye	37.6	43.9	41.1	650.00	F		19.98	10.72	19.82		-	-
Kenogamisis Lake	Southwest Arm	KLSW-ANG-03	KLSW-WALL-051	10/1/2023	Angling	NA1	Walleye	41	47.5	44.7	1100.00	F		21.21	23.1	45.11		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-27	KLSW-WALL-052	10/1/2023	Gill Net	NA1	Walleye	50	57.7	54.7	1400.00	F		24.23	17.08	36.24		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-28	KLSW-WALL-053	10/1/2023	Gill Net	NA1	Walleye	52.4	60.2	56.6	1900.00	F		18.51	40.96	58.35		-	-
Kenogamisis Lake	Southwest Arm	KLSW-GN-28	KLSW-WALL-054	10/1/2023	Gill Net	NA1	Walleye	27.5	32.2	30.1	225.00	F		20.56	2.78	7.03		-	-
Gamsby Lake	-	GMBY-GN-03	GMBY-WALL-001	9/26/2023	Gill Net	NA1	Walleye	32.7	38.0	35.3	375.00	M		14.98	4.54	8.21		-	-
Gamsby Lake	-	GMBY-GN-03	GMBY-WALL-002	9/26/2023	Gill Net	NA1	Walleye	28.8	33.2	31.2	250.00	M		18.28	2.66	3.04		-	-
Gamsby Lake	-	GMBY-GN-04	GMBY-WALL-003	9/26/2023	Gill Net	NA1	Walleye	38.2	44.8	42.0	775.00	M		20.59	8.34	22.19		-	-
Gamsby Lake	-	GMBY-GN-05	GMBY-WALL-004	9/27/2023	Gill Net	NA1	Walleye	45	51.8	49.0	1280.00	F		13.98	16.83	27.46		-	-

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Collection Method	Mesh Size	Species	Standard Length (cm)	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Sex	Age (years)	Tissue Sample Weight (g)	Liver Weight (g)	Gonad Weight (g)	Total Eggs	External Condition	Internal Condition
Gamsby Lake	-	GMBY-GN-05	GMBY-WALL-005	9/27/2023	Gill Net	NA1	Walleye	34.5	40.0	37.2	575.00	M		14.41	9	18.74		-	-
Gamsby Lake	-	GMBY-GN-05	GMBY-WALL-006	9/27/2023	Gill Net	NA1	Walleye	35.2	40.1	38.1	575.00	F		15.07	6.13	12.3		-	-
Gamsby Lake	-	GMBY-GN-05	GMBY-WALL-007	9/27/2023	Gill Net	NA1	Walleye	36.5	41.7	39.3	550.00	F		15.57	6.94	12.19		-	-
Gamsby Lake	-	GMBY-GN-05	GMBY-WALL-008	9/27/2023	Gill Net	NA1	Walleye	29.2	34.1	32.0	300.00	M		15.14	4.4	7.29		-	-
Gamsby Lake	-	GMBY-GN-05	GMBY-WALL-009	9/27/2023	Gill Net	NA1	Walleye	35.1	40.7	38.0	525.00	M		16.47	5.28	14.45		-	-
Gamsby Lake	-	GMBY-GN-05	GMBY-WALL-010	9/27/2023	Gill Net	NA1	Walleye	30.2	35.3	33.1	350.00	M		14.25	3.55	8.26		-	-
Gamsby Lake	-	GMBY-GN-05	GMBY-WALL-011	9/27/2023	Gill Net	NA1	Walleye	33.2	36.2	34.5	375.00	M		16.07	3.22	7.64		-	-
Gamsby Lake	-	GMBY-GN-07	GMBY-WALL-012	9/27/2023	Gill Net	NA1	Walleye	35.8	41.7	39.0	575.00	M		17.90	6.44	15.45		-	-
Gamsby Lake	-	GMBY-GN-07	GMBY-WALL-013	9/27/2023	Gill Net	NA1	Walleye	43.5	50.7	48.3	950.00	F		15.84	11.28	17.04		-	-
Gamsby Lake	-	GMBY-GN-07	GMBY-WALL-014	9/27/2023	Gill Net	NA1	Walleye	31.8	37.0	34.5	325.00	M		14.67	3.8	8.2		-	-
Gamsby Lake	-	GMBY-GN-07	GMBY-WALL-015	9/27/2023	Gill Net	NA1	Walleye	44	50.8	48.3	1380.00	F		15.40	17.76	38.4		-	-
Gamsby Lake	-	GMBY-GN-07	GMBY-WALL-016	9/27/2023	Gill Net	NA1	Walleye	38.2	44.1	41.6	700.00	F		16.06	10.32	19.69		-	-
Gamsby Lake	-	GMBY-GN-07	GMBY-WALL-017	9/27/2023	Gill Net	NA1	Walleye	30	34.8	32.6	300.00	M		15.46	2.85	7.06		-	-
Gamsby Lake	-	GMBY-GN-07	GMBY-WALL-018	9/27/2023	Gill Net	NA1	Walleye	33.8	38.9	36.5	450.00	M		14.24	5.34	13.21		-	-
Gamsby Lake	-	GMBY-GN-07	GMBY-WALL-019	9/27/2023	Gill Net	NA1	Walleye	40.2	46.7	44.0	800.00	F		15.68	9.5	16.97		Lesions left side	-
Gamsby Lake	-	GMBY-GN-07	GMBY-WALL-020	9/27/2023	Gill Net	NA1	Walleye	37	43.2	40.8	625.00	F		16.04	8.59	16.86		-	-
Gamsby Lake	-	GMBY-GN-06	GMBY-WALL-021	9/27/2023	Gill Net	NA1	Walleye	37	43.3	40.2	675.00	F		16.00	9.19	16.55		-	-
Gamsby Lake	-	GMBY-GN-06	GMBY-WALL-022	9/27/2023	Gill Net	NA1	Walleye	43.2	49.8	47.3	1080.00	F		15.31	14.62	25.61		-	-
Gamsby Lake	-	GMBY-GN-06	GMBY-WALL-023	9/27/2023	Gill Net	NA1	Walleye	29	33.2	31.2	275.00	M		16.33	2.34	5.61		-	-
Gamsby Lake	-	GMBY-GN-06	GMBY-WALL-024	9/27/2023	Gill Net	NA1	Walleye	29.2	33.7	31.5	300.00	M		16.00	3.06	5.44		-	-
Gamsby Lake	-	GMBY-GN-06	GMBY-WALL-025	9/27/2023	Gill Net	NA1	Walleye	31	35.7	34.0	375.00	M		18.32	4.31	7.05		-	-
Gamsby Lake	-	GMBY-GN-06	GMBY-WALL-026	9/27/2023	Gill Net	NA1	Walleye	36.2	42.4	40.0	620.00	M		21.01	6.76	18.08		-	-
Gamsby Lake	-	GMBY-GN-06	GMBY-WALL-027	9/27/2023	Gill Net	NA1	Walleye	30	35.2	32.5	350.00	M		20.55	4.82	8.04		-	-

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Collection Method	Mesh Size	Species	Standard Length (cm)	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Sex	Age (years)	Tissue Sample Weight (g)	Liver Weight (g)	Gonad Weight (g)	Total Eggs	External Condition	Internal Condition
Gamsby Lake	-	GMBY-GN-09	GMBY-WALL-028	9/28/2023	Gill Net	NA1	Walleye	36.1	42.0	39.2	590.00	M		18.60	5.51	17.41		-	-
Gamsby Lake	-	GMBY-GN-09	GMBY-WALL-029	9/28/2023	Gill Net	NA1	Walleye	31.2	36.3	34.2	375.00	M		17.71	3.63	9.29		-	-
Gamsby Lake	-	GMBY-GN-09	GMBY-WALL-030	9/28/2023	Gill Net	NA1	Walleye	30.2	35.2	33.1	350.00	M		17.26	3.39	7.94		-	-
Gamsby Lake	-	GMBY-GN-10	GMBY-WALL-032	9/28/2023	Gill Net	NA1	Walleye	58	66.2	63.5	3050.00	F		20.43	73.03	133.03		-	-
Gamsby Lake	-	GMBY-GN-11	GMBY-WALL-033	9/28/2023	Gill Net	NA1	Walleye	33.3	38.8	36.4	425.00	F		19.45	5.49	8.82		-	-
Gamsby Lake	-	GMBY-GN-11	GMBY-WALL-034	9/28/2023	Gill Net	NA1	Walleye	35.2	40.7	38.2	500.00	F		18.78	6.03	9.07		-	-
Gamsby Lake	-	GMBY-GN-11	GMBY-WALL-036	9/28/2023	Gill Net	NA1	Walleye	36.5	42.7	39.8	650.00	F		21.52	8.23	15.25		-	-
Gamsby Lake	-	GMBY-GN-12	GMBY-WALL-044	9/29/2023	Gill Net	NA1	Walleye	33.2	38.9	36.4	450.00	F		18.64	6.29	11.17		-	-
Gamsby Lake	-	GMBY-GN-12	GMBY-WALL-045	9/29/2023	Gill Net	NA1	Walleye	31.7	37.0	34.2	425.00	F		17.47	5.61	10.24		-	-
Gamsby Lake	-	GMBY-GN-13	GMBY-WALL-048	9/29/2023	Gill Net	NA1	Walleye	45.3	52.4	49.1	1300.00	F		19.63	21.08	44.81		-	-
Gamsby Lake	-	GMBY-GN-15	GMBY-WALL-052	9/30/2023	Gill Net	NA1	Walleye	33.8	39.6	37.0	450.00	F		18.75	6.12	9.12		-	-
Gamsby Lake	-	GMBY-GN-15	GMBY-WALL-053	9/30/2023	Gill Net	NA1	Walleye	35.8	41.6	39.0	550.00	F		23.80	6.49	11.75		-	-
Gamsby Lake	-	GMBY-GN-15	GMBY-WALL-054	9/30/2023	Gill Net	NA1	Walleye	42.7	50.3	46.8	1020.00	F		18.08	15.06	25.56		-	-
Gamsby Lake	-	GN01	GMBY-WALL-001	8/21/2018	Gill Net	NA1	Walleye		44.7	42.1	800.00	F	8	31.08	10.2	12.83	43187	-	-
Gamsby Lake	-	GN01	GMBY-WALL-002	8/21/2018	Gill Net	NA1	Walleye		40.7	37.7	550.00	F	7	39.26	5.42	4.25	16157	-	-
Gamsby Lake	-	GN01	GMBY-WALL-003	8/21/2018	Gill Net	NA1	Walleye		39.0	35.0	550.00	F	7	34.96	6.77	5.36	34338	-	-
Gamsby Lake	-	GN03	GMBY-WALL-004	8/21/2018	Gill Net	NA1	Walleye		63.5	60.0	2880.00	F	13	31.26	57.37	42.76	178505	-	-
Gamsby Lake	-	GN03	GMBY-WALL-005	8/21/2018	Gill Net	NA1	Walleye		39.2	35.7	560.40	M	11	30.63	5.78	1	-	-	-
Gamsby Lake	-	GN03	GMBY-WALL-006	8/21/2018	Gill Net	NA1	Walleye		38.2	36.0	293.00	F	7	31.79	3.42	3.87	17229	-	-
Gamsby Lake	-	GN04	GMBY-WALL-007	8/21/2018	Gill Net	NA1	Walleye		41.0	38.4	525.00	F	8	20.00	5.68	5.98	37189	-	-
Gamsby Lake	-	GN04	GMBY-WALL-009	8/21/2018	Gill Net	NA1	Walleye		41.1	38.4	525.00	M	6	37.01	8.58	2.19	-	-	-
Gamsby Lake	-	GN04	GMBY-WALL-010	8/21/2018	Gill Net	NA1	Walleye		41.4	38.7	500.00	F	7	34.64	6.04	6.53	41928	-	-
Gamsby Lake	-	GN05	GMBY-WALL-012	8/21/2018	Gill Net	NA1	Walleye		41.6	39.0	550.00	F	8	38.06	6.4	7.96	31163	-	-
Gamsby Lake	-	GN05	GMBY-WALL-014	8/21/2018	Gill Net	NA1	Walleye		42.2	39.3	575.00	F	7	40.16	7.3	8.5	33027	-	-
Gamsby Lake	-	GN05	GMBY-WALL-016	8/21/2018	Gill Net	NA1	Walleye		41.3	38.9	600.00	F	8	40.56	7.3	7.35	46660	-	-
Gamsby Lake	-	GN05	GMBY-WALL-018	8/21/2018	Gill Net	NA1	Walleye		43.1	40.5	625.00	F	8	35.88	6.78	8.3	34741	-	-
Gamsby Lake	-	GN05	GMBY-WALL-020	8/21/2018	Gill Net	NA1	Walleye		40.7	38.2	525.00	M	8	34.35	7.25	3.2	-	lesion on second dorsal ray	-

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Collection Method	Mesh Size	Species	Standard Length (cm)	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Sex	Age (years)	Tissue Sample Weight (g)	Liver Weight (g)	Gonad Weight (g)	Total Eggs	External Condition	Internal Condition
Gamsby Lake	-	GN05	GMBY-WALL-021	8/21/2018	Gill Net	NA1	Walleye		38.5	36.5	425.00	M	8	27.79	6.95	2.44	-	-	-
Gamsby Lake	-	GN02	GMBY-WALL-022	8/21/2018	Gill Net	NA1	Walleye		40.2	37.8	500.00	M	8	33.39	6.71	3.02	-	-	-
Gamsby Lake	-	GN02	GMBY-WALL-023	8/21/2018	Gill Net	NA1	Walleye		39.8	37.7	500.00	M	7	27.64	7.22	1.84	-	-	-
Gamsby Lake	-	GN02	GMBY-WALL-025	8/21/2018	Gill Net	NA1	Walleye		42.3	40.0	625.00	F	8	33.73	6.91	9.35	53513	-	-
Gamsby Lake	-	GN02	GMBY-WALL-027	8/21/2018	Gill Net	NA1	Walleye		35.6	33.6	350.00	F	6	29.05	5.03	3.31	13055	-	-
Gamsby Lake	-	GN08	GMBY-WALL-029	8/22/2018	Gill Net	NA1	Walleye		41.5	38.5	550.00	M	9	37.88	4.93	5.6	-	Lesion on left side	-
Gamsby Lake	-	GN08	GMBY-WALL-031	8/22/2018	Gill Net	NA1	Walleye		42.5	39.8	625.00	F	8	29.03	7.21	10.42	35653	-	-
Gamsby Lake	-	GN08	GMBY-WALL-033	8/22/2018	Gill Net	NA1	Walleye		40.0	37.2	550.00	M	8	34.46	8.21	4.71	-	-	-
Gamsby Lake	-	GN08	GMBY-WALL-034	8/22/2018	Gill Net	NA1	Walleye		42.0	39.8	600.00	M	8	37.94	5.27	1.77	-	-	-
Gamsby Lake	-	GN08	GMBY-WALL-035	8/22/2018	Gill Net	NA1	Walleye		49.0	46.2	950.00	F	9	34.42	10.1	13.56	59126	Lesion on left side	-
Gamsby Lake	-	GN08	GMBY-WALL-038	8/22/2018	Gill Net	NA1	Walleye		40.2	37.6	500.00	M	8	26.76	7.53	2.61	-	-	-
Gamsby Lake	-	GN08	GMBY-WALL-040	8/22/2018	Gill Net	NA1	Walleye		39.2	37.5	450.00	M	7	47.27	5.48	1.81	-	-	-
Gamsby Lake	-	GN08	GMBY-WALL-041	8/22/2018	Gill Net	NA1	Walleye		41.2	38.8	550.00	M	9	32.83	7.26	4.99	-	-	-
Gamsby Lake	-	GN08	GMBY-WALL-043	8/22/2018	Gill Net	NA1	Walleye		37.2	34.9	350.00	M	5	34.93	3.36	0.99	-	-	-
Gamsby Lake	-	GN06	GMBY-WALL-045	8/22/2018	Gill Net	NA1	Walleye		45.0	42.0	700.00	M	12	27.80	6.12	5.24	-	-	-
Gamsby Lake	-	GN06	GMBY-WALL-047	8/22/2018	Gill Net	NA1	Walleye		41.9	39.2	575.00	M	9	27.59	6.86	3.2	-	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-001	8/28/2018	Gill Net	NA1	Walleye		62.0	58.3	2500.00	F	15	56.65	36.19	44.03	176120	-	stomach content cisco = 88.6g
Kenogamisis Lake	KLSW	-	KLSW-WALL-003	8/28/2018	Gill Net	NA1	Walleye		63.7	60.5	2600.00	F	12	54.44	49.27	47.6	140740	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-004	8/28/2018	Gill Net	NA1	Walleye		41.3	38.7	730.00	F	8	33.05	7.84	13.89	53338	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-006	8/28/2018	Gill Net	NA1	Walleye		36.0	33.9	390.00	F	6	30.91	2.972	3.53	8941	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-007	8/28/2018	Gill Net	NA1	Walleye		35.4	33.3	395.00	M	7	38.36	3.21	7.09	-	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-008	8/28/2018	Gill Net	NA1	Walleye		40.8	38.3	550.00	M	10	36.45	4.89	7.72	-	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-009	8/28/2018	Gill Net	NA1	Walleye		41.3	38.8	620.00	M	8	31.27	8.31	11.12	-	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-010	8/28/2018	Gill Net	NA1	Walleye		57.3	54.5	2380.00	F	11	37.25	24.64	28.54	107665	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-011	8/28/2018	Gill Net	NA1	Walleye		36.1	33.7	410.00	M	5	31.52	3.61	3.14	-	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-012	8/28/2018	Gill Net	NA1	Walleye		40.8	38.2	580.00	F	7	35.11	7.35	9.02	25170	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-013	8/28/2018	Gill Net	NA1	Walleye		49.4	47.0	1040.00	F	9	49.39	10.25	15.12	48054	-	Nemotodes on intestine
Kenogamisis Lake	KLSW	-	KLSW-WALL-014	8/28/2018	Gill Net	NA1	Walleye		37.2	34.8	415.00	F	6	32.67	3.15	4.7	1676	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-015	8/28/2018	Gill Net	NA1	Walleye		32.3	30.2	270.00	M	5	45.84	2.16	3.28	-	-	2 small perch in stomach
Kenogamisis Lake	KLSW	-	KLSW-WALL-016	8/28/2018	Gill Net	NA1	Walleye		38.6	36.1	465.00	F	6	31.31	4.5	4.71	2006	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-017	8/28/2018	Gill Net	NA1	Walleye		38.1	35.7	450.00	F	7	35.94	4.63	5.14	19439	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-018	8/28/2018	Gill Net	NA1	Walleye		45.7	43.2	820.00	F	12	48.44	6.97	12.44	39082	-	-

Waterbody	Sub-Location	Station Name	Fish ID	Collection Date	Collection Method	Mesh Size	Species	Standard Length (cm)	Total Length (cm)	Fork Length (cm)	Total Weight (g)	Sex	Age (years)	Tissue Sample Weight (g)	Liver Weight (g)	Gonad Weight (g)	Total Eggs	External Condition	Internal Condition
Kenogamisis Lake	KLSW	-	KLSW-WALL-019	8/28/2018	Gill Net	NA1	Walleye		37.9	35.6	470.00	F	8	43.50	4.634	6.69	21734	Missing left peck fin	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-020	8/28/2018	Gill Net	NA1	Walleye		36.6	34.5	455.00	M	-	41.13	5.51	13.09	-	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-021	8/28/2018	Gill Net	NA1	Walleye		38.5	36.2	455.00	F	-	33.70	3.98	6.214	17468	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-022	8/28/2018	Gill Net	NA1	Walleye		33.9	31.9	365.00	M	-	57.02	3.36	6.26	-	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-023	8/28/2018	Gill Net	NA1	Walleye		32.3	30.1	278.00	M	5	36.06	3.271	1.739	-	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-024	8/28/2018	Gill Net	NA1	Walleye		29.6	27.6	202.00	M	3	33.71	1.89	0.61	-	-	Two small fish in stomach
Kenogamisis Lake	KLSW	-	KLSW-WALL-025	8/28/2018	Gill Net	NA1	Walleye		45.5	43.0	890.00	M	-	71.92	13.1	13.94	-	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-026	8/28/2018	Gill Net	NA1	Walleye		40.9	38.6	630.00	F	-	48.51	9.09	10.12	28233	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-028	8/28/2018	Gill Net	NA1	Walleye		35.4	33.1	365.00	F	-	51.80	3.07	4.28	15464	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-034	8/28/2018	Gill Net	NA1	Walleye		34.5	32.5	330.00	M	-	32.99	3.383	1.603	-	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-040	8/30/2018	Gill Net	NA1	Walleye		37.3	35.5	525.00	M	6	34.99	6.02	12.57	-	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-041	8/30/2018	Gill Net	NA1	Walleye		36.0	33.8	475.00	M	6	32.57	5.11	5.25	-	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-042	8/30/2018	Gill Net	NA1	Walleye		34.1	31.9	400.00	M	6	30.39	4.38	6	-	-	-
Kenogamisis Lake	KLSW	-	KLSW-WALL-043	8/30/2018	Gill Net	NA1	Walleye		34.6	32.5	375.00	M	6	22.37	3.36	5.32	-	-	-

Appendix E.6 Kenogamisis Lake Fish Tissue Laboratory Data

Greenstone Gold Mines GP INC.
ATTN: Mike Johns
1-70 Southgate Drive
Guelph ON N1G 4P5

Date Received: 01-OCT-18
Report Date: 10-JAN-19 13:08 (MT)
Version: FINAL

Client Phone: 519-780-8145

Certificate of Analysis

Lab Work Order #: L2173416

Project P.O. #: 17-00229
Job Reference: 160961254
C of C Numbers:
Legal Site Desc:

<original signed by>

Christine Paradis
Project Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-1 Tissue 21-AUG-18 09:00 GMBY-LKWH-001-T	L2173416-2 Tissue 21-AUG-18 09:00 GMBY-LKWH-002-T	L2173416-4 Tissue 21-AUG-18 09:00 GMBY-LKWH-004-T	L2173416-6 Tissue 21-AUG-18 09:00 GMBY-LKWH-006-T	L2173416-8 Tissue 22-AUG-18 09:00 GMBY-LKWH-008-T
TISSUE						
Physical Tests	% Moisture (%)	75.8	74.8	77.0	80.7	72.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.43	0.42	<0.40	<0.40	0.72
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.115	0.0541	0.0993	0.0816	0.0755
	Barium (Ba)-Total (mg/kg wwt)	0.013	0.016	<0.010	<0.010	0.018
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	325	510	180	56.5	205
	Cesium (Cs)-Total (mg/kg wwt)	0.0259	0.0153	0.0366	0.0216	0.0132
	Chromium (Cr)-Total (mg/kg wwt)	0.025	0.077	0.015	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.136	0.123	0.125	0.124	0.095
	Iron (Fe)-Total (mg/kg wwt)	2.26	2.09	2.18	1.76	1.97
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.237	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	346	334	293	284	287
	Manganese (Mn)-Total (mg/kg wwt)	0.166	0.170	0.126	0.077	0.154
	Mercury (Hg)-Total (mg/kg wwt)	0.0861	0.120	0.103	0.0867	0.113
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0048	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2730	2720	2390	2220	2250
	Potassium (K)-Total (mg/kg wwt)	4420	4370	4010	3990	3790
	Rubidium (Rb)-Total (mg/kg wwt)	9.01	6.59	8.05	6.43	6.11
	Selenium (Se)-Total (mg/kg wwt)	0.258	0.240	0.289	0.234	0.181
	Sodium (Na)-Total (mg/kg wwt)	235	406	430	382	433
	Strontium (Sr)-Total (mg/kg wwt)	0.096	0.172	0.045	0.011	0.050
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00300	0.00169	0.00209	0.00098	0.00256
	Tin (Sn)-Total (mg/kg wwt)	0.140	0.085	0.488	0.070	0.138
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.25	3.64	3.22	2.65	2.53
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	1.1	1.1	0.9	<0.5	6.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-9 Tissue 23-AUG-18 09:00 GMBY-LKWH-009-TB	L2173416-10 Tissue 22-AUG-18 09:00 GMBY-LKWH-009-T	L2173416-11 Tissue 22-AUG-18 09:00 GMBY-LKWH-010-T	L2173416-12 Tissue 24-AUG-18 09:00 GMBY-LKWH-011-T	L2173416-13 Tissue 21-AUG-18 09:00 GMBY-NRPK-001-T
TISSUE						
Physical Tests	% Moisture (%)	78.1	79.3	78.2	75.2	78.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	0.61	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0873	0.0503	0.0337	0.225	0.0361
	Barium (Ba)-Total (mg/kg wwt)	0.015	<0.010	0.012	<0.010	0.011
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	575	195	139	362	337
	Cesium (Cs)-Total (mg/kg wwt)	0.0206	0.0133	0.0136	0.0483	0.0372
	Chromium (Cr)-Total (mg/kg wwt)	0.017	<0.010	0.015	<0.010	0.013
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.160	0.101	0.116	0.141	0.100
	Iron (Fe)-Total (mg/kg wwt)	2.26	2.11	2.01	2.59	1.07
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0046	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	320	287	304	293	353
	Manganese (Mn)-Total (mg/kg wwt)	0.222	0.144	0.111	0.162	0.212
	Mercury (Hg)-Total (mg/kg wwt)	0.0424	0.123	0.109	0.0821	0.283
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2710	2280	2310	2420	2440
	Potassium (K)-Total (mg/kg wwt)	4470	3880	4130	4160	4220
	Rubidium (Rb)-Total (mg/kg wwt)	7.10	6.28	5.69	8.30	12.3
	Selenium (Se)-Total (mg/kg wwt)	0.240	0.178	0.204	0.221	0.180
	Sodium (Na)-Total (mg/kg wwt)	203	401	307	300	333
	Strontium (Sr)-Total (mg/kg wwt)	0.179	0.051	0.280	0.107	0.040
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00211	0.00227	0.00418	0.00220	0.00471
	Tin (Sn)-Total (mg/kg wwt)	0.195	0.237	0.221	0.058	0.117
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.11	3.05	3.19	3.12	3.52
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					0.215
Aggregate Organics	Lipid Content (% wwt)	1.3	1.2	0.5	2.1	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	Sample ID: L2173416-14 Description: Tissue Sampled Date: 21-AUG-18 Sampled Time: 09:00 Client ID: GMBY-NRPK-002-T	L2173416-15 Tissue 21-AUG-18 09:00 GMBY-NRPK-003-T	L2173416-16 Tissue 21-AUG-18 09:00 GMBY-NRPK-004-T	L2173416-17 Tissue 21-AUG-18 09:00 GMBY-NRPK-005-T	L2173416-19 Tissue 21-AUG-18 09:00 GMBY-NRPK-007-T
TISSUE						
Physical Tests	% Moisture (%)	79.9	79.3	78.3	77.0	79.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0312	0.0251	0.0384	0.0281	0.0296
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.015	0.012	<0.010	0.026
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	202	500	361	96.3	643
	Cesium (Cs)-Total (mg/kg wwt)	0.0399	0.0279	0.0526	0.0525	0.0289
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.010	0.013	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.101	0.113	0.107	0.173	0.100
	Iron (Fe)-Total (mg/kg wwt)	1.41	0.91	1.24	1.63	1.37
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0047	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	348	317	344	322	333
	Manganese (Mn)-Total (mg/kg wwt)	0.185	0.317	0.236	0.106	0.467
	Mercury (Hg)-Total (mg/kg wwt)	0.162	0.150	0.407	0.908	0.129
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2360	2400	2550	2420	2500
	Potassium (K)-Total (mg/kg wwt)	4350	4080	4490	4220	4040
	Rubidium (Rb)-Total (mg/kg wwt)	12.2	9.62	13.8	8.76	10.1
	Selenium (Se)-Total (mg/kg wwt)	0.189	0.157	0.177	0.169	0.181
	Sodium (Na)-Total (mg/kg wwt)	373	294	330	383	352
	Strontium (Sr)-Total (mg/kg wwt)	0.019	0.061	0.038	<0.010	0.086
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00599	0.00363	0.00544	0.00307	0.00555
	Tin (Sn)-Total (mg/kg wwt)	0.055	0.089	0.280	0.129	0.252
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.65	3.49	3.46	6.12	4.13
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.127	0.125	0.316	1.13	0.0988
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	0.6	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-20 Tissue 21-AUG-18 09:00 GMBY-NRPK-008-T	L2173416-21 Tissue 21-AUG-18 09:00 GMBY-NRPK-009-T	L2173416-22 Tissue 21-AUG-18 09:00 GMBY-NRPK-010-T	L2173416-24 Tissue 22-AUG-18 09:00 GMBY-NRPK-012-T	L2173416-26 Tissue 22-AUG-18 09:00 GMBY-NRPK-014-T
TISSUE						
Physical Tests	% Moisture (%)	80.8	82.1	78.8	78.5	80.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.41	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0254	0.0206	0.0263	0.0507	0.0286
	Barium (Ba)-Total (mg/kg wwt)	0.017	0.012	<0.010	0.034	0.034
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	421	264	210	543	756
	Cesium (Cs)-Total (mg/kg wwt)	0.0297	0.0235	0.0426	0.0355	0.0312
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.017	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.100	0.103	0.109	0.089	0.088
	Iron (Fe)-Total (mg/kg wwt)	1.65	1.21	0.99	1.81	1.51
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	319	292	327	329	314
	Manganese (Mn)-Total (mg/kg wwt)	0.291	0.235	0.149	0.496	0.360
	Mercury (Hg)-Total (mg/kg wwt)	0.0972	0.0758	0.193	0.270	0.206
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2290	2110	2320	2440	2430
	Potassium (K)-Total (mg/kg wwt)	3960	3860	4290	4280	3750
	Rubidium (Rb)-Total (mg/kg wwt)	11.4	10.9	12.2	9.63	8.93
	Selenium (Se)-Total (mg/kg wwt)	0.166	0.143	0.185	0.158	0.142
	Sodium (Na)-Total (mg/kg wwt)	253	115	274	296	376
	Strontium (Sr)-Total (mg/kg wwt)	0.060	0.036	0.020	0.085	0.109
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00462	0.00585	0.00472	0.00623	0.00422
	Tin (Sn)-Total (mg/kg wwt)	0.131	0.394	0.117	0.331	0.131
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.44	3.19	3.38	3.95	3.60
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0773	0.0670	0.174	0.211	0.172
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-28 Tissue 22-AUG-18 09:00 GMBY-NRPK-016-T	L2173416-29 Tissue 22-AUG-18 09:00 GMBY-NRPK-017-T	L2173416-30 Tissue 22-AUG-18 09:00 GMBY-NRPK-018-T	L2173416-31 Tissue 22-AUG-18 09:00 GMBY-NRPK-019-T	L2173416-33 Tissue 22-AUG-18 09:00 GMBY-NRPK-021-T
TISSUE						
Physical Tests	% Moisture (%)	79.2	80.1	80.1	79.8	76.3
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0317	0.0376	0.0383	0.0274	0.0362
	Barium (Ba)-Total (mg/kg wwt)	0.037	0.030	0.015	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	469	469	343	200	272
	Cesium (Cs)-Total (mg/kg wwt)	0.0338	0.0411	0.0361	0.0316	0.0391
	Chromium (Cr)-Total (mg/kg wwt)	0.018	<0.010	0.011	<0.010	0.033
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.120	0.093	0.093	0.105	0.088
	Iron (Fe)-Total (mg/kg wwt)	1.65	1.44	1.60	1.03	0.70
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	337	335	315	336	340
	Manganese (Mn)-Total (mg/kg wwt)	0.331	0.259	0.304	0.171	0.144
	Mercury (Hg)-Total (mg/kg wwt)	0.259	0.143	0.288	0.224	1.23
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2420	2380	2270	2280	2330
	Potassium (K)-Total (mg/kg wwt)	4190	4170	4040	4050	4190
	Rubidium (Rb)-Total (mg/kg wwt)	10.5	11.9	10.2	9.57	7.87
	Selenium (Se)-Total (mg/kg wwt)	0.166	0.188	0.185	0.158	0.160
	Sodium (Na)-Total (mg/kg wwt)	212	137	391	255	313
	Strontium (Sr)-Total (mg/kg wwt)	0.075	0.064	0.042	0.025	0.029
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00526	0.00577	0.00530	0.00357	0.00168
	Tin (Sn)-Total (mg/kg wwt)	0.225	0.127	0.323	0.075	0.048
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	6.58	3.50	3.48	3.97	3.95
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.228	0.101	0.270	0.201	1.71
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-35 Tissue 21-AUG-18 09:00 GMBY-WALL-001-G	L2173416-36 Tissue 21-AUG-18 09:00 GMBY-WALL-001-L	L2173416-37 Tissue 21-AUG-18 09:00 GMBY-WALL-001-T	L2173416-38 Tissue 21-AUG-18 09:00 GMBY-WALL-001-WB	L2173416-39 Tissue 21-AUG-18 09:00 GMBY-WALL-001-WBLD
TISSUE						
Physical Tests	% Moisture (%)	76.0	76.1	76.9	73.8	72.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	<1.0	1.0	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0233	0.0264	0.0316	0.0297	0.0301
	Barium (Ba)-Total (mg/kg wwt)	0.032	0.013	<0.010	0.333	0.321
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0062	0.0982	<0.0010	0.0028	0.0029
	Calcium (Ca)-Total (mg/kg wwt)	549	141	93.6	12500	11400
	Cesium (Cs)-Total (mg/kg wwt)	0.0845	0.0460	0.0795	0.0546	0.0561
	Chromium (Cr)-Total (mg/kg wwt)	<0.040	<0.040	0.011	0.028	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0750	0.0799	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	1.14	2.46	0.116	0.280	0.292
	Iron (Fe)-Total (mg/kg wwt)	68.4	191	1.67	8.07	9.69
	Lead (Pb)-Total (mg/kg wwt)	<0.010	<0.010	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	284	173	318	455	422
	Manganese (Mn)-Total (mg/kg wwt)	2.02	0.924	0.084	0.932	0.603
	Mercury (Hg)-Total (mg/kg wwt)	0.0533	0.177	0.436	0.199	0.252
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0085	0.0769	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	0.061	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	3560	2700	2360	8470	7850
	Potassium (K)-Total (mg/kg wwt)	4360	2850	4720	3260	3320
	Rubidium (Rb)-Total (mg/kg wwt)	26.0	21.5	27.6	17.0	17.5
	Selenium (Se)-Total (mg/kg wwt)	0.670	0.768	0.186	0.247	0.265
	Sodium (Na)-Total (mg/kg wwt)	1150	1140	240	1070	1140
	Strontium (Sr)-Total (mg/kg wwt)	0.085	0.028	<0.010	2.22	2.02
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.0128	0.0192	0.00710	0.00634	0.00567
	Tin (Sn)-Total (mg/kg wwt)	0.070	0.070	0.094	0.024	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00072	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	69.2	19.6	2.96	18.7	16.7
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)			0.440	0.153	0.186
Aggregate Organics	Lipid Content (% wwt)	4.4	4.3	<0.5	2.6	3.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-40 Tissue 21-AUG-18 09:00 GMBY-WALL-002-G	L2173416-41 Tissue 21-AUG-18 09:00 GMBY-WALL-002-L	L2173416-42 Tissue 21-AUG-18 09:00 GMBY-WALL-002-T	L2173416-43 Tissue 21-AUG-18 09:00 GMBY-WALL-002-WB	L2173416-44 Tissue 21-AUG-18 09:00 GMBY-WALL-002-WBLD
TISSUE						
Physical Tests	% Moisture (%)	73.1	72.0	81.5	74.7	75.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<1.0	2.8	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0264	0.0752	0.0362	0.0332	0.0332
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.036	<0.010	0.582	0.728
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0029	0.265	<0.0010	0.0016	0.0015
	Calcium (Ca)-Total (mg/kg wwt)	291	1200	89.0	22300	29500
	Cesium (Cs)-Total (mg/kg wwt)	0.0516	0.0351	0.0490	0.0327	0.0329
	Chromium (Cr)-Total (mg/kg wwt)	<0.040	<0.040	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.119	0.685	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.970	3.06	0.099	0.245	0.244
	Iron (Fe)-Total (mg/kg wwt)	31.8	198	1.35	5.80	5.62
	Lead (Pb)-Total (mg/kg wwt)	<0.010	<0.010	<0.0040	0.0185	0.0217
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	0.15	0.18
	Magnesium (Mg)-Total (mg/kg wwt)	373	273	302	628	761
	Manganese (Mn)-Total (mg/kg wwt)	1.62	2.10	0.064	1.45	1.91
	Mercury (Hg)-Total (mg/kg wwt)	0.0434	0.234	0.242	0.139	0.150
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0157	0.256	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	5810	5020	2220	14100	18100
	Potassium (K)-Total (mg/kg wwt)	4640	2940	4440	3040	3120
	Rubidium (Rb)-Total (mg/kg wwt)	21.8	14.2	18.8	12.3	12.6
	Selenium (Se)-Total (mg/kg wwt)	0.923	1.26	0.193	0.247	0.245
	Sodium (Na)-Total (mg/kg wwt)	655	1280	236	1140	1190
	Strontium (Sr)-Total (mg/kg wwt)	0.024	0.186	<0.010	2.88	3.88
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.0167	0.0165	0.00513	0.00501	0.00613
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00126	<0.00040	0.00108	0.00123
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.039	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	172	30.6	3.14	20.1	21.9
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)			0.221	0.0969	0.102
Aggregate Organics	Lipid Content (% wwt)		4.1	<0.5	2.3	2.7

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-45 Tissue 21-AUG-18 09:00 GMBY-WALL-003-G	L2173416-46 Tissue 21-AUG-18 09:00 GMBY-WALL-003-L	L2173416-47 Tissue 21-AUG-18 09:00 GMBY-WALL-003-T	L2173416-48 Tissue 21-AUG-18 09:00 GMBY-WALL-003-WB	L2173416-49 Tissue 21-AUG-18 09:00 GMBY-WALL-004-G
TISSUE						
Physical Tests	% Moisture (%)	76.5		78.3	68.3	79.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<1.0	1.1	<0.40	0.47	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0173	0.0314	0.0298	0.0273	0.0064
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.011	<0.010	0.587	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0037	0.249	<0.0010	0.0033	0.0018
	Calcium (Ca)-Total (mg/kg wwt)	258	70.7	107	25100	268
	Cesium (Cs)-Total (mg/kg wwt)	0.0555	0.0303	0.0567	0.0389	0.0914
	Chromium (Cr)-Total (mg/kg wwt)	<0.040	<0.040	<0.010	<0.010	0.012
	Cobalt (Co)-Total (mg/kg wwt)	0.0809	0.234	<0.0040	<0.0040	0.0559
	Copper (Cu)-Total (mg/kg wwt)	0.979	1.73	0.111	0.260	0.892
	Iron (Fe)-Total (mg/kg wwt)	36.2	125	1.24	6.34	42.6
	Lead (Pb)-Total (mg/kg wwt)	<0.010	<0.010	<0.0040	0.0161	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	0.13	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	328	142	328	694	230
	Manganese (Mn)-Total (mg/kg wwt)	2.47	1.32	0.072	2.34	1.23
	Mercury (Hg)-Total (mg/kg wwt)	0.0333	0.137	0.263	0.153	0.0598
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0145	0.159	<0.0040	0.0042	0.0060
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	4650	2340	2500	15600	2300
	Potassium (K)-Total (mg/kg wwt)	4580	2190	4890	3350	3530
	Rubidium (Rb)-Total (mg/kg wwt)	22.6	11.7	23.1	14.2	24.8
	Selenium (Se)-Total (mg/kg wwt)	0.693	0.681	0.227	0.278	0.459
	Sodium (Na)-Total (mg/kg wwt)	883	1090	244	1220	1100
	Strontium (Sr)-Total (mg/kg wwt)	<0.020	<0.020	<0.010	3.24	0.018
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.0132	0.0144	0.00555	0.00631	0.0111
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.029	<0.020	<0.020	0.073
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00079	<0.00040	0.00125	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	105	16.8	3.07	19.5	32.6
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)			0.235	0.110	
Aggregate Organics	Lipid Content (% wwt)		2.4	<0.5	2.8	5.0

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-50 Tissue 21-AUG-18 09:00 GMBY-WALL-004-L	L2173416-51 Tissue 21-AUG-18 09:00 GMBY-WALL-004-T	L2173416-52 Tissue 21-AUG-18 09:00 GMBY-WALL-004-WB	L2173416-53 Tissue 21-AUG-18 09:00 GMBY-WALL-005-L	L2173416-54 Tissue 21-AUG-18 09:00 GMBY-WALL-005-T
TISSUE						
Physical Tests	% Moisture (%)	72.6	77.4	71.0	80.7	80.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.59	<0.40	1.00	9.4	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0117	0.0185	0.0184	0.104	0.0480
	Barium (Ba)-Total (mg/kg wwt)	0.042	<0.010	0.228	0.011	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0594	<0.0010	0.0019	1.12	0.0011
	Calcium (Ca)-Total (mg/kg wwt)	58.0	105	8270	89.2	74.0
	Cesium (Cs)-Total (mg/kg wwt)	0.0488	0.106	0.0725	0.0093	0.0415
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.011	<0.010	<0.040	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0768	<0.0040	<0.0040	0.715	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	2.11	0.102	0.246	2.28	0.130
	Iron (Fe)-Total (mg/kg wwt)	61.2	1.53	7.28	55.5	1.80
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0058	0.013	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	125	335	366	130	310
	Manganese (Mn)-Total (mg/kg wwt)	0.883	0.082	0.552	1.64	0.078
	Mercury (Hg)-Total (mg/kg wwt)	0.215	0.608	0.389	0.258	0.361
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0853	<0.0040	<0.0040	0.218	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	1960	2420	6180	2280	2190
	Potassium (K)-Total (mg/kg wwt)	2310	4440	3070	2150	4250
	Rubidium (Rb)-Total (mg/kg wwt)	17.3	31.8	18.8	7.15	12.8
	Selenium (Se)-Total (mg/kg wwt)	0.643	0.200	0.236	0.805	0.213
	Sodium (Na)-Total (mg/kg wwt)	1120	283	973	1160	288
	Strontium (Sr)-Total (mg/kg wwt)	0.011	<0.010	1.07	<0.020	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.0138	0.00601	0.00470	0.00948	0.00476
	Tin (Sn)-Total (mg/kg wwt)	0.051	0.025	0.036	0.152	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	0.00379	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	0.131	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	16.0	3.94	16.2	18.5	2.78
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)		0.796	0.433		0.363
Aggregate Organics	Lipid Content (% wwt)	8.7	0.6	4.7	1.7	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-55 Tissue 21-AUG-18 09:00 GMBY-WALL-005-WB	L2173416-56 Tissue 21-AUG-18 09:00 GMBY-WALL-006-G	L2173416-57 Tissue 21-AUG-18 09:00 GMBY-WALL-006-L	L2173416-58 Tissue 21-AUG-18 09:00 GMBY-WALL-006-T	L2173416-59 Tissue 21-AUG-18 09:00 GMBY-WALL-006-WB
TISSUE						
Physical Tests	% Moisture (%)	73.8			80.2	73.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	1.17	<1.0	2.6	<0.40	0.49
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0830	0.0243	0.0951	0.0381	0.0353
	Barium (Ba)-Total (mg/kg wwt)	0.803	0.018	0.013	<0.010	0.520
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0099	0.0065	0.524	<0.0010	0.0047
	Calcium (Ca)-Total (mg/kg wwt)	20000	221	169	124	22700
	Cesium (Cs)-Total (mg/kg wwt)	0.0254	0.0488	0.0234	0.0522	0.0362
	Chromium (Cr)-Total (mg/kg wwt)	0.015	<0.040	<0.040	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0651	0.611	<0.0040	0.0042
	Copper (Cu)-Total (mg/kg wwt)	0.387	0.924	2.77	0.115	0.269
	Iron (Fe)-Total (mg/kg wwt)	9.24	47.7	62.6	1.44	6.11
	Lead (Pb)-Total (mg/kg wwt)	0.0387	<0.010	<0.010	<0.0040	0.0108
	Lithium (Li)-Total (mg/kg wwt)	0.15	<0.10	<0.10	<0.10	0.18
	Magnesium (Mg)-Total (mg/kg wwt)	557	255	191	319	636
	Manganese (Mn)-Total (mg/kg wwt)	2.23	2.52	2.44	0.056	1.26
	Mercury (Hg)-Total (mg/kg wwt)	0.256	0.0360	0.255	0.286	0.232
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0059	0.0180	0.274	<0.0040	0.0046
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	12500	3610	3580	2330	14200
	Potassium (K)-Total (mg/kg wwt)	3150	3990	2490	4590	3550
	Rubidium (Rb)-Total (mg/kg wwt)	9.09	19.5	12.5	19.5	14.8
	Selenium (Se)-Total (mg/kg wwt)	0.276	0.718	1.07	0.213	0.236
	Sodium (Na)-Total (mg/kg wwt)	1350	755	1050	382	1150
	Strontium (Sr)-Total (mg/kg wwt)	2.60	<0.020	0.030	0.011	2.71
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00472	0.0131	0.0157	0.00462	0.00559
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	0.020	0.090	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00222	<0.00040	0.00200	<0.00040	0.00107
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	0.053	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	23.1	78.7	24.2	3.23	14.6
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.251			0.259	0.136
Aggregate Organics	Lipid Content (% wwt)	1.5		3.5	<0.5	2.1

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-60 Tissue 21-AUG-18 09:00 GMBY-WALL-007-T	L2173416-62 Tissue 21-AUG-18 09:00 GMBY-WALL-009-L	L2173416-63 Tissue 21-AUG-18 09:00 GMBY-WALL-009-T	L2173416-64 Tissue 21-AUG-18 09:00 GMBY-WALL-009-WB	L2173416-65 Tissue 21-AUG-18 09:00 GMBY-WALL-010-T
TISSUE						
Physical Tests	% Moisture (%)	78.8		78.2	67.6	78.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	<1.0	<1.0	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0311	0.0245	0.0304	0.0296	0.0367
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.331	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0020	0.0588	<0.0010	0.0011	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	91.2	85.1	91.0	14300	145
	Cesium (Cs)-Total (mg/kg wwt)	0.0609	0.0265	0.0664	0.0457	0.0580
	Chromium (Cr)-Total (mg/kg wwt)	<0.040	<0.040	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.323	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.112	2.14	0.128	0.306	0.107
	Iron (Fe)-Total (mg/kg wwt)	1.6	149	1.23	6.89	1.20
	Lead (Pb)-Total (mg/kg wwt)	<0.010	<0.010	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	297	122	338	513	311
	Manganese (Mn)-Total (mg/kg wwt)	0.069	0.981	0.087	0.883	0.063
	Mercury (Hg)-Total (mg/kg wwt)	0.340	0.133	0.301	0.179	0.290
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0080	0.126	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2430	2140	2490	10100	2220
	Potassium (K)-Total (mg/kg wwt)	4610	2200	4940	3400	4430
	Rubidium (Rb)-Total (mg/kg wwt)	21.5	11.1	23.5	15.3	19.7
	Selenium (Se)-Total (mg/kg wwt)	0.199	0.697	0.183	0.233	0.215
	Sodium (Na)-Total (mg/kg wwt)	305	1060	292	1040	408
	Strontium (Sr)-Total (mg/kg wwt)	<0.020	<0.020	<0.010	2.05	0.013
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00519	0.0103	0.00554	0.00532	0.00415
	Tin (Sn)-Total (mg/kg wwt)	0.247	<0.020	0.024	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	2.90	18.5	3.57	19.0	3.12
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.281		0.269	0.0925	0.265
Aggregate Organics	Lipid Content (% wwt)	<0.5	6.3	<0.5	2.8	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-67 Tissue 21-AUG-18 09:00 GMBY-WALL-012-T	L2173416-69 Tissue 21-AUG-18 09:00 GMBY-WALL-014-T	L2173416-71 Tissue 21-AUG-18 09:00 GMBY-WALL-016-T	L2173416-73 Tissue 21-AUG-18 09:00 GMBY-WALL-018-T	L2173416-75 Tissue 21-AUG-18 09:00 GMBY-WALL-020-L
TISSUE						
Physical Tests	% Moisture (%)	80.9	78.5	80.0	79.5	
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	3.0
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0358	0.0357	0.0226	0.0374	0.0607
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.021
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	0.297
	Calcium (Ca)-Total (mg/kg wwt)	109	124	129	173	135
	Cesium (Cs)-Total (mg/kg wwt)	0.0640	0.0621	0.0540	0.0524	0.0273
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.052	<0.010	<0.040
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.466
	Copper (Cu)-Total (mg/kg wwt)	0.098	0.110	0.095	0.108	1.79
	Iron (Fe)-Total (mg/kg wwt)	0.91	3.27	1.24	1.49	137
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.010
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	302	330	308	317	141
	Manganese (Mn)-Total (mg/kg wwt)	0.057	0.066	0.064	0.064	1.38
	Mercury (Hg)-Total (mg/kg wwt)	0.347	0.273	0.294	0.341	0.188
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.173
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2140	2370	2250	2210	2540
	Potassium (K)-Total (mg/kg wwt)	4090	4550	4390	4230	2260
	Rubidium (Rb)-Total (mg/kg wwt)	21.2	23.1	20.6	19.0	11.9
	Selenium (Se)-Total (mg/kg wwt)	0.182	0.209	0.212	0.191	0.842
	Sodium (Na)-Total (mg/kg wwt)	393	411	282	446	1160
	Strontium (Sr)-Total (mg/kg wwt)	<0.010	0.011	0.011	0.019	0.030
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00500	0.00525	0.00466	0.00399	0.0134
	Tin (Sn)-Total (mg/kg wwt)	0.025	0.163	0.023	0.130	1.11
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	0.00139
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.030
	Zinc (Zn)-Total (mg/kg wwt)	2.70	3.63	2.78	2.80	19.0
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	0.042	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.288	0.200	0.266	0.261	
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	3.9

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-76 Tissue 21-AUG-18 09:00 GMBY-WALL-020-T	L2173416-77 Tissue 21-AUG-18 09:00 GMBY-WALL-020-WB	L2173416-78 Tissue 21-AUG-18 09:00 GMBY-WALL-021-L	L2173416-79 Tissue 21-AUG-18 09:00 GMBY-WALL-021-T	L2173416-80 Tissue 21-AUG-18 09:00 GMBY-WALL-021-WB
TISSUE						
Physical Tests	% Moisture (%)	78.3	71.2		78.5	67.2
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	0.54	1.4	<0.40	2.57
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0359	0.0352	0.0414	0.0484	0.0427
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.482	<0.010	<0.010	0.574
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0031	0.214	<0.0010	0.0033
	Calcium (Ca)-Total (mg/kg wwt)	94.7	14500	114	107	15600
	Cesium (Cs)-Total (mg/kg wwt)	0.0611	0.0446	0.0251	0.0478	0.0329
	Chromium (Cr)-Total (mg/kg wwt)	0.011	0.027	<0.040	0.013	0.012
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.358	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.132	0.379	1.47	0.111	0.270
	Iron (Fe)-Total (mg/kg wwt)	1.50	9.09	199	1.50	11.2
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0066	<0.010	<0.0040	0.0089
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	0.12
	Magnesium (Mg)-Total (mg/kg wwt)	332	496	132	321	513
	Manganese (Mn)-Total (mg/kg wwt)	0.069	1.35	1.13	0.054	1.44
	Mercury (Hg)-Total (mg/kg wwt)	0.316	0.191	0.129	0.319	0.181
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	0.148	<0.0040	0.0052
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2390	10200	2180	2340	10600
	Potassium (K)-Total (mg/kg wwt)	4630	3430	2410	4500	3230
	Rubidium (Rb)-Total (mg/kg wwt)	21.1	14.0	8.72	13.6	9.75
	Selenium (Se)-Total (mg/kg wwt)	0.210	0.284	0.709	0.223	0.261
	Sodium (Na)-Total (mg/kg wwt)	383	1110	1130	380	997
	Strontium (Sr)-Total (mg/kg wwt)	<0.010	2.15	0.021	0.011	2.29
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00578	0.00533	0.00894	0.00444	0.00447
	Tin (Sn)-Total (mg/kg wwt)	0.094	<0.020	0.161	0.374	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00091	0.00092	<0.00040	0.00148
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	0.032	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.20	15.6	15.0	3.26	16.9
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.241	0.127		0.173	0.164
Aggregate Organics	Lipid Content (% wwt)	0.6	4.1	1.4	<0.5	3.3

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-81 Tissue 21-AUG-18 09:00 GMBY-WALL-022-L	L2173416-82 Tissue 21-AUG-18 09:00 GMBY-WALL-022-T	L2173416-83 Tissue 21-AUG-18 09:00 GMBY-WALL-022-WB	L2173416-84 Tissue 21-AUG-18 09:00 GMBY-WALL-023-T	L2173416-86 Tissue 21-AUG-18 09:00 GMBY-WALL-025-T
TISSUE						
Physical Tests	% Moisture (%)	78.9	69.4	79.0	80.3	
Metals	Aluminum (Al)-Total (mg/kg wwt)	2.0	<0.40	0.79	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0440	0.0436	0.0360	0.0318	0.0349
	Barium (Ba)-Total (mg/kg wwt)	0.011	<0.010	0.684	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.300	<0.0010	0.0042	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	95.4	93.4	21200	135	74.2
	Cesium (Cs)-Total (mg/kg wwt)	0.0212	0.0575	0.0412	0.0594	0.0576
	Chromium (Cr)-Total (mg/kg wwt)	0.058	<0.010	0.013	0.014	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.202	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	1.50	0.119	0.299	0.127	0.086
	Iron (Fe)-Total (mg/kg wwt)	324	1.59	9.32	1.51	1.16
	Lead (Pb)-Total (mg/kg wwt)	<0.010	<0.0040	0.0086	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	0.15	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	143	341	613	308	288
	Manganese (Mn)-Total (mg/kg wwt)	1.40	0.073	1.34	0.059	0.052
	Mercury (Hg)-Total (mg/kg wwt)	0.168	0.297	0.181	0.240	0.293
	Molybdenum (Mo)-Total (mg/kg wwt)	0.171	<0.0040	0.0044	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2410	2440	13500	2300	2120
	Potassium (K)-Total (mg/kg wwt)	2500	4850	3440	4420	4350
	Rubidium (Rb)-Total (mg/kg wwt)	9.64	18.8	13.1	21.9	21.8
	Selenium (Se)-Total (mg/kg wwt)	0.930	0.237	0.298	0.225	0.206
	Sodium (Na)-Total (mg/kg wwt)	1160	317	1250	404	200
	Strontium (Sr)-Total (mg/kg wwt)	<0.020	<0.010	2.98	0.013	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.0113	0.00468	0.00520	0.00572	0.00520
	Tin (Sn)-Total (mg/kg wwt)	0.268	0.155	<0.020	0.411	0.294
	Uranium (U)-Total (mg/kg wwt)	0.00114	<0.00040	0.00097	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	0.036	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	19.0	3.45	21.2	3.14	3.22
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.284	0.101	0.239	0.274	
Aggregate Organics	Lipid Content (% wwt)	2.8	<0.5	4.1	0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-88 Tissue 21-AUG-18 09:00 GMBY-WALL-027-T	L2173416-90 Tissue 22-AUG-18 09:00 GMBY-WALL-029-T	L2173416-92 Tissue 22-AUG-18 09:00 GMBY-WALL-031-T	L2173416-94 Tissue 22-AUG-18 09:00 GMBY-WALL-033-T	L2173416-95 Tissue 22-AUG-18 09:00 GMBY-WALL-034-T
TISSUE						
Physical Tests	% Moisture (%)	79.0	78.4	79.0	77.5	78.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0293	0.0295	0.0260	0.0662	0.0345
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	86.2	80.9	205	156	88.7
	Cesium (Cs)-Total (mg/kg wwt)	0.0622	0.0754	0.0655	0.0806	0.0665
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.016	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.104	0.105	0.113	0.136	0.110
	Iron (Fe)-Total (mg/kg wwt)	1.93	1.07	1.73	1.28	1.35
	Lead (Pb)-Total (mg/kg wwt)	0.0113	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	317	312	346	341	316
	Manganese (Mn)-Total (mg/kg wwt)	0.063	0.063	0.064	0.075	0.069
	Mercury (Hg)-Total (mg/kg wwt)	0.252	0.293	0.392	0.376	0.349
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2290	2350	2510	2500	2340
	Potassium (K)-Total (mg/kg wwt)	4450	4540	4840	4660	4580
	Rubidium (Rb)-Total (mg/kg wwt)	23.2	23.1	25.2	23.5	22.3
	Selenium (Se)-Total (mg/kg wwt)	0.184	0.199	0.193	0.212	0.216
	Sodium (Na)-Total (mg/kg wwt)	384	231	304	299	325
	Strontium (Sr)-Total (mg/kg wwt)	<0.010	<0.010	0.024	0.018	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00562	0.00552	0.00748	0.00563	0.00490
	Tin (Sn)-Total (mg/kg wwt)	0.696	0.452	0.251	0.179	0.125
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.03	3.19	3.12	3.68	3.27
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.180	0.288	0.266	0.217	0.304
Aggregate Organics	Lipid Content (% wwt)	<0.5	0.5	0.5	0.7	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-96 Tissue 22-AUG-18 09:00 GMBY-WALL-035-T	L2173416-99 Tissue 22-AUG-18 09:00 GMBY-WALL-038-T	L2173416-101 Tissue 22-AUG-18 09:00 GMBY-WALL-040-T	L2173416-102 Tissue 22-AUG-18 09:00 GMBY-WALL-041-T	L2173416-104 Tissue 22-AUG-18 09:00 GMBY-WALL-043-T
TISSUE						
Physical Tests	% Moisture (%)	78.7	78.4	79.2	78.1	79.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0226	0.0266	0.0367	0.0442	0.0317
	Barium (Ba)-Total (mg/kg wwt)	0.010	<0.010	0.018	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	307	93.4	176	90.1	134
	Cesium (Cs)-Total (mg/kg wwt)	0.0601	0.0669	0.0540	0.0587	0.0566
	Chromium (Cr)-Total (mg/kg wwt)	0.011	<0.010	<0.010	<0.010	0.029
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.108	0.139	0.146	0.118	0.116
	Iron (Fe)-Total (mg/kg wwt)	1.51	1.72	1.96	1.74	1.70
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	319	331	300	312	324
	Manganese (Mn)-Total (mg/kg wwt)	0.079	0.071	0.077	0.077	0.084
	Mercury (Hg)-Total (mg/kg wwt)	0.314	0.336	0.237	0.344	0.181
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2400	2320	2340	2290	2340
	Potassium (K)-Total (mg/kg wwt)	4460	4470	4460	4550	4580
	Rubidium (Rb)-Total (mg/kg wwt)	19.8	20.5	19.9	22.0	23.5
	Selenium (Se)-Total (mg/kg wwt)	0.249	0.219	0.227	0.233	0.203
	Sodium (Na)-Total (mg/kg wwt)	286	344	354	289	243
	Strontium (Sr)-Total (mg/kg wwt)	0.034	<0.010	0.018	<0.010	0.011
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00399	0.00530	0.00436	0.00540	0.00559
	Tin (Sn)-Total (mg/kg wwt)	0.075	0.242	0.101	0.192	0.424
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.32	3.27	3.90	3.19	3.96
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.181	0.388	0.283	0.463	0.216
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-105 Tissue 22-AUG-18 09:00 GMBY-WALL-045-T	L2173416-107 Tissue 22-AUG-18 09:00 GMBY-WALL-047-T	L2173416-109 Tissue 21-AUG-18 09:00 GMBY-WHSC-001-T	L2173416-110 Tissue 21-AUG-18 09:00 GMBY-WHSC-001-WB	L2173416-111 Tissue 21-AUG-18 09:00 GMBY-WHSC-002-T
TISSUE						
Physical Tests	% Moisture (%)	78.9	78.5	80.1	71.6	79.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	8.69	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	0.0026	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0613	0.0383	0.0255	0.0530	0.0439
	Barium (Ba)-Total (mg/kg wwt)	0.012	0.019	0.032	0.643	0.019
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	0.0144	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	211	138	112	16400	89.2
	Cesium (Cs)-Total (mg/kg wwt)	0.0565	0.0531	0.0212	0.0136	0.0219
	Chromium (Cr)-Total (mg/kg wwt)	0.014	<0.010	0.091	0.069	0.015
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0142	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.152	0.110	0.211	0.685	0.261
	Iron (Fe)-Total (mg/kg wwt)	4.60	1.75	2.92	24.2	6.35
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0282	0.191	0.0052
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	309	312	337	536	311
	Manganese (Mn)-Total (mg/kg wwt)	0.059	0.079	0.125	5.34	0.107
	Mercury (Hg)-Total (mg/kg wwt)	0.400	0.268	0.297	0.159	0.251
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0193	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2370	2330	2170	10700	2260
	Potassium (K)-Total (mg/kg wwt)	4350	4590	4050	2740	4110
	Rubidium (Rb)-Total (mg/kg wwt)	15.2	16.4	6.22	4.15	7.34
	Selenium (Se)-Total (mg/kg wwt)	0.264	0.251	0.181	0.236	0.191
	Sodium (Na)-Total (mg/kg wwt)	357	272	312	1160	334
	Strontium (Sr)-Total (mg/kg wwt)	0.026	0.012	0.018	4.34	0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00466	0.00437	0.00042	0.00072	0.00061
	Tin (Sn)-Total (mg/kg wwt)	0.202	0.158	0.127	<0.020	0.407
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	0.00552	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	0.051	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.36	3.02	3.56	21.9	3.11
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.533	0.324			
Aggregate Organics	Lipid Content (% wwt)	0.6	0.5	0.7	3.0	1.1

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-112 Tissue 21-AUG-18 09:00 GMBY-WHSC-002-WB	L2173416-113 Tissue 21-AUG-18 09:00 GMBY-WHSC-003-T	L2173416-114 Tissue 21-AUG-18 09:00 GMBY-WHSC-003-WB	L2173416-115 Tissue 21-AUG-18 09:00 GMBY-WHSC-004-T	L2173416-116 Tissue 21-AUG-18 09:00 GMBY-WHSC-004-WB
TISSUE						
Physical Tests	% Moisture (%)	74.1	79.1	70.6	78.9	79.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.98	<0.40	3.35	0.43	2.89
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0445	0.0406	0.0378	0.0792	0.0712
	Barium (Ba)-Total (mg/kg wwt)	0.448	0.028	0.661	0.027	0.710
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0148	<0.0010	0.0080	<0.0010	0.0054
	Calcium (Ca)-Total (mg/kg wwt)	6990	156	16200	414	20900
	Cesium (Cs)-Total (mg/kg wwt)	0.0153	0.0264	0.0151	0.0193	0.0118
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.018	<0.010	0.014
	Cobalt (Co)-Total (mg/kg wwt)	0.0087	0.0043	0.0086	<0.0040	0.0078
	Copper (Cu)-Total (mg/kg wwt)	0.578	0.288	0.606	0.242	0.647
	Iron (Fe)-Total (mg/kg wwt)	22.9	4.91	18.7	4.49	27.5
	Lead (Pb)-Total (mg/kg wwt)	0.0161	<0.0040	0.0455	<0.0040	0.0181
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	339	356	541	365	590
	Manganese (Mn)-Total (mg/kg wwt)	3.07	0.218	6.66	0.381	7.46
	Mercury (Hg)-Total (mg/kg wwt)	0.159	0.228	0.116	0.0879	0.0510
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0129	<0.0040	0.0152	0.0043	0.0323
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	5540	2640	11000	2650	13200
	Potassium (K)-Total (mg/kg wwt)	2960	4670	3000	4540	3170
	Rubidium (Rb)-Total (mg/kg wwt)	5.21	7.40	4.77	6.51	4.41
	Selenium (Se)-Total (mg/kg wwt)	0.241	0.221	0.247	0.221	0.232
	Sodium (Na)-Total (mg/kg wwt)	856	459	1060	399	1080
	Strontium (Sr)-Total (mg/kg wwt)	1.59	0.026	3.60	0.091	5.01
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00080	0.00074	0.00103	0.00129	0.00178
	Tin (Sn)-Total (mg/kg wwt)	0.037	0.097	<0.020	0.111	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00206	<0.00040	0.00328	<0.00040	0.00370
	Vanadium (V)-Total (mg/kg wwt)	0.021	<0.020	0.049	<0.020	0.068
	Zinc (Zn)-Total (mg/kg wwt)	13.8	3.97	18.2	3.43	13.9
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	5.2	1.0	4.2	0.8	4.0

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2173416-117	L2173416-118	L2173416-119	L2173416-120	L2173416-121
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	21-AUG-18	21-AUG-18	21-AUG-18	21-AUG-18	21-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	GMBY-WHSC-005-T	GMBY-WHSC-005-WB	GMBY-WHSC-006-T	GMBY-WHSC-006-WB	GMBY-WHSC-007-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	78.1	73.8	80.6	71.6	79.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.43	2.23	0.54	7.73	0.55
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.106	0.132	0.0658	0.113	0.0260
	Barium (Ba)-Total (mg/kg wwt)	0.017	0.443	0.029	0.483	0.017
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0068	<0.0010	0.0078	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	107	11900	154	14400	83.7
	Cesium (Cs)-Total (mg/kg wwt)	0.0223	0.0149	0.0193	0.0136	0.0256
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.011	0.021	0.016
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0095	<0.0040	0.0127	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.215	0.793	0.202	0.681	0.232
	Iron (Fe)-Total (mg/kg wwt)	3.99	18.3	4.31	25.9	4.34
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0146	<0.0040	0.0248	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	298	503	298	622	309
	Manganese (Mn)-Total (mg/kg wwt)	0.162	4.03	0.169	5.40	0.132
	Mercury (Hg)-Total (mg/kg wwt)	0.139	0.0654	0.0959	0.0628	0.229
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0150	<0.0040	0.0137	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2140	8450	2280	9480	2220
	Potassium (K)-Total (mg/kg wwt)	4010	3030	4370	2930	4360
	Rubidium (Rb)-Total (mg/kg wwt)	5.50	4.27	6.13	4.18	6.25
	Selenium (Se)-Total (mg/kg wwt)	0.172	0.223	0.149	0.205	0.167
	Sodium (Na)-Total (mg/kg wwt)	249	904	209	894	148
	Strontium (Sr)-Total (mg/kg wwt)	0.018	3.90	0.025	3.74	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00121	0.00170	0.00067	0.00123	0.00043
	Tin (Sn)-Total (mg/kg wwt)	0.104	<0.020	0.052	<0.020	0.210
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00185	<0.00040	0.00377	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.030	<0.020	0.043	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.07	18.9	4.03	18.1	3.36
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	1.0	6.2	1.2	4.3	1.2

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-122 Tissue 21-AUG-18 09:00 GMBY-WHSC-007-WB	L2173416-123 Tissue 21-AUG-18 09:00 GMBY-WHSC-008-T	L2173416-124 Tissue 21-AUG-18 09:00 GMBY-WHSC-009-T	L2173416-125 Tissue 21-AUG-18 09:00 GMBY-WHSC-010-T	L2173416-126 Tissue 21-AUG-18 09:00 GMBY-WHSC-010-WB
TISSUE						
Physical Tests	% Moisture (%)	74.1	79.0	78.0	79.9	75.2
Metals	Aluminum (Al)-Total (mg/kg wwt)	2.59	0.65	0.99	1.36	11.9
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0278	0.0394	0.0992	0.0627	0.0982
	Barium (Ba)-Total (mg/kg wwt)	0.306	0.018	0.014	0.018	0.457
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0060	<0.0010	<0.0010	<0.0010	0.0164
	Calcium (Ca)-Total (mg/kg wwt)	11200	130	110	148	11200
	Cesium (Cs)-Total (mg/kg wwt)	0.0156	0.0200	0.0257	0.0175	0.0134
	Chromium (Cr)-Total (mg/kg wwt)	0.011	0.011	<0.010	0.012	0.035
	Cobalt (Co)-Total (mg/kg wwt)	0.0057	<0.0040	<0.0040	<0.0040	0.0138
	Copper (Cu)-Total (mg/kg wwt)	0.617	0.240	0.337	0.227	0.761
	Iron (Fe)-Total (mg/kg wwt)	15.2	4.49	5.35	4.65	34.0
	Lead (Pb)-Total (mg/kg wwt)	0.0134	<0.0040	<0.0040	0.0045	0.0315
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	443	334	347	328	482
	Manganese (Mn)-Total (mg/kg wwt)	2.92	0.142	0.152	0.223	5.04
	Mercury (Hg)-Total (mg/kg wwt)	0.132	0.305	0.151	0.137	0.0800
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0139	<0.0040	<0.0040	<0.0040	0.0185
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	7790	2280	2470	2390	7770
	Potassium (K)-Total (mg/kg wwt)	2790	4130	4630	4410	3200
	Rubidium (Rb)-Total (mg/kg wwt)	4.07	5.81	6.81	6.05	4.32
	Selenium (Se)-Total (mg/kg wwt)	0.216	0.195	0.220	0.213	0.286
	Sodium (Na)-Total (mg/kg wwt)	833	295	223	298	991
	Strontium (Sr)-Total (mg/kg wwt)	2.26	0.020	0.014	0.024	3.07
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00057	0.00074	0.00092	0.00085	0.00118
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.060	0.080	0.175	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00212	<0.00040	<0.00040	<0.00040	0.00385
	Vanadium (V)-Total (mg/kg wwt)	0.025	<0.020	<0.020	<0.020	0.055
	Zinc (Zn)-Total (mg/kg wwt)	13.9	3.25	3.74	3.43	12.5
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	4.4	1.0	1.0	<0.5	3.0

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-127 Tissue 21-AUG-18 09:00 GMBY-WHSC-011-T	L2173416-128 Tissue 21-AUG-18 09:00 GMBY-WHSC-011-WB	L2173416-129 Tissue 21-AUG-18 09:00 GMBY-WHSC-012-T	L2173416-130 Tissue 21-AUG-18 09:00 GMBY-WHSC-012-WB	L2173416-131 Tissue 21-AUG-18 09:00 GMBY-WHSC-013-T
TISSUE						
Physical Tests	% Moisture (%)	80.3	76.4	80.1	79.6	78.8
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.87	5.84	0.80	3.85	0.78
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0241	0.0426	0.0341	0.0469	0.0405
	Barium (Ba)-Total (mg/kg wwt)	0.019	0.497	0.017	0.482	0.019
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0211	0.0011	0.0252	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	167	9180	139	14400	116
	Cesium (Cs)-Total (mg/kg wwt)	0.0164	0.0113	0.0276	0.0155	0.0216
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.014	<0.010	0.013	0.018
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0093	<0.0040	0.0095	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.193	0.754	0.212	0.674	0.187
	Iron (Fe)-Total (mg/kg wwt)	3.38	23.6	4.00	18.7	7.32
	Lead (Pb)-Total (mg/kg wwt)	0.0045	0.0308	<0.0040	0.0402	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	318	406	297	432	328
	Manganese (Mn)-Total (mg/kg wwt)	0.209	3.32	0.189	4.29	0.200
	Mercury (Hg)-Total (mg/kg wwt)	0.450	0.270	0.301	0.140	0.158
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0191	<0.0040	0.0230	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2360	6910	2230	9020	2410
	Potassium (K)-Total (mg/kg wwt)	4350	2910	4070	2720	4530
	Rubidium (Rb)-Total (mg/kg wwt)	6.34	4.38	6.32	4.34	8.13
	Selenium (Se)-Total (mg/kg wwt)	0.174	0.245	0.197	0.256	0.189
	Sodium (Na)-Total (mg/kg wwt)	263	1000	346	1270	280
	Strontium (Sr)-Total (mg/kg wwt)	0.028	2.28	0.023	2.84	0.015
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00064	0.00089	0.00111	0.00156	0.00048
	Tin (Sn)-Total (mg/kg wwt)	0.067	<0.020	0.168	<0.020	0.164
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00464	<0.00040	0.00476	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.047	<0.020	0.044	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.08	15.5	2.88	15.0	3.33
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.7	4.8	0.6	2.6	0.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-132 Tissue 21-AUG-18 09:00 GMBY-WHSC-014-T	L2173416-133 Tissue 21-AUG-18 09:00 GMBY-WHSC-015-T	L2173416-134 Tissue 21-AUG-18 09:00 GMBY-WHSC-016-T	L2173416-135 Tissue 21-AUG-18 09:00 GMBY-WHSC-017-T	L2173416-136 Tissue 21-AUG-18 09:00 GMBY-WHSC-019-T
TISSUE						
Physical Tests	% Moisture (%)	79.2	79.1	79.7	77.5	78.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.96	0.48	0.50	0.48	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0460	0.0532	0.0423	0.0605	0.0413
	Barium (Ba)-Total (mg/kg wwt)	0.016	0.043	0.015	0.024	0.022
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	138	191	119	132	197
	Cesium (Cs)-Total (mg/kg wwt)	0.0177	0.0142	0.0172	0.0157	0.0194
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.012	0.010	0.020
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.211	0.176	0.189	0.201	0.307
	Iron (Fe)-Total (mg/kg wwt)	4.15	2.83	3.67	2.66	3.40
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	320	353	326	343	305
	Manganese (Mn)-Total (mg/kg wwt)	0.213	0.205	0.175	0.178	0.260
	Mercury (Hg)-Total (mg/kg wwt)	0.203	0.163	0.130	0.169	0.184
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2230	2410	2340	2370	2170
	Potassium (K)-Total (mg/kg wwt)	4220	4670	4530	4410	4030
	Rubidium (Rb)-Total (mg/kg wwt)	6.98	6.04	6.22	6.79	6.33
	Selenium (Se)-Total (mg/kg wwt)	0.180	0.202	0.160	0.203	0.197
	Sodium (Na)-Total (mg/kg wwt)	290	187	230	247	326
	Strontium (Sr)-Total (mg/kg wwt)	0.023	0.033	0.016	0.019	0.034
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00117	0.00070	0.00146	0.00096	0.00100
	Tin (Sn)-Total (mg/kg wwt)	0.068	0.183	0.208	0.106	0.064
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.49	4.25	3.31	3.92	3.84
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.8	0.9	79.4	0.6	1.0

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2173416-137	L2173416-138	L2173416-141	L2173416-142	L2173416-143
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	21-AUG-18	21-AUG-18	29-AUG-18	29-AUG-18	29-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	GMBY-WHSC-021-T	GMBY-WHSC-024-T	GMBY-YLPR-COMP1	GMBY-YLPR-COMP2	GMBY-YLPR-COMP3
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	79.4	76.9	76.3	79.4	75.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	2.91	2.0	2.1	1.7
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0332	0.0781	0.0496	0.0507	0.0422
	Barium (Ba)-Total (mg/kg wwt)	0.011	0.017	0.481	0.373	0.514
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	0.0047	0.0059	0.0045
	Calcium (Ca)-Total (mg/kg wwt)	116	289	12500	10400	14000
	Cesium (Cs)-Total (mg/kg wwt)	0.0232	0.0193	0.0155	0.0100	0.0153
	Chromium (Cr)-Total (mg/kg wwt)	0.110	0.021	<0.040	<0.040	<0.040
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0055	0.0054	0.0059
	Copper (Cu)-Total (mg/kg wwt)	0.281	0.266	0.601	0.476	0.671
	Iron (Fe)-Total (mg/kg wwt)	4.58	3.16	14.4	15.2	12.8
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0102	<0.010	<0.010	<0.010
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	0.12	<0.10	0.12
	Magnesium (Mg)-Total (mg/kg wwt)	327	316	425	417	485
	Manganese (Mn)-Total (mg/kg wwt)	0.118	0.225	5.84	7.67	5.57
	Mercury (Hg)-Total (mg/kg wwt)	0.351	0.180	0.0302	0.0250	0.0264
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0191	0.0158	0.0171
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2400	2340	9360	8560	10900
	Potassium (K)-Total (mg/kg wwt)	4470	4120	3590	3100	3680
	Rubidium (Rb)-Total (mg/kg wwt)	7.18	6.11	8.25	6.35	9.17
	Selenium (Se)-Total (mg/kg wwt)	0.210	0.251	0.243	0.218	0.229
	Sodium (Na)-Total (mg/kg wwt)	295	312	962	780	1010
	Strontium (Sr)-Total (mg/kg wwt)	0.014	0.074	2.40	1.78	2.80
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00078	0.00120	0.00506	0.00483	0.00572
	Tin (Sn)-Total (mg/kg wwt)	0.043	0.987	0.157	0.180	0.224
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	0.00108	0.00103	0.00139
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.47	5.35	21.8	19.4	25.1
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)			0.0313	0.0197	0.0300
Aggregate Organics	Lipid Content (% wwt)	1.2	1.0	2.1	2.1	1.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-144 Tissue 29-AUG-18 09:00 GMBY-YLPR-COMP4	L2173416-145 Tissue 29-AUG-18 09:00 GMBY-YLPR-COMP5	L2173416-146 Tissue 29-AUG-18 09:00 GMBY-YLPR-COMP6	L2173416-147 Tissue 29-AUG-18 09:00 GMBY-YLPR-COMP7	L2173416-148 Tissue 29-AUG-18 09:00 GMBY-YLPR-COMP8
TISSUE						
Physical Tests	% Moisture (%)	77.9	77.3	76.2	78.1	78.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	1.3	2.7	3.9	1.4	3.21
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0466	0.0475	0.0506	0.0453	0.0456
	Barium (Ba)-Total (mg/kg wwt)	0.383	0.416	0.471	0.425	0.471
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0051	0.0062	0.0050	0.0041	0.0047
	Calcium (Ca)-Total (mg/kg wwt)	9980	11200	13700	12700	11000
	Cesium (Cs)-Total (mg/kg wwt)	0.0120	0.0126	0.0119	0.0135	0.0129
	Chromium (Cr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	0.014
	Cobalt (Co)-Total (mg/kg wwt)	0.0048	0.0057	0.0064	0.0049	0.0051
	Copper (Cu)-Total (mg/kg wwt)	0.496	0.540	0.512	0.532	0.522
	Iron (Fe)-Total (mg/kg wwt)	10.3	15.5	16.4	9.7	16.7
	Lead (Pb)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.0064
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	0.11	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	380	445	454	412	396
	Manganese (Mn)-Total (mg/kg wwt)	5.18	11.3	13.9	7.41	7.86
	Mercury (Hg)-Total (mg/kg wwt)	0.0267	0.0283	0.0306	0.0267	0.0177
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0168	0.0198	0.0164	0.0163	0.0180
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	7980	9140	9620	8390	8610
	Potassium (K)-Total (mg/kg wwt)	3350	3670	3480	3020	3460
	Rubidium (Rb)-Total (mg/kg wwt)	7.56	7.89	7.77	6.81	8.31
	Selenium (Se)-Total (mg/kg wwt)	0.220	0.227	0.245	0.214	0.197
	Sodium (Na)-Total (mg/kg wwt)	874	871	896	823	872
	Strontium (Sr)-Total (mg/kg wwt)	1.74	1.91	2.30	2.45	2.07
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00385	0.00501	0.00501	0.00418	0.00516
	Tin (Sn)-Total (mg/kg wwt)	0.244	0.226	0.216	0.264	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00163	0.00144	0.00129	0.00108	0.00176
	Vanadium (V)-Total (mg/kg wwt)	0.022	<0.020	0.021	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	18.4	22.9	22.3	19.2	22.4
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0273	0.0328	0.0354	0.0348	0.0233
Aggregate Organics	Lipid Content (% wwt)	2.0	2.1	2.1	2.1	2.1

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-149 Tissue 21-AUG-18 09:00 GMBY-YLPR-001-T	L2173416-150 Tissue 21-AUG-18 09:00 GMBY-YLPR-002-T	L2173416-151 Tissue 21-AUG-18 09:00 GMBY-YLPR-003-T	L2173416-152 Tissue 21-AUG-18 09:00 GMBY-YLPR-004-T	L2173416-153 Tissue 21-AUG-18 09:00 GMBY-YLPR-005-T
TISSUE						
Physical Tests	% Moisture (%)	78.7	77.1	77.8	78.0	77.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<1.0	<1.0	<0.40	0.41	<1.0
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0138	0.0166	0.0176	0.0217	0.0216
	Barium (Ba)-Total (mg/kg wwt)	0.011	0.050	0.020	0.020	0.046
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0010	<0.0010	<0.0020
	Calcium (Ca)-Total (mg/kg wwt)	188	1180	597	410	975
	Cesium (Cs)-Total (mg/kg wwt)	0.0236	0.0299	0.0201	0.0160	0.0178
	Chromium (Cr)-Total (mg/kg wwt)	<0.040	<0.040	0.079	0.012	<0.040
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.085	0.129	0.111	0.157	0.167
	Iron (Fe)-Total (mg/kg wwt)	1.5	2.0	3.33	2.18	2.4
	Lead (Pb)-Total (mg/kg wwt)	<0.010	<0.010	<0.0040	0.0044	<0.010
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	262	338	348	345	282
	Manganese (Mn)-Total (mg/kg wwt)	0.118	0.378	0.292	0.343	0.347
	Mercury (Hg)-Total (mg/kg wwt)	0.135	0.168	0.0774	0.0391	0.0491
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0080	<0.0080	<0.0040	<0.0040	<0.0080
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	0.046	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2030	3050	2600	2440	2390
	Potassium (K)-Total (mg/kg wwt)	3600	4380	4360	4260	3550
	Rubidium (Rb)-Total (mg/kg wwt)	7.47	9.57	7.98	7.90	7.72
	Selenium (Se)-Total (mg/kg wwt)	0.258	0.306	0.303	0.317	0.271
	Sodium (Na)-Total (mg/kg wwt)	202	465	459	616	674
	Strontium (Sr)-Total (mg/kg wwt)	0.028	0.159	0.069	0.050	0.173
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00142	0.00265	0.00526	0.00376	0.00317
	Tin (Sn)-Total (mg/kg wwt)	0.327	0.336	0.159	0.173	0.534
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.23	4.23	4.13	4.68	4.93
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.142	0.169	0.0859	0.0347	0.0437
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-154 Tissue 21-AUG-18 09:00 GMBY-YLPR-006-T	L2173416-155 Tissue 21-AUG-18 09:00 GMBY-YLPR-007-T	L2173416-156 Tissue 21-AUG-18 09:00 GMBY-YLPR-008-T	L2173416-157 Tissue 21-AUG-18 09:00 GMBY-YLPR-009-T	L2173416-158 Tissue 21-AUG-18 09:00 GMBY-YLPR-010-T
TISSUE						
Physical Tests	% Moisture (%)	79.6	78.1	79.5	79.7	77.2
Metals	Aluminum (Al)-Total (mg/kg wwt)	<1.0	<1.0	<1.0	<1.0	2.4
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0117	0.0240	0.0274	0.0140	0.0175
	Barium (Ba)-Total (mg/kg wwt)	0.038	0.025	0.043	0.033	0.022
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Calcium (Ca)-Total (mg/kg wwt)	554	445	802	520	330
	Cesium (Cs)-Total (mg/kg wwt)	0.0207	0.0171	0.0167	0.0209	0.0175
	Chromium (Cr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	0.046	<0.040
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.161	0.246	0.167	0.125	0.184
	Iron (Fe)-Total (mg/kg wwt)	3.8	3.4	2.8	3.7	3.8
	Lead (Pb)-Total (mg/kg wwt)	0.011	<0.010	<0.010	0.017	<0.010
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	238	293	231	289	215
	Manganese (Mn)-Total (mg/kg wwt)	0.354	0.464	0.514	0.271	0.478
	Mercury (Hg)-Total (mg/kg wwt)	0.0585	0.0364	0.0433	0.0461	0.0448
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0080	<0.0080	<0.0080	<0.0080	<0.0080
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	1980	2320	1910	2120	1700
	Potassium (K)-Total (mg/kg wwt)	3450	3860	2920	3810	3080
	Rubidium (Rb)-Total (mg/kg wwt)	10.1	8.05	6.87	10.2	9.33
	Selenium (Se)-Total (mg/kg wwt)	0.216	0.288	0.179	0.224	0.210
	Sodium (Na)-Total (mg/kg wwt)	623	706	473	233	552
	Strontium (Sr)-Total (mg/kg wwt)	0.071	0.061	0.118	0.066	0.044
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00236	0.00290	0.00246	0.00276	0.00358
	Tin (Sn)-Total (mg/kg wwt)	0.765	1.04	0.604	0.957	1.28
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.67	5.36	4.41	3.96	4.81
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0679	0.0343	0.0479	0.0614	0.0512
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-159 Tissue 21-AUG-18 09:00 GMBY-YLPR-011-T	L2173416-161 Tissue 21-AUG-18 09:00 GMBY-YLPR-013-T	L2173416-162 Tissue 21-AUG-18 09:00 GMBY-YLPR-014-T	L2173416-165 Tissue 21-AUG-18 09:00 GMBY-YLPR-017-T	L2173416-166 Tissue 21-AUG-18 09:00 GMBY-YLPR-018-T
TISSUE						
Physical Tests	% Moisture (%)	77.6	78.1	78.3	80.3	80.2
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	31.0	<1.0	<0.40	1.7
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	0.0033	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0249	0.0488	0.0232	0.0144	0.0126
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.011	0.052	0.011	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	0.28	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0020	<0.0020	<0.0010	<0.0020
	Calcium (Ca)-Total (mg/kg wwt)	219	119	570	296	107
	Cesium (Cs)-Total (mg/kg wwt)	0.0240	0.0197	0.0236	0.0176	0.0160
	Chromium (Cr)-Total (mg/kg wwt)	0.015	0.108	0.067	0.012	<0.040
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.116	0.125	0.126	0.129	0.136
	Iron (Fe)-Total (mg/kg wwt)	1.31	1.6	2.9	1.65	1.4
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.055	0.039	<0.0040	<0.010
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	373	286	348	322	267
	Manganese (Mn)-Total (mg/kg wwt)	0.214	0.185	0.393	0.257	0.158
	Mercury (Hg)-Total (mg/kg wwt)	0.112	0.0528	0.0580	0.0636	0.0379
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0090	<0.0080	<0.0040	<0.0080
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2780	2240	2740	2390	2090
	Potassium (K)-Total (mg/kg wwt)	5000	4140	4630	4370	3770
	Rubidium (Rb)-Total (mg/kg wwt)	8.74	7.52	10.7	8.64	8.07
	Selenium (Se)-Total (mg/kg wwt)	0.297	0.405	0.329	0.233	0.203
	Sodium (Na)-Total (mg/kg wwt)	334	607	318	263	379
	Strontium (Sr)-Total (mg/kg wwt)	0.022	0.152	0.083	0.035	<0.020
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00514	0.00402	0.00597	0.00320	0.00234
	Tin (Sn)-Total (mg/kg wwt)	0.497	7.07	1.40	0.345	0.918
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.18	17.2	4.70	3.72	4.23
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.133	0.0612	0.0680	0.0725	0.0459
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2173416-168	L2173416-169	L2173416-170	L2173416-171	L2173416-172
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	21-AUG-18	21-AUG-18	21-AUG-18	21-AUG-18	21-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	GMBY-YLPR-020-T	GMBY-YLPR-021-T	GMBY-YLPR-022-T	GMBY-YLPR-023-T	GMBY-YLPR-024-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	78.4	79.0	78.9	79.1	77.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	1.37	<1.0	<1.0	<1.0	<1.0
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0236	0.0211	0.0132	0.0115	0.0185
	Barium (Ba)-Total (mg/kg wwt)	0.014	0.035	0.027	0.017	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0020	<0.0020	<0.0020	<0.0020
	Calcium (Ca)-Total (mg/kg wwt)	395	822	640	303	142
	Cesium (Cs)-Total (mg/kg wwt)	0.0212	0.0260	0.0130	0.0132	0.0193
	Chromium (Cr)-Total (mg/kg wwt)	0.055	<0.040	<0.040	<0.040	<0.040
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.169	0.189	0.171	0.132	0.251
	Iron (Fe)-Total (mg/kg wwt)	2.87	3.3	2.2	1.5	2.2
	Lead (Pb)-Total (mg/kg wwt)	0.0068	<0.010	<0.010	<0.010	<0.010
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	341	294	239	220	270
	Manganese (Mn)-Total (mg/kg wwt)	0.229	0.455	0.268	0.216	0.168
	Mercury (Hg)-Total (mg/kg wwt)	0.0595	0.0593	0.0338	0.0377	0.0535
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0080	<0.0080	<0.0080	<0.0080
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2490	2220	1770	1680	2230
	Potassium (K)-Total (mg/kg wwt)	4220	3240	2830	3040	4090
	Rubidium (Rb)-Total (mg/kg wwt)	8.76	10.2	5.98	5.74	7.95
	Selenium (Se)-Total (mg/kg wwt)	0.308	0.260	0.263	0.208	0.270
	Sodium (Na)-Total (mg/kg wwt)	461	591	556	374	368
	Strontium (Sr)-Total (mg/kg wwt)	0.052	0.117	0.101	0.042	<0.020
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00296	0.00355	0.00219	0.00482	0.00455
	Tin (Sn)-Total (mg/kg wwt)	1.06	0.270	0.317	0.257	0.205
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.50	5.64	4.14	3.18	4.10
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0658	0.0533	0.0437	0.0527	0.0590
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-173 Tissue 30-AUG-18 09:00 KLBB-LKWH-001-T	L2173416-174 Tissue 30-AUG-18 09:00 KLBB-LKWH-002-T	L2173416-175 Tissue 30-AUG-18 09:00 KLBB-LKWH-003-T	L2173416-176 Tissue 01-SEP-18 09:00 KLBB-LKWH-004-T	L2173416-177 Tissue 01-SEP-18 09:00 KLBB-LKWH-005-T
TISSUE						
Physical Tests	% Moisture (%)	76.1	77.0	76.1	76.2	74.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.105	0.209	0.147	0.158	0.120
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.023	0.012	<0.010	0.013
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	204	938	393	172	108
	Cesium (Cs)-Total (mg/kg wwt)	0.0146	0.0190	0.0136	0.0179	0.0142
	Chromium (Cr)-Total (mg/kg wwt)	0.012	0.015	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0045	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.200	0.138	0.223	0.271	0.219
	Iron (Fe)-Total (mg/kg wwt)	3.85	4.24	4.28	6.06	2.65
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0052	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	303	323	309	310	331
	Manganese (Mn)-Total (mg/kg wwt)	0.143	0.217	0.182	0.078	0.150
	Mercury (Hg)-Total (mg/kg wwt)	0.126	0.112	0.149	0.192	0.112
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2510	3020	2470	2810	2650
	Potassium (K)-Total (mg/kg wwt)	3970	4370	3800	4350	4480
	Rubidium (Rb)-Total (mg/kg wwt)	4.51	4.88	4.61	4.46	5.98
	Selenium (Se)-Total (mg/kg wwt)	0.248	0.258	0.213	0.264	0.202
	Sodium (Na)-Total (mg/kg wwt)	348	388	495	413	278
	Strontium (Sr)-Total (mg/kg wwt)	0.079	0.470	0.144	0.058	0.037
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00094	0.00057	0.00195	0.00134	0.00131
	Tin (Sn)-Total (mg/kg wwt)	0.077	0.223	0.050	0.111	0.061
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.47	3.56	3.75	3.69	3.62
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	3.0	1.9	2.3	1.1	1.4

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-178 Tissue 01-SEP-18 09:00 KLBB-NRPK-001-T	L2173416-179 Tissue 02-SEP-18 09:00 KLBB-NRPK-002-T	L2173416-180 Tissue 01-SEP-18 09:00 KLBB-NRPK-003-T	L2173416-181 Tissue 30-AUG-18 09:00 KLBB-WALL-001-T	L2173416-182 Tissue 30-AUG-18 09:00 KLBB-WALL-002-T
TISSUE						
Physical Tests	% Moisture (%)	78.7	77.7	77.2	79.5	79.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	0.77	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.442	0.171	0.354	0.0661	0.328
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.016	0.014	<0.010	0.024
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	391	606	372	225	557
	Cesium (Cs)-Total (mg/kg wwt)	0.0624	0.0554	0.0509	0.0601	0.0990
	Chromium (Cr)-Total (mg/kg wwt)	0.010	<0.010	0.010	0.104	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.141	0.135	0.149	0.149	0.162
	Iron (Fe)-Total (mg/kg wwt)	1.60	1.17	2.01	2.44	2.23
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0046
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	329	387	361	326	319
	Manganese (Mn)-Total (mg/kg wwt)	0.228	0.317	0.259	0.088	0.146
	Mercury (Hg)-Total (mg/kg wwt)	0.188	0.255	0.156	0.379	0.522
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	0.053	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2540	2880	2650	2500	2440
	Potassium (K)-Total (mg/kg wwt)	4380	4710	4480	4480	4180
	Rubidium (Rb)-Total (mg/kg wwt)	9.24	11.7	9.57	12.7	11.6
	Selenium (Se)-Total (mg/kg wwt)	0.174	0.180	0.170	0.183	0.200
	Sodium (Na)-Total (mg/kg wwt)	323	358	339	283	411
	Strontium (Sr)-Total (mg/kg wwt)	0.075	0.102	0.082	0.039	0.122
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00628	0.00677	0.00594	0.00509	0.00312
	Tin (Sn)-Total (mg/kg wwt)	0.086	0.035	0.148	0.025	0.023
	Uranium (U)-Total (mg/kg wwt)	0.00087	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.46	5.28	4.09	3.51	4.31
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.174	0.282	0.210	0.432	0.658
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	0.7

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-183 Tissue 30-AUG-18 09:00 KLBB-WALL-003-T	L2173416-184 Tissue 30-AUG-18 09:00 KLBB-WALL-004-T	L2173416-185 Tissue 01-SEP-18 09:00 KLBB-WALL-005-T	L2173416-186 Tissue 01-SEP-18 09:00 KLBB-WALL-006-T	L2173416-187 Tissue 01-SEP-18 09:00 KLBB-WALL-006-WB
TISSUE						
Physical Tests	% Moisture (%)	79.1	78.7	78.5	78.9	70.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	0.41	<0.40	<0.40	0.74
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.239	0.176	0.103	0.0794	0.134
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.465
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	0.0025
	Calcium (Ca)-Total (mg/kg wwt)	178	183	122	117	25000
	Cesium (Cs)-Total (mg/kg wwt)	0.119	0.138	0.110	0.108	0.0656
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.013
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0082
	Copper (Cu)-Total (mg/kg wwt)	0.158	0.153	0.131	0.184	0.348
	Iron (Fe)-Total (mg/kg wwt)	1.62	1.89	1.20	1.51	8.22
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0045
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	305	330	358	327	655
	Manganese (Mn)-Total (mg/kg wwt)	0.078	0.109	0.066	0.081	1.53
	Mercury (Hg)-Total (mg/kg wwt)	0.514	0.380	0.384	0.293	0.161
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0043
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2340	2520	2570	2630	15500
	Potassium (K)-Total (mg/kg wwt)	4400	4780	4910	5030	3220
	Rubidium (Rb)-Total (mg/kg wwt)	13.4	16.2	22.8	17.1	10.6
	Selenium (Se)-Total (mg/kg wwt)	0.160	0.177	0.177	0.167	0.228
	Sodium (Na)-Total (mg/kg wwt)	327	356	276	253	1460
	Strontium (Sr)-Total (mg/kg wwt)	0.035	0.032	0.015	0.014	4.89
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00388	0.00677	0.00650	0.00976	0.00950
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.55	3.98	3.97	3.68	22.0
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.585	0.440	0.403	0.390	
Aggregate Organics	Lipid Content (% wwt)	0.6	<0.5	0.5	0.6	3.1

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-188 Tissue 01-SEP-18 09:00 KLBB-WALL-010-T	L2173416-189 Tissue 01-SEP-18 09:00 KLBB-WALL-010-WB	L2173416-190 Tissue 02-SEP-18 09:00 KLBB-WALL-014-G	L2173416-191 Tissue 02-SEP-18 09:00 KLBB-WALL-014-L	L2173416-192 Tissue 02-SEP-18 09:00 KLBB-WALL-014-T
TISSUE						
Physical Tests	% Moisture (%)	78.0	65.1	75.5	65.5	76.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	6.67	<1.0	<1.0	0.44
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.129	0.378	0.0414	0.0519	0.130
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.552	0.040	0.021	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0049	0.0036	0.0985	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	111	22600	322	82.1	116
	Cesium (Cs)-Total (mg/kg wwt)	0.0692	0.0492	0.108	0.0634	0.118
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.139	<0.040	<0.040	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0126	0.0761	0.0784	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.189	0.412	0.898	1.46	0.128
	Iron (Fe)-Total (mg/kg wwt)	1.66	21.5	31.0	46.6	1.56
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0124	<0.010	<0.010	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	333	658	315	198	333
	Manganese (Mn)-Total (mg/kg wwt)	0.059	1.99	2.78	1.75	0.064
	Mercury (Hg)-Total (mg/kg wwt)	0.417	0.250	0.0771	0.341	0.738
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0087	<0.0080	0.152	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	0.062	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2500	14300	3500	3130	2480
	Potassium (K)-Total (mg/kg wwt)	4790	3590	3900	2900	4650
	Rubidium (Rb)-Total (mg/kg wwt)	19.3	13.4	20.8	19.4	23.5
	Selenium (Se)-Total (mg/kg wwt)	0.187	0.283	0.729	0.757	0.193
	Sodium (Na)-Total (mg/kg wwt)	241	1410	1120	968	219
	Strontium (Sr)-Total (mg/kg wwt)	0.014	3.97	0.048	0.036	0.016
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00523	0.00579	0.0111	0.0306	0.00489
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	0.062	0.215	0.056
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00067	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.021	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.09	22.2	58.1	19.1	3.30
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.598			0.343	0.687
Aggregate Organics	Lipid Content (% wwt)	<0.5	3.9	6.9	14.0	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-193 Tissue 01-SEP-18 09:00 KLBB-WALL-014-WB	L2173416-194 Tissue 03-SEP-18 09:00 KLBB-WALL-020-T	L2173416-195 Tissue 03-SEP-18 09:00 KLBB-WALL-022-T	L2173416-196 Tissue 03-SEP-18 09:00 KLBB-WALL-023-T	L2173416-198 Tissue 30-AUG-18 09:00 KLBB-WHSC-001-T
TISSUE						
Physical Tests	% Moisture (%)	68.7	77.0	79.0	77.6	82.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.47	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.121	0.0875	0.128	0.125	0.202
	Barium (Ba)-Total (mg/kg wwt)	0.287	<0.010	<0.010	<0.010	0.016
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0023	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	16200	356	161	128	148
	Cesium (Cs)-Total (mg/kg wwt)	0.0824	0.135	0.0741	0.100	0.0304
	Chromium (Cr)-Total (mg/kg wwt)	0.013	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.317	0.142	0.147	0.195	0.188
	Iron (Fe)-Total (mg/kg wwt)	9.60	1.45	1.64	2.26	2.74
	Lead (Pb)-Total (mg/kg wwt)	0.0064	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	523	318	318	333	265
	Manganese (Mn)-Total (mg/kg wwt)	0.899	0.093	0.058	0.060	0.150
	Mercury (Hg)-Total (mg/kg wwt)	0.432	0.438	0.548	0.451	0.199
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	11100	2470	2330	2550	2120
	Potassium (K)-Total (mg/kg wwt)	3400	4390	4430	4920	4000
	Rubidium (Rb)-Total (mg/kg wwt)	15.9	20.2	15.8	19.6	5.22
	Selenium (Se)-Total (mg/kg wwt)	0.260	0.171	0.195	0.204	0.197
	Sodium (Na)-Total (mg/kg wwt)	1210	292	295	275	293
	Strontium (Sr)-Total (mg/kg wwt)	3.56	0.065	0.025	0.017	0.036
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00522	0.00508	0.00546	0.00594	0.00065
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.024
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	17.8	4.37	3.67	4.36	3.41
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)		0.398	0.495	0.376	
Aggregate Organics	Lipid Content (% wwt)	3.6	0.5	0.6	0.6	0.7

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-199 Tissue 30-AUG-18 09:00 KLBB-WHSC-002-T	L2173416-200 Tissue 30-AUG-18 09:00 KLBB-WHSC-003-T	L2173416-201 Tissue 30-AUG-18 09:00 KLBB-WHSC-004-T	L2173416-202 Tissue 30-AUG-18 09:00 KLBB-WHSC-004-WB	L2173416-203 Tissue 30-AUG-18 09:00 KLBB-WHSC-005-T
TISSUE						
Physical Tests	% Moisture (%)	81.2	82.1	80.7	74.8	81.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	32.5	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	0.0063	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.330	0.116	0.307	1.52	0.234
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.016	0.020	0.497	0.015
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	0.0116	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	177	179	198	7420	210
	Cesium (Cs)-Total (mg/kg wwt)	0.0265	0.0229	0.0283	0.0205	0.0140
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.130	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0381	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.186	0.190	0.266	0.896	0.304
	Iron (Fe)-Total (mg/kg wwt)	2.42	3.12	4.21	91.7	5.22
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0429	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	335	303	288	360	266
	Manganese (Mn)-Total (mg/kg wwt)	0.143	0.167	0.183	4.43	0.210
	Mercury (Hg)-Total (mg/kg wwt)	0.172	0.216	0.143	0.0669	0.168
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0206	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	0.087	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2150	2080	2170	6100	1870
	Potassium (K)-Total (mg/kg wwt)	4170	4020	3980	2910	3390
	Rubidium (Rb)-Total (mg/kg wwt)	5.50	4.21	4.54	3.29	4.92
	Selenium (Se)-Total (mg/kg wwt)	0.175	0.250	0.245	0.247	0.218
	Sodium (Na)-Total (mg/kg wwt)	227	271	313	1010	555
	Strontium (Sr)-Total (mg/kg wwt)	0.038	0.035	0.052	2.34	0.051
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00124	0.00063	0.00104	0.00137	0.00067
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.022
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	0.00373	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	0.122	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.48	3.85	3.41	13.5	3.95
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	0.063	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.7	<0.5	1.1	3.6	0.9

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-204 Tissue 30-AUG-18 09:00 KLBB-WHSC-005-WB	L2173416-205 Tissue 30-AUG-18 09:00 KLBB-WHSC-006-T	L2173416-206 Tissue 30-AUG-18 09:00 KLBB-WHSC-007-T	L2173416-207 Tissue 30-AUG-18 09:00 KLBB-WHSC-008-T	L2173416-208 Tissue 30-AUG-18 09:00 KLBB-WHSC-010-T
TISSUE						
Physical Tests	% Moisture (%)	74.2	82.6	79.2	80.0	78.2
Metals	Aluminum (Al)-Total (mg/kg wwt)	17.0	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	0.0034	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.999	0.102	0.300	0.308	0.268
	Barium (Ba)-Total (mg/kg wwt)	0.542	0.021	0.016	0.038	0.013
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0118	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	11900	261	135	449	175
	Cesium (Cs)-Total (mg/kg wwt)	0.0114	0.0193	0.0267	0.0212	0.0325
	Chromium (Cr)-Total (mg/kg wwt)	0.070	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0219	0.0043	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.917	0.258	0.297	0.209	0.208
	Iron (Fe)-Total (mg/kg wwt)	58.9	3.53	3.56	3.17	3.51
	Lead (Pb)-Total (mg/kg wwt)	0.0374	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	433	260	331	341	313
	Manganese (Mn)-Total (mg/kg wwt)	7.14	0.185	0.179	0.206	0.142
	Mercury (Hg)-Total (mg/kg wwt)	0.0820	0.127	0.0990	0.137	0.177
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0155	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	0.050	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	8400	2110	2220	2380	2360
	Potassium (K)-Total (mg/kg wwt)	2800	3760	4040	4200	4490
	Rubidium (Rb)-Total (mg/kg wwt)	3.83	3.09	4.37	7.20	5.08
	Selenium (Se)-Total (mg/kg wwt)	0.216	0.120	0.220	0.205	0.215
	Sodium (Na)-Total (mg/kg wwt)	937	332	279	262	348
	Strontium (Sr)-Total (mg/kg wwt)	3.23	0.088	0.030	0.099	0.044
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00092	<0.00040	0.00119	0.00082	0.00098
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.028	0.021	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00420	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	0.077	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	18.8	3.87	4.40	3.80	3.78
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	2.7	0.5	2.7	1.2	0.9

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-209 Tissue 30-AUG-18 09:00 KLBB-WHSC-010-WB	L2173416-210 Tissue 30-AUG-18 09:00 KLBB-WHSC-013-T	L2173416-211 Tissue 01-SEP-18 09:00 KLBB-WHSC-013-WB	L2173416-212 Tissue 01-SEP-18 09:00 KLBB-YLPR 010-T	L2173416-213 Tissue 01-SEP-18 09:00 KLBB-YLPR 011-T
TISSUE						
Physical Tests	% Moisture (%)	80.4	80.5	74.6	77.9	78.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	25.7	<0.40	4.47	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	0.0054	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	1.35	0.211	0.443	0.118	0.130
	Barium (Ba)-Total (mg/kg wwt)	0.567	0.031	0.254	0.039	0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0085	<0.0010	0.0051	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	21800	316	5450	465	264
	Cesium (Cs)-Total (mg/kg wwt)	0.0192	0.0432	0.0262	0.0407	0.0706
	Chromium (Cr)-Total (mg/kg wwt)	0.100	<0.010	0.016	0.017	0.018
	Cobalt (Co)-Total (mg/kg wwt)	0.0339	<0.0040	0.0171	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.820	0.211	0.694	0.151	0.147
	Iron (Fe)-Total (mg/kg wwt)	73.1	2.51	19.3	1.97	2.45
	Lead (Pb)-Total (mg/kg wwt)	0.0446	<0.0040	0.0077	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	625	334	345	318	316
	Manganese (Mn)-Total (mg/kg wwt)	5.59	0.264	2.63	0.272	0.139
	Mercury (Hg)-Total (mg/kg wwt)	0.0768	0.0711	0.0424	0.0945	0.287
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0297	<0.0040	0.0216	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	0.063	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	14100	2290	4880	2460	2450
	Potassium (K)-Total (mg/kg wwt)	2810	4140	3190	4400	4270
	Rubidium (Rb)-Total (mg/kg wwt)	3.20	5.22	3.94	8.00	9.55
	Selenium (Se)-Total (mg/kg wwt)	0.234	0.161	0.228	0.327	0.339
	Sodium (Na)-Total (mg/kg wwt)	1410	272	972	266	295
	Strontium (Sr)-Total (mg/kg wwt)	7.36	0.106	2.09	0.131	0.059
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00128	0.00078	0.00087	0.00360	0.00226
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	0.041	0.028
	Uranium (U)-Total (mg/kg wwt)	0.00328	<0.00040	0.00075	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	0.123	<0.020	0.026	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	19.7	3.67	14.4	4.11	4.13
	Zirconium (Zr)-Total (mg/kg wwt)	0.052	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	3.6	0.6	3.9	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-214 Tissue 30-AUG-18 09:00 KLBB-YLPR-012-T	L2173416-215 Tissue 30-AUG-18 09:00 KLBB-YLPR-001-T	L2173416-216 Tissue 30-AUG-18 09:00 KLBB-YLPR-002-T	L2173416-217 Tissue 30-AUG-18 09:00 KLBB-YLPR-003-T	L2173416-218 Tissue 30-AUG-18 09:00 KLBB-YLPR-004-T
TISSUE						
Physical Tests	% Moisture (%)	77.7	79.9	78.5	78.1	81.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0868	0.158	0.186	0.264	0.254
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.011	0.012	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	215	238	443	332	171
	Cesium (Cs)-Total (mg/kg wwt)	0.0497	0.0505	0.122	0.0700	0.0222
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.124	0.116	0.161	0.138	0.134
	Iron (Fe)-Total (mg/kg wwt)	1.63	1.33	1.80	1.73	1.51
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	331	329	311	346	307
	Manganese (Mn)-Total (mg/kg wwt)	0.152	0.172	0.214	0.183	0.208
	Mercury (Hg)-Total (mg/kg wwt)	0.118	0.165	0.206	0.145	0.0475
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2400	2380	2340	2520	2120
	Potassium (K)-Total (mg/kg wwt)	4440	4290	3920	4590	4060
	Rubidium (Rb)-Total (mg/kg wwt)	9.38	8.45	9.00	9.77	6.43
	Selenium (Se)-Total (mg/kg wwt)	0.305	0.263	0.304	0.355	0.235
	Sodium (Na)-Total (mg/kg wwt)	269	263	477	239	241
	Strontium (Sr)-Total (mg/kg wwt)	0.041	0.066	0.142	0.090	0.035
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00255	0.00226	0.00348	0.00266	0.00242
	Tin (Sn)-Total (mg/kg wwt)	0.058	0.042	0.043	0.033	0.042
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.83	3.55	4.45	3.97	4.18
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-219 Tissue 30-AUG-18 09:00 KLBB-YLPR-005-T	L2173416-220 Tissue 30-AUG-18 09:00 KLBB-YLPR-006-T	L2173416-221 Tissue 30-AUG-18 09:00 KLBB-YLPR-007-T	L2173416-222 Tissue 30-AUG-18 09:00 KLBB-YLPR-008-T	L2173416-223 Tissue 30-AUG-18 09:00 KLBB-YLPR-009-T
TISSUE						
Physical Tests	% Moisture (%)	78.2	78.6	78.9	78.4	78.2
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.183	0.308	0.256	0.182	0.190
	Barium (Ba)-Total (mg/kg wwt)	0.021	0.063	0.044	0.029	0.046
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0012	<0.0010	<0.0010	0.0010
	Calcium (Ca)-Total (mg/kg wwt)	554	898	1210	633	612
	Cesium (Cs)-Total (mg/kg wwt)	0.0164	0.0193	0.0185	0.0221	0.0150
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.011	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.160	0.180	0.155	0.143	0.162
	Iron (Fe)-Total (mg/kg wwt)	1.52	2.05	1.85	1.50	1.96
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	334	344	328	352	357
	Manganese (Mn)-Total (mg/kg wwt)	0.421	0.733	0.799	0.456	0.525
	Mercury (Hg)-Total (mg/kg wwt)	0.0628	0.0555	0.0506	0.0734	0.0531
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2450	2620	2680	2470	2620
	Potassium (K)-Total (mg/kg wwt)	4230	4200	3860	4290	4490
	Rubidium (Rb)-Total (mg/kg wwt)	7.96	7.70	7.35	8.28	7.62
	Selenium (Se)-Total (mg/kg wwt)	0.275	0.358	0.345	0.294	0.295
	Sodium (Na)-Total (mg/kg wwt)	580	605	560	236	354
	Strontium (Sr)-Total (mg/kg wwt)	0.121	0.348	0.286	0.123	0.185
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00227	0.00211	0.00218	0.00236	0.00231
	Tin (Sn)-Total (mg/kg wwt)	0.025	0.041	0.032	0.035	0.038
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.51	4.85	4.58	4.29	4.69
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	<0.5	0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-224 Tissue 30-AUG-18 09:00 KLCB-LKWH-001-T	L2173416-225 Tissue 30-AUG-18 09:00 KLCB-LKWH-002-T	L2173416-226 Tissue 30-AUG-18 09:00 KLCB-LKWH-003-T	L2173416-227 Tissue 30-AUG-18 09:00 KLCB-LKWH-004-T	L2173416-230 Tissue 28-AUG-18 09:00 KLCB-LKWH-007-T
TISSUE						
Physical Tests	% Moisture (%)	79.0	80.4	77.2	77.5	80.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	1.93
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.202	0.127	0.110	0.140	0.158
	Barium (Ba)-Total (mg/kg wwt)	0.020	0.012	<0.010	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	493	376	63.3	108	227
	Cesium (Cs)-Total (mg/kg wwt)	0.0156	0.0271	0.0231	0.0160	0.0249
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0042	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.271	0.183	0.429	0.330	0.126
	Iron (Fe)-Total (mg/kg wwt)	4.37	3.73	6.51	4.37	3.04
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	310	308	295	302	295
	Manganese (Mn)-Total (mg/kg wwt)	0.245	0.140	0.103	0.113	0.122
	Mercury (Hg)-Total (mg/kg wwt)	0.123	0.173	0.156	0.118	0.221
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2450	2590	2390	2430	2660
	Potassium (K)-Total (mg/kg wwt)	4040	4360	4030	4200	4840
	Rubidium (Rb)-Total (mg/kg wwt)	6.01	5.33	4.33	4.42	5.19
	Selenium (Se)-Total (mg/kg wwt)	0.216	0.233	0.214	0.228	0.204
	Sodium (Na)-Total (mg/kg wwt)	367	433	415	308	352
	Strontium (Sr)-Total (mg/kg wwt)	0.140	0.162	0.019	0.043	0.082
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00181	0.00097	0.00145	0.00140	0.00079
	Tin (Sn)-Total (mg/kg wwt)	0.034	0.035	0.031	0.025	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	5.33	3.41	3.37	3.17	2.83
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.8	1.0	2.3	2.1	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-231 Tissue 28-AUG-18 09:00 KLCB-NRPK-001-T	L2173416-232 Tissue 31-AUG-18 09:00 KLCB-NRPK-002-T	L2173416-233 Tissue 31-AUG-18 09:00 KLCB-NRPK-003-T	L2173416-234 Tissue 31-AUG-18 09:00 KLCB-NRPK-004-T	L2173416-235 Tissue 28-AUG-18 09:00 KLCB-NRPK-005-T
TISSUE						
Physical Tests	% Moisture (%)	82.0	79.4	77.4	77.1	76.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0880	0.178	0.242	0.380	0.418
	Barium (Ba)-Total (mg/kg wwt)	0.011	0.011	0.011	0.016	0.017
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	381	298	321	328	633
	Cesium (Cs)-Total (mg/kg wwt)	0.0309	0.0349	0.0427	0.0417	0.0618
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.015
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.147	0.122	0.163	0.147	0.121
	Iron (Fe)-Total (mg/kg wwt)	0.89	1.10	2.00	1.76	1.33
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	340	317	360	349	373
	Manganese (Mn)-Total (mg/kg wwt)	0.243	0.234	0.340	0.373	0.319
	Mercury (Hg)-Total (mg/kg wwt)	0.259	0.181	0.206	0.234	0.199
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2570	2360	2790	2570	2950
	Potassium (K)-Total (mg/kg wwt)	4590	4300	4830	4500	4860
	Rubidium (Rb)-Total (mg/kg wwt)	8.68	8.90	10.8	9.37	9.05
	Selenium (Se)-Total (mg/kg wwt)	0.196	0.177	0.177	0.170	0.173
	Sodium (Na)-Total (mg/kg wwt)	332	350	293	260	306
	Strontium (Sr)-Total (mg/kg wwt)	0.057	0.047	0.045	0.054	0.124
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00493	0.00479	0.00530	0.00471	0.00288
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.021
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.14	3.08	4.57	4.39	3.90
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.289	0.250	0.304	0.283	0.216
Aggregate Organics	Lipid Content (% wwt)	0.7	<0.5	0.6	0.8	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-236 Tissue 28-AUG-18 09:00 KLCB-WALL-001-T	L2173416-237 Tissue 28-AUG-18 09:00 KLCB-WALL-001-WB	L2173416-238 Tissue 28-AUG-18 09:00 KLCB-WALL-002-T	L2173416-239 Tissue 28-AUG-18 09:00 KLCB-WALL-003-T	L2173416-240 Tissue 28-AUG-18 09:00 KLCB-WALL-004-T
TISSUE						
Physical Tests	% Moisture (%)	78.5	74.6	78.3	78.7	78.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	0.44	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.100	0.0737	0.0849	0.0686	0.0590
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.511	0.020	0.020	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0093	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	116	13300	752	361	78.4
	Cesium (Cs)-Total (mg/kg wwt)	0.0844	0.0553	0.0971	0.0531	0.0922
	Chromium (Cr)-Total (mg/kg wwt)	0.027	<0.010	<0.010	0.011	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0066	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.126	0.336	0.109	0.127	0.117
	Iron (Fe)-Total (mg/kg wwt)	2.33	13.5	1.37	2.68	1.08
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0112	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	316	448	340	299	332
	Manganese (Mn)-Total (mg/kg wwt)	0.061	1.03	0.099	0.089	0.046
	Mercury (Hg)-Total (mg/kg wwt)	1.40	0.752	0.536	1.32	1.41
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2520	9340	2820	2530	2440
	Potassium (K)-Total (mg/kg wwt)	5060	3030	4930	4680	4720
	Rubidium (Rb)-Total (mg/kg wwt)	19.4	11.6	23.2	12.8	21.1
	Selenium (Se)-Total (mg/kg wwt)	0.225	0.270	0.173	0.217	0.236
	Sodium (Na)-Total (mg/kg wwt)	251	1130	325	347	271
	Strontium (Sr)-Total (mg/kg wwt)	0.014	2.19	0.119	0.052	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00441	0.00390	0.00747	0.00471	0.00705
	Tin (Sn)-Total (mg/kg wwt)	0.022	<0.020	0.029	0.024	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00098	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.01	15.7	3.88	3.22	3.32
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	1.66		0.641	1.32	0.443
Aggregate Organics	Lipid Content (% wwt)	<0.5	3.0	0.7	<0.5	0.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-241 Tissue 28-AUG-18 09:00 KLCB-WALL-005-T	L2173416-242 Tissue 28-AUG-18 09:00 KLCB-WALL-005-WB	L2173416-243 Tissue 28-AUG-18 09:00 KLCB-WALL-006-T	L2173416-244 Tissue 28-AUG-18 09:00 KLCB-WALL-007-T	L2173416-245 Tissue 28-AUG-18 09:00 KLCB-WALL-008-T
TISSUE						
Physical Tests	% Moisture (%)	78.2	71.8	78.8	79.5	78.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0694	0.0672	0.0987	0.0609	0.123
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.505	0.016	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0030	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	141	17400	380	79.7	115
	Cesium (Cs)-Total (mg/kg wwt)	0.0566	0.0416	0.0784	0.0684	0.0703
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0065	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.127	0.296	0.156	0.120	0.157
	Iron (Fe)-Total (mg/kg wwt)	1.34	6.51	2.21	1.00	1.56
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0062	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	331	532	314	315	337
	Manganese (Mn)-Total (mg/kg wwt)	0.094	1.16	0.106	0.052	0.064
	Mercury (Hg)-Total (mg/kg wwt)	0.567	0.336	0.585	0.905	0.666
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2550	11800	2500	2370	2520
	Potassium (K)-Total (mg/kg wwt)	4810	3320	4530	4670	4810
	Rubidium (Rb)-Total (mg/kg wwt)	18.5	12.5	19.3	19.8	20.8
	Selenium (Se)-Total (mg/kg wwt)	0.218	0.287	0.179	0.199	0.190
	Sodium (Na)-Total (mg/kg wwt)	248	1130	341	316	308
	Strontium (Sr)-Total (mg/kg wwt)	0.015	2.93	0.056	<0.010	0.013
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00751	0.00774	0.00506	0.00590	0.00662
	Tin (Sn)-Total (mg/kg wwt)	0.023	<0.020	<0.020	0.021	0.022
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00045	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.35	17.3	4.08	2.97	3.77
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.331		0.309	0.812	0.597
Aggregate Organics	Lipid Content (% wwt)	<0.5	4.7	1.0	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-246 Tissue 28-AUG-18 09:00 KLCB-WALL-009-T	L2173416-247 Tissue 28-AUG-18 09:00 KLCB-WALL-009-WB	L2173416-248 Tissue 28-AUG-18 09:00 KLCB-WALL-010-T	L2173416-249 Tissue 28-AUG-18 09:00 KLCB-WALL-011-G	L2173416-250 Tissue 28-AUG-18 09:00 KLCB-WALL-011-L
TISSUE						
Physical Tests	% Moisture (%)	78.5	70.0	79.1	79.9	75.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	0.71	<0.40	<1.0	1.3
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	0.0082
	Arsenic (As)-Total (mg/kg wwt)	0.0490	0.0689	0.0518	0.0160	0.137
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.308	<0.010	0.011	0.013
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0029	<0.0010	0.0073	0.340
	Calcium (Ca)-Total (mg/kg wwt)	123	11900	119	285	96.7
	Cesium (Cs)-Total (mg/kg wwt)	0.0624	0.0447	0.0502	0.0532	0.0282
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.014	<0.010	<0.040	<0.040
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0046	<0.0040	0.0668	0.591
	Copper (Cu)-Total (mg/kg wwt)	0.124	0.552	0.156	0.872	1.62
	Iron (Fe)-Total (mg/kg wwt)	1.14	8.12	1.50	12.1	31.2
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0048	<0.0040	<0.010	<0.010
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	324	435	319	215	166
	Manganese (Mn)-Total (mg/kg wwt)	0.058	0.782	0.068	1.22	1.64
	Mercury (Hg)-Total (mg/kg wwt)	0.676	0.361	0.641	0.294	1.75
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0043	<0.0040	0.0101	0.253
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2450	8810	2390	3050	2990
	Potassium (K)-Total (mg/kg wwt)	4660	3250	4550	4040	2520
	Rubidium (Rb)-Total (mg/kg wwt)	17.3	11.4	13.9	15.7	10.1
	Selenium (Se)-Total (mg/kg wwt)	0.239	0.307	0.211	0.590	1.39
	Sodium (Na)-Total (mg/kg wwt)	327	1180	272	1260	1270
	Strontium (Sr)-Total (mg/kg wwt)	0.012	1.99	0.012	0.030	0.024
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0121
	Thallium (Tl)-Total (mg/kg wwt)	0.00762	0.00672	0.00692	0.0132	0.0165
	Tin (Sn)-Total (mg/kg wwt)	0.021	<0.020	<0.020	0.030	0.105
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	0.00112
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.080
	Zinc (Zn)-Total (mg/kg wwt)	3.43	16.1	3.56	67.1	20.9
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	0.093	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.622		0.575		
Aggregate Organics	Lipid Content (% wwt)	1.0	4.2	<0.5	2.4	5.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-251 Tissue 28-AUG-18 09:00 KLCB-WALL-011-T	L2173416-252 Tissue 28-AUG-18 09:00 KLCB-WALL-011-WB	L2173416-253 Tissue 30-AUG-18 09:00 KLCB-WALL-012-T	L2173416-254 Tissue 30-AUG-18 09:00 KLCB-WALL-018-T	L2173416-255 Tissue 28-AUG-18 09:00 KLCB-WALL-023-T
TISSUE						
Physical Tests	% Moisture (%)	80.2	74.7	78.4	78.6	77.8
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	0.68	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0531	0.0493	0.0737	0.0617	0.311
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.683	<0.010	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0023	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	68.1	26100	112	96.0	119
	Cesium (Cs)-Total (mg/kg wwt)	0.0621	0.0438	0.0650	0.0482	0.139
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.014	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.150	0.285	0.151	0.121	0.118
	Iron (Fe)-Total (mg/kg wwt)	0.95	5.21	1.54	1.26	1.41
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0170	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	285	657	329	309	318
	Manganese (Mn)-Total (mg/kg wwt)	0.043	1.09	0.065	0.061	0.061
	Mercury (Hg)-Total (mg/kg wwt)	1.44	0.747	0.635	1.14	1.45
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2290	16500	2450	2290	2420
	Potassium (K)-Total (mg/kg wwt)	4230	2950	4790	4380	4610
	Rubidium (Rb)-Total (mg/kg wwt)	14.4	10.0	17.9	13.3	22.4
	Selenium (Se)-Total (mg/kg wwt)	0.246	0.279	0.237	0.235	0.204
	Sodium (Na)-Total (mg/kg wwt)	286	1420	296	292	238
	Strontium (Sr)-Total (mg/kg wwt)	<0.010	4.53	<0.010	<0.010	0.016
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00616	0.00708	0.00784	0.00569	0.00387
	Tin (Sn)-Total (mg/kg wwt)	0.032	<0.020	0.039	0.027	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00053	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.26	15.8	3.49	3.25	3.72
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	1.37		0.709	1.04	1.25
Aggregate Organics	Lipid Content (% wwt)	<0.5	2.4	0.6	<0.5	1.2

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2173416-257	L2173416-258	L2173416-259	L2173416-261	L2173416-262
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	28-AUG-18	28-AUG-18	28-AUG-18	28-AUG-18	28-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLCB-WHSC-001-T	KLCB-WHSC-001-WB	KLCB-WHSC-002-T	KLCB-WHSC-003-T	KLCB-WHSC-004-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	82.0	74.1	82.2	80.0	80.8
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	10.5	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.136	0.377	0.104	0.149	0.229
	Barium (Ba)-Total (mg/kg wwt)	0.014	0.460	0.027	0.025	0.029
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0061	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	119	10200	259	116	312
	Cesium (Cs)-Total (mg/kg wwt)	0.0149	0.0122	0.0176	0.0168	0.0161
	Chromium (Cr)-Total (mg/kg wwt)	0.021	0.030	0.011	<0.010	0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0138	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.241	0.768	0.172	0.184	0.180
	Iron (Fe)-Total (mg/kg wwt)	3.87	37.3	2.17	2.81	2.06
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0260	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	314	464	310	309	337
	Manganese (Mn)-Total (mg/kg wwt)	0.156	6.99	0.171	0.103	0.290
	Mercury (Hg)-Total (mg/kg wwt)	0.0805	0.0409	0.279	0.188	0.126
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0174	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	0.089	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2120	7870	2320	2190	2390
	Potassium (K)-Total (mg/kg wwt)	4020	2930	4370	4260	4450
	Rubidium (Rb)-Total (mg/kg wwt)	5.41	3.99	5.02	5.38	5.92
	Selenium (Se)-Total (mg/kg wwt)	0.180	0.238	0.226	0.224	0.210
	Sodium (Na)-Total (mg/kg wwt)	312	820	334	307	190
	Strontium (Sr)-Total (mg/kg wwt)	0.020	2.67	0.050	0.022	0.068
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00139	0.00179	<0.00040	<0.00040	<0.00040
	Tin (Sn)-Total (mg/kg wwt)	0.035	<0.020	0.040	0.029	0.044
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00341	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.051	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.26	12.8	3.31	4.00	4.06
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.9	3.4	0.5	<0.5	0.9

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2173416-263 Tissue 28-AUG-18 09:00 KLCB-WHSC-005-T	L2173416-264 Tissue 28-AUG-18 09:00 KLCB-WHSC-006-T	L2173416-265 Tissue 30-AUG-18 09:00 KLCB-WHSC-007-T	L2173416-266 Tissue 30-AUG-18 09:00 KLCB-WHSC-007-WB	L2173416-267 Tissue 30-AUG-18 09:00 KLCB-WHSC-007-WBLD
TISSUE						
Physical Tests	% Moisture (%)	81.3	81.3	80.5	78.7	78.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	3.30	3.25
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.175	0.184	0.118	0.285	0.282
	Barium (Ba)-Total (mg/kg wwt)	0.020	0.020	0.015	0.520	0.598
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	0.0182	0.0191
	Calcium (Ca)-Total (mg/kg wwt)	217	236	98.1	11900	14500
	Cesium (Cs)-Total (mg/kg wwt)	0.0180	0.0302	0.0153	0.0103	0.0099
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.011	0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0112	0.0095
	Copper (Cu)-Total (mg/kg wwt)	0.163	0.167	0.230	0.878	0.860
	Iron (Fe)-Total (mg/kg wwt)	1.80	1.67	2.71	23.9	23.1
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0340	0.0365
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	305	316	309	433	479
	Manganese (Mn)-Total (mg/kg wwt)	0.235	0.242	0.089	7.17	9.03
	Mercury (Hg)-Total (mg/kg wwt)	0.182	0.181	0.189	0.0770	0.0717
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0217	0.0219
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	0.123	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2330	2270	2190	8620	10100
	Potassium (K)-Total (mg/kg wwt)	4340	4340	4110	3080	2910
	Rubidium (Rb)-Total (mg/kg wwt)	5.00	5.32	5.11	3.80	3.67
	Selenium (Se)-Total (mg/kg wwt)	0.177	0.212	0.181	0.224	0.216
	Sodium (Na)-Total (mg/kg wwt)	168	300	229	908	938
	Strontium (Sr)-Total (mg/kg wwt)	0.043	0.052	0.014	3.15	3.87
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00109	0.00134	0.00071	0.00091	0.00097
	Tin (Sn)-Total (mg/kg wwt)	0.036	<0.020	0.026	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	0.00262	0.00385
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	0.049	0.061
	Zinc (Zn)-Total (mg/kg wwt)	3.14	3.21	3.24	16.6	17.9
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.6	<0.5	1.4	4.3	4.4

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2173416-268	L2173416-269			
	Description	Tissue	Tissue			
	Sampled Date	30-AUG-18	30-AUG-18			
	Sampled Time	09:00	09:00			
	Client ID	KLCB-WHSC-008-T	KLCB-WHSC-0009-T			
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	81.0	79.1			
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40			
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020			
	Arsenic (As)-Total (mg/kg wwt)	0.246	0.347			
	Barium (Ba)-Total (mg/kg wwt)	0.036	0.036			
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020			
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020			
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20			
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010			
	Calcium (Ca)-Total (mg/kg wwt)	263	131			
	Cesium (Cs)-Total (mg/kg wwt)	0.0281	0.0260			
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010			
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040			
	Copper (Cu)-Total (mg/kg wwt)	0.298	0.187			
	Iron (Fe)-Total (mg/kg wwt)	4.36	2.87			
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040			
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10			
	Magnesium (Mg)-Total (mg/kg wwt)	317	367			
	Manganese (Mn)-Total (mg/kg wwt)	0.331	0.111			
	Mercury (Hg)-Total (mg/kg wwt)	0.265	0.256			
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040			
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040			
	Phosphorus (P)-Total (mg/kg wwt)	2310	2560			
	Potassium (K)-Total (mg/kg wwt)	4290	4790			
	Rubidium (Rb)-Total (mg/kg wwt)	5.08	6.57			
	Selenium (Se)-Total (mg/kg wwt)	0.204	0.166			
	Sodium (Na)-Total (mg/kg wwt)	289	286			
	Strontium (Sr)-Total (mg/kg wwt)	0.060	0.021			
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040			
	Thallium (Tl)-Total (mg/kg wwt)	0.00045	0.00172			
	Tin (Sn)-Total (mg/kg wwt)	0.037	0.029			
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040			
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020			
	Zinc (Zn)-Total (mg/kg wwt)	4.09	4.21			
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040			
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.5	0.7			

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Method Blank	Aluminum (Al)-Total	B	L2173416-246, -248, -251, -253, -254, -255, -259, -261, -262, -263, -264, -265, -268, -269
Duplicate	Aluminum (Al)-Total	DUP-H	L2173416-101, -102, -104, -105, -107, -109, -111, -113, -115, -79, -82, -84, -86, -88, -90, -92, -94, -95, -96, -99
Duplicate	Calcium (Ca)-Total	DUP-H	L2173416-117, -119, -121, -123, -124, -125, -127, -129, -131, -132, -133, -134, -135, -136, -137, -138, -151, -152, -159, -165
Duplicate	Chromium (Cr)-Total	DUP-H	L2173416-117, -187, -257, -59
Duplicate	Iron (Fe)-Total	DUP-H	L2173416-198, -199, -200, -201, -203, -205, -206, -207, -208, -210, -212, -213, -214, -215, -216, -217, -218, -219, -220, -221
Duplicate	Lead (Pb)-Total	DUP-H	L2173416-101, -102, -104, -105, -107, -109, -111, -113, -115, -79, -82, -84, -86, -88, -90, -92, -94, -95, -96, -99
Duplicate	Strontium (Sr)-Total	DUP-H	L2173416-117, -119, -121, -123, -124, -125, -127, -129, -131, -132, -133, -134, -135, -136, -137, -138, -151, -152, -159, -165
Duplicate	Tin (Sn)-Total	DUP-H	L2173416-90
Duplicate	Tin (Sn)-Total	DUP-H	L2173416-117, -187, -257, -59
Duplicate	Tin (Sn)-Total	DUP-H	L2173416-148
Certified Reference Material	Thallium (Tl)-Total	MES	L2173416-198, -199, -200, -201, -203, -205, -206, -207, -208, -210, -212, -213, -214, -215, -216, -217, -218, -219, -220, -221

Qualifiers for Individual Parameters Listed:

Qualifier	Description
B	Method Blank exceeds ALS DQO. Associated sample results which are < Limit of Reporting or > 5 times blank level are considered reliable.
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.
MES	Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-WET-CVAFS-N-VA	Tissue	Mercury in Tissue by CVAFS (WET)	EPA 200.3, EPA 245.7

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Analysis is by atomic fluorescence spectrophotometry or atomic absorption spectrophotometry, adapted from US EPA Method 245.7.

HG-WET-MICR-CVAF-VA	Tissue	Mercury in Tissue by CVAFS Micro (WET)	EPA 200.3, EPA 245.7

This method is adapted from US EPA Method 200.3 "Sample Procedures for Spectrochemical Determination of Total Recoverable Elements in Biological Tissues" (1996). Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with repeated additions of hydrogen peroxide. Analysis is by atomic fluorescence spectrophotometry or atomic absorption spectrophotometry, adapted from US EPA Method 245.7.

LIPIDS-GRAV-VA	Tissue	Lipids in Tissue by Gravimetric	EPA 3570, 8290A

A portion of homogenized sample is extracted with dichloromethane. The extract is evaporated to dryness and the lipid content determined gravimetrically.

MEHG-WET-GCAF-VA	Tissue	Methylmercury in Tissue by GCAFS (Wet)	Liang et al. (1994)

This method follows the procedures published by Liang, Bloom and Horvat in Clinical Chemistry (Vol 40, No 4, 1994). Samples are homogenized and then digested in a methanolic potassium hydroxide solution. An aliquot of the digestate is analyzed by aqueous phase ethylation, purge and trap, desorption and GC separation. The separated species are then pyrolized to elemental Hg and quantified by cold vapour atomic fluorescence spectroscopy. Results are reported "as MeHg".

MEHG-WET-MIC-GCAF-VA	Tissue	Methylmercury in Tissue by GCAFS (Wet)	Liang et al. (1994)

This method follows the procedures published by Liang, Bloom and Horvat in Clinical Chemistry (Vol 40, No 4, 1994). Samples are homogenized and then digested in a methanolic potassium hydroxide solution. An aliquot of the digestate is analyzed by aqueous phase ethylation, purge and trap, desorption and GC separation. The separated species are then pyrolized to elemental Hg and quantified by cold vapour atomic fluorescence spectroscopy. Results are reported "as MeHg".

MET-WET-CCMS-MID-VA	Tissue	Metals in Tissue by CRC ICPMS (WET)	EPA 200.3/6020A

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).

Reference Information

Method Limitation: This method employs a strong acid/peroxide digestion, and is intended to provide a conservative estimate of bio-available metals. Near complete recoveries are achieved for most toxicologically important metals, but elements associated with recalcitrant minerals may be only partially recovered.

MET-WET-CCMS-N-VA Tissue Metals in Tissue by CRC ICPMS (WET) EPA 200.3/6020A

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).

Method Limitation: This method employs a strong acid/peroxide digestion, and is intended to provide a conservative estimate of bio-available metals. Near complete recoveries are achieved for most toxicologically important metals, but elements associated with recalcitrant minerals may be only partially recovered.

MET-WET-MICR-HRMS-VA Tissue Metals in Tissue by HR-ICPMS Micro (WET) EPA 200.3/200.8

Trace metals in tissue are analyzed by high resolution inductively coupled plasma mass spectrometry (HR-ICPMS) modified from US EPA Method 200.8, (Revision 5.5). The sample preparation procedure is modified from US EPA 200.3. Analytical results are reported on wet weight basis.

Method Limitation: This method employs a strong acid/peroxide digestion, and is intended to provide a conservative estimate of bio-available metals. Near complete recoveries are achieved for most toxicologically important metals, but elements associated with recalcitrant minerals may be only partially recovered.

MOISTURE-MICR-VA Tissue Moisture in Tissue Puget Sound WQ Authority, Apr 1997

This analysis is carried out gravimetrically by drying the sample at <60 deg. C.

MOISTURE-TISS-VA Tissue % Moisture in Tissues Puget Sound WQ Authority, Apr 1997

This analysis is carried out gravimetrically by drying the sample at 105 C for a minimum of six hours.

** 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
VA	ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour 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.
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-adjusted weight of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

Chain of Custody (COC) / Analytical Request Form

ALS Environmental

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

L2173416-COFC

Number: 17

Page of

Report To	Contact and company name below will appear on the final report
Company:	Greenstone Gold Mines Ltd. / Stantec
Contact:	Mike Johns
Phone:	519-780-8145
	Company address below will appear on the final report
Street:	1-70 Southgate Drive
City/Province:	Guelph, ON
Postal Code:	N1G 4P5
Invoice To	Same as Report To ☐ ☑ NO
	Copy of Invoice with Report ☐ ☐ NO
Company:	Greenstone Gold Mines Ltd.
Contact:	Accounts Payable

Project Information

ALS Account # / Quote #:	Q66285
Job #:	160961254
PO / AFE:	
LSD:	

ALS Lab Work Order # (lab use only): L2173416

Report Format / Distribution

Select Report Format: ☑ PDF ☑ EXCEL ☑ EDD (DIGITAL)

Quality Control (QC) Report with Report ☐ ☐ NO

☐ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1	environmental@ggmines.com
Email 2	Aaron.MacDonell@ggmines.com
Email 3	Mike.Johns@stantec.com, Nathan.Burnett@stantec.com

Invoice Distribution

Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax	ap@premiergoldmines.com
Email 2	environmental@ggmines.com

Oil and Gas Required Fields (client use)

AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Contact: | **Sampler:**

Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)

Regular [R] ☑ Standard TAT if received by 3 pm - business days - no surcharges apply

PRIORITY (Business Days)
- 4 day [P4-20%] ☐
- 3 day [P3-25%] ☐
- 2 day [P2-50%] ☐

EMERGENCY
- 1 Business day [E - 100%] ☐
- Same Day, Weekend or Statutory holiday [E2 -200% (Laboratory opening fees may apply)] ☐

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm

For tests that can not be performed according to the service level selected, you will be contacted.

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	Metals Tissue CRC ICPMS (WET)	Mercury Tissue CVAFS (WET)	Lipids in Tissue by Gravimetric	% Moisture Tissue	Methyl Mercury Tissue GCAFS (WET)	Lab to Create Duplicate	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
	GMBY-LKWH-001-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-002-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-003-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-004-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-005-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-006-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-007-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-008-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-009-TB	23-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-009-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-010-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-LKWH-011-T	24-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-NRPK-001-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-002-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-003-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-004-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-005-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-006-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-007-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-008-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-009-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-010-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-011-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-012-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		

L2173416-COFC

| | | |

	GMBY-WALL-016-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-017-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-018-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-019-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-020-L	21-Aug-18	9:00	Tissue	1	1	1	1	0	0										0		
	GMBY-WALL-020-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-020-WB	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-021-L	21-Aug-18	9:00	Tissue	1	1	1	1	0	0										0		
	GMBY-WALL-021-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-021-WB	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-022-L	21-Aug-18	9:00	Tissue	1	1	1	1	0	0										0		
	GMBY-WALL-022-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-022-WB	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-023-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-024-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-025-T-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-026-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-027-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-028-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-029-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-030-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-031-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-032-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-033-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-034-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-035-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-036-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-037-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-038-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-039-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-040-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-041-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-042-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-043-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-045-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-046-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-047-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WALL-048-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-WHSC-001-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	GMBY-WHSC-001-WB	21-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	GMBY-WHSC-002-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	GMBY-WHSC-002-WB	21-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	GMBY-WHSC-003-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	GMBY-WHSC-003-WB	21-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	GMBY-WHSC-004-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	GMBY-WHSC-004-WB	21-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		

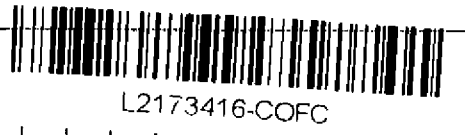
L2173416-COFC

| | | |

	GMBY-YLPR-015-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-016	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-017-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-018-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-019-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-020-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-021-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-022-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-023-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	GMBY-YLPR-024-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-LKWH-001-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-LKWH-002-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-LKWH-003-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-LKWH-004-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-LKWH-005-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-NRPK-001-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-NRPK-002-T	2-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-NRPK-003-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-001-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-002-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-003-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-004-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-005-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-006-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-006-WB	1-Sep-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WALL-010-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-010-WB	1-Sep-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WALL-014-G	2-Sep-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WALL-014-L	2-Sep-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WALL-014-T	2-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-014-WB	2-Sep-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WALL-020-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-022-T	3-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-023-T	3-Sep-18	9:00	Tissue	1	1	1	1	1	1										0		
	KLBB-WALL-024-T	3-Sep-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-001-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-002-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-003-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-004-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-004-WB	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-005-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-005-WB	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-006-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-007-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-008-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		
	KLBB-WHSC-010-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0										0		

L2173416-COFC

| | | |


L2173416-COFC

| | | |

L2173416-COFC

| | | |

L2173416-COFC

| | | |

L2173416-COFC

| | | |

L2173416-COFC

| | | |

L2173416-COFC

| | | |

L2173416-COFC

| | | |

Client: Greenstone

L2173416-COFC

Verified By	Date	Time	Sample Integrity Issues Enter information on back page
	Oct. 1/18		

Sample Layout Verification:

Labels Verification:

Verified By	Do any samples require prep?
KW/LS/CY/CP	(NO). P F/P

		Sample #:															
1L	Plastic																
500mL	Plastic																
250mL	Plastic																
145mL	Plastic																
60mL	Plastic																
Micro																	
Toxicity Pail																	
1L	Glass																
500mL	Glass																
250mL	Glass																
120mL	Glass																
60mL	Glass																
40mL	Vial (Glass)																
40mL	Methanol Vials																
Soil Jar (120, 250 or 500mL)																	
Other:																	
Other:																	
Total Number of Bottles																	

Trip/Travel/Field Blank Information

Solids Batch#:	Metals Batch#:	T:	D:
Routine Batch#:	Mercury Batch#:	T:	D:
BOD Batch#:	Cyanide Batch#:	T:	D:
Nutrients Batch#:	OGG Batch#:		
DOC/Carbon Batch#:	Phenols Batch#:		
VOC Batch#:			
Other:			

COOLER TRACKING

EPP		Coleman	
Small		Micro (5QT)	
Med		Sm(9QT)	
Lrg		Med(16QT)	
Micro Box		Lrg(28QT)	
		Lrg(48QT)	10 - fish

Greenstone Gold Mines GP INC.
ATTN: Mike Johns
1-70 Southgate Drive
Guelph ON N1G 4P5

Date Received: 25-OCT-18
Report Date: 15-JAN-19 14:19 (MT)
Version: FINAL

Client Phone: 519-780-8145

Certificate of Analysis

Lab Work Order #: L2187167

Project P.O. #: NOT SUBMITTED
Job Reference: 160961254
C of C Numbers:
Legal Site Desc:

<original signed by>

Kyle Watkins
Account Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2187167-1	L2187167-2	L2187167-3	L2187167-4	L2187167-5
	Description	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
	Sampled Date	21-AUG-18	21-AUG-18	21-AUG-18	21-AUG-18	21-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	GMBY-LKWH-003-T	GMBY-LKWH-005-T	GMBY-LKWH-007-T	GMBY-NRPK-006-T	GMBY-NRPK-011-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	74.9	77.5	79.3	76.8	79.3
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0498	0.126	0.0868	0.0307	0.0279
	Barium (Ba)-Total (mg/kg wwt)	0.017	0.017	0.010	0.010	0.013
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	359	527	508	200	252
	Cesium (Cs)-Total (mg/kg wwt)	0.0147	0.0385	0.0228	0.0553	0.0445
	Chromium (Cr)-Total (mg/kg wwt)	0.033	0.031	0.013	0.017	0.041
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.193	0.126	0.117	0.126	0.111
	Iron (Fe)-Total (mg/kg wwt)	3.05	2.20	1.54	1.47	1.38
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	304	332	289	353	323
	Manganese (Mn)-Total (mg/kg wwt)	0.136	0.277	0.148	0.158	0.184
	Mercury (Hg)-Total (mg/kg wwt)	0.110	0.0995	0.0987	0.877	0.195
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2490	2630	2410	2370	2310
	Potassium (K)-Total (mg/kg wwt)	4150	4220	4170	4350	4410
	Rubidium (Rb)-Total (mg/kg wwt)	6.46	8.45	6.68	9.25	12.9
	Selenium (Se)-Total (mg/kg wwt)	0.227	0.320	0.249	0.157	0.178
	Sodium (Na)-Total (mg/kg wwt)	508	523	338	340	263
	Strontium (Sr)-Total (mg/kg wwt)	0.143	0.174	0.168	0.030	0.033
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00264	0.00264	0.00098	0.00303	0.00490
	Tin (Sn)-Total (mg/kg wwt)	0.021	0.031	0.027	0.029	0.074
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.41	4.01	2.95	4.86	3.42
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	0.113
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)				0.388	0.0776
Aggregate Organics	Lipid Content (% wwt)	1.3	2.1	0.8	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L2187167-6	L2187167-7	L2187167-8	L2187167-9	L2187167-10
Description	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
Sampled Date	22-AUG-18	22-AUG-18	22-AUG-18	22-AUG-18	21-AUG-18
Sampled Time	09:00	09:00	09:00	09:00	09:00
Client ID	GMBY-NRPK-013-T	GMBY-NRPK-015-T	GMBY-NRPK-020-T	GMBY-NRPK-022-T	GMBY-WALL-008-T
Grouping / **Analyte**					
TISSUE					
Physical Tests % Moisture (%)	78.2	80.2	79.1	77.2	78.7
Metals Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Arsenic (As)-Total (mg/kg wwt)	0.0522	0.0293	0.0284	0.0315	0.0291
Barium (Ba)-Total (mg/kg wwt)	0.064	0.015	0.022	0.013	<0.010
Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Calcium (Ca)-Total (mg/kg wwt)	918	280	559	318	77.9
Cesium (Cs)-Total (mg/kg wwt)	0.0366	0.0341	0.0326	0.0374	0.0579
Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.018	0.010	0.029	<0.010
Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
Copper (Cu)-Total (mg/kg wwt)	0.089	0.097	0.100	0.103	0.107
Iron (Fe)-Total (mg/kg wwt)	1.35	1.17	0.84	0.84	1.00
Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium (Mg)-Total (mg/kg wwt)	348	307	334	338	294
Manganese (Mn)-Total (mg/kg wwt)	1.02	0.193	0.373	0.171	0.051
Mercury (Hg)-Total (mg/kg wwt)	0.269	0.216	0.228	1.35	0.355
Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Phosphorus (P)-Total (mg/kg wwt)	2690	2230	2380	2200	2250
Potassium (K)-Total (mg/kg wwt)	4450	4020	4070	4100	4700
Rubidium (Rb)-Total (mg/kg wwt)	10.1	9.61	9.51	7.90	20.4
Selenium (Se)-Total (mg/kg wwt)	0.160	0.145	0.147	0.157	0.197
Sodium (Na)-Total (mg/kg wwt)	292	207	253	308	286
Strontium (Sr)-Total (mg/kg wwt)	0.176	0.044	0.089	0.039	<0.010
Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
Thallium (Tl)-Total (mg/kg wwt)	0.00681	0.00393	0.00356	0.00166	0.00570
Tin (Sn)-Total (mg/kg wwt)	<0.020	0.040	<0.020	0.055	<0.020
Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
Zinc (Zn)-Total (mg/kg wwt)	4.39	3.18	3.68	4.10	2.77
Zirconium (Zr)-Total (mg/kg wwt)	<0.040	0.057	<0.040	<0.040	<0.040
Speciated Metals Methylmercury (as MeHg) (mg/kg wwt)	0.139	0.100	0.0944	1.46	0.149
Aggregate Organics Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2187167-11 TISSUE 21-AUG-18 09:00 GMBY-WALL-011-T	L2187167-12 TISSUE 21-AUG-18 09:00 GMBY-WALL-013-T	L2187167-13 TISSUE 21-AUG-18 09:00 GMBY-WALL-015-T	L2187167-14 TISSUE 21-AUG-18 09:00 GMBY-WALL-017-T	L2187167-15 TISSUE 21-AUG-18 09:00 GMBY-WALL-019-T
Sample ID						
Description						
Sampled Date						
Sampled Time						
Client ID						
TISSUE						
Physical Tests	% Moisture (%)	79.1	80.3	78.9	79.7	79.2
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0369	0.0377	0.0319	0.0228	0.0389
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	0.010	<0.010	0.012
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	166	74.9	182	80.7	174
	Cesium (Cs)-Total (mg/kg wwt)	0.0610	0.0680	0.0579	0.0539	0.0509
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.117	0.101	0.114	0.114	0.111
	Iron (Fe)-Total (mg/kg wwt)	1.71	0.96	1.42	1.39	1.50
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	329	319	302	297	296
	Manganese (Mn)-Total (mg/kg wwt)	0.064	0.057	0.064	0.064	0.059
	Mercury (Hg)-Total (mg/kg wwt)	0.301	0.398	0.273	0.306	0.322
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2290	2220	2210	2340	2160
	Potassium (K)-Total (mg/kg wwt)	4650	4500	4430	4610	4110
	Rubidium (Rb)-Total (mg/kg wwt)	20.2	21.7	20.5	19.8	17.4
	Selenium (Se)-Total (mg/kg wwt)	0.210	0.181	0.192	0.213	0.190
	Sodium (Na)-Total (mg/kg wwt)	364	272	402	204	433
	Strontium (Sr)-Total (mg/kg wwt)	0.016	<0.010	0.019	<0.010	0.020
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00458	0.00536	0.00529	0.00556	0.00390
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.35	2.80	3.51	3.40	2.73
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.116	0.228	0.105	0.143	0.135
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2187167-16 TISSUE 21-AUG-18 09:00 GMBY-WALL-024-T	L2187167-17 TISSUE 21-AUG-18 09:00 GMBY-WALL-026-T	L2187167-18 TISSUE 21-AUG-18 09:00 GMBY-WALL-028-T	L2187167-19 TISSUE 22-AUG-18 09:00 GMBY-WALL-030-T	L2187167-20 TISSUE 22-AUG-18 09:00 GMBY-WALL-032-T
Sample ID						
Description						
Sampled Date						
Sampled Time						
Client ID						
TISSUE						
Physical Tests	% Moisture (%)	78.5	80.4	79.1	78.6	77.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0331	0.0344	0.0287	0.0299	0.0256
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	0.013	0.025	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	136	92.6	175	535	128
	Cesium (Cs)-Total (mg/kg wwt)	0.0649	0.0561	0.0628	0.0778	0.0641
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.059	<0.010	0.033	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.127	0.101	0.117	0.137	0.108
	Iron (Fe)-Total (mg/kg wwt)	1.25	1.33	1.55	1.69	1.42
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	331	270	330	328	308
	Manganese (Mn)-Total (mg/kg wwt)	0.058	0.054	0.084	0.116	0.054
	Mercury (Hg)-Total (mg/kg wwt)	0.235	0.329	0.263	0.317	0.427
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2470	2050	2410	2690	2370
	Potassium (K)-Total (mg/kg wwt)	4800	4270	4540	4700	4700
	Rubidium (Rb)-Total (mg/kg wwt)	22.3	19.5	22.2	23.1	22.9
	Selenium (Se)-Total (mg/kg wwt)	0.237	0.200	0.184	0.205	0.181
	Sodium (Na)-Total (mg/kg wwt)	412	189	403	297	266
	Strontium (Sr)-Total (mg/kg wwt)	0.014	0.010	0.019	0.070	0.013
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00692	0.00509	0.00597	0.00629	0.00672
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.027	<0.020	0.045	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.25	3.22	3.32	4.38	2.91
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.133	0.171	0.127	0.131	0.190
Aggregate Organics	Lipid Content (% wwt)	0.5	<0.5	<0.5	2.1	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2187167-21 TISSUE 22-AUG-18 09:00 GMBY-WALL-036-T	L2187167-22 TISSUE 22-AUG-18 09:00 GMBY-WALL-039-T	L2187167-23 TISSUE 22-AUG-18 09:00 GMBY-WALL-042-T	L2187167-24 TISSUE 22-AUG-18 09:00 GMBY-WALL-046-T	L2187167-25 TISSUE 22-AUG-18 09:00 GMBY-WALL-048-T
Sample ID						
Description						
Sampled Date						
Sampled Time						
Client ID						
TISSUE						
Physical Tests	% Moisture (%)	79.1	79.7	79.0	78.5	87.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0272	0.0292	0.0453	0.0540	0.0434
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.011	<0.010	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	72.6	143	90.0	164	77.5
	Cesium (Cs)-Total (mg/kg wwt)	0.0603	0.0634	0.0625	0.0564	0.0543
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.115	0.163	0.117	0.114	0.154
	Iron (Fe)-Total (mg/kg wwt)	1.28	1.95	1.45	1.64	1.71
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	315	280	332	319	314
	Manganese (Mn)-Total (mg/kg wwt)	0.047	0.050	0.077	0.067	0.053
	Mercury (Hg)-Total (mg/kg wwt)	0.332	0.316	0.380	0.492	0.292
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2370	2420	2390	2330	2400
	Potassium (K)-Total (mg/kg wwt)	4540	4460	4890	4590	4740
	Rubidium (Rb)-Total (mg/kg wwt)	18.1	17.9	21.6	15.9	16.1
	Selenium (Se)-Total (mg/kg wwt)	0.237	0.209	0.224	0.265	0.244
	Sodium (Na)-Total (mg/kg wwt)	295	393	273	275	325
	Strontium (Sr)-Total (mg/kg wwt)	<0.010	0.015	<0.010	0.016	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00510	0.00544	0.00657	0.00437	0.00515
	Tin (Sn)-Total (mg/kg wwt)	0.035	<0.020	<0.020	<0.020	0.032
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.02	3.28	2.94	3.35	3.07
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.128	0.135	0.158	0.238	0.160
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	0.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2187167-26 TISSUE 21-AUG-18 09:00 GMBY-WHSC-025-T	L2187167-27 TISSUE 21-AUG-18 09:00 GMBY-WHSC-026-T	L2187167-28 TISSUE 21-AUG-18 09:00 GMBY-YLPR-012-T	L2187167-29 TISSUE 21-AUG-18 09:00 GMBY-YLPR-015-T	L2187167-30 TISSUE 21-AUG-18 09:00 GMBY-YLPR-016-T
Sample ID / **Description** / **Sampled Date** / **Sampled Time** / **Client ID**						
TISSUE						
Physical Tests	% Moisture (%)	81.3	78.7	77.1	77.4	78.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0246	0.0692	0.0233	0.0191	0.0182
	Barium (Ba)-Total (mg/kg wwt)	0.019	0.020	<0.010	0.021	0.020
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	302	229	99.5	359	558
	Cesium (Cs)-Total (mg/kg wwt)	0.0246	0.0192	0.0227	0.0189	0.0185
	Chromium (Cr)-Total (mg/kg wwt)	0.027	<0.010	0.076	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.266	0.297	0.117	0.144	0.118
	Iron (Fe)-Total (mg/kg wwt)	4.04	3.64	1.78	1.72	1.23
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	279	304	346	329	336
	Manganese (Mn)-Total (mg/kg wwt)	0.166	0.184	0.192	0.227	0.319
	Mercury (Hg)-Total (mg/kg wwt)	0.294	0.150	0.107	0.0597	0.0532
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	0.046	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2320	2220	2470	2370	2550
	Potassium (K)-Total (mg/kg wwt)	4300	3850	4510	4080	4470
	Rubidium (Rb)-Total (mg/kg wwt)	6.50	5.71	7.90	7.34	9.03
	Selenium (Se)-Total (mg/kg wwt)	0.183	0.239	0.269	0.323	0.277
	Sodium (Na)-Total (mg/kg wwt)	273	267	328	588	272
	Strontium (Sr)-Total (mg/kg wwt)	0.065	0.050	0.010	0.045	0.070
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00072	0.00114	0.00442	0.00493	0.00539
	Tin (Sn)-Total (mg/kg wwt)	0.039	<0.020	0.081	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.02	3.86	4.01	4.10	4.04
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	0.043	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.233		0.0388	0.0219	0.0202
Aggregate Organics	Lipid Content (% wwt)	<0.5	1.1	<0.5	0.6	0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2187167-31 TISSUE 21-SEP-18 09:00 GMBY-YLPR-019-T	L2187167-32 TISSUE 03-SEP-18 09:00 KLBB-WALL-024-T	L2187167-33 TISSUE 30-AUG-18 09:00 KLCB-LKWH-005-T	L2187167-34 TISSUE 30-AUG-18 09:00 KLCB-LKWH-006-T	L2187167-35 TISSUE 30-AUG-18 09:00 KLCB-WALL-024-T
TISSUE						
Physical Tests	% Moisture (%)	78.8	79.7	79.8	78.0	75.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0135	0.0858	0.0940	0.130	0.315
	Barium (Ba)-Total (mg/kg wwt)	0.011	<0.010	<0.010	0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	0.0011	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	241	77.6	151	445	66.1
	Cesium (Cs)-Total (mg/kg wwt)	0.0193	0.0740	0.0262	0.0265	0.142
	Chromium (Cr)-Total (mg/kg wwt)	0.019	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.125	0.116	0.334	0.133	0.131
	Iron (Fe)-Total (mg/kg wwt)	1.28	1.65	7.77	2.32	1.58
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	349	233	281	327	300
	Manganese (Mn)-Total (mg/kg wwt)	0.257	0.045	0.086	0.156	0.046
	Mercury (Hg)-Total (mg/kg wwt)	0.0673	0.322	0.151	0.116	1.41
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2340	1820	2390	2540	2320
	Potassium (K)-Total (mg/kg wwt)	4240	3680	3940	4210	4390
	Rubidium (Rb)-Total (mg/kg wwt)	8.71	13.4	4.88	4.70	20.1
	Selenium (Se)-Total (mg/kg wwt)	0.240	0.131	0.241	0.183	0.209
	Sodium (Na)-Total (mg/kg wwt)	235	198	405	383	254
	Strontium (Sr)-Total (mg/kg wwt)	0.032	0.011	0.069	0.235	0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00369	0.00491	0.00087	0.00124	0.00409
	Tin (Sn)-Total (mg/kg wwt)	0.051	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.64	2.46	3.41	2.99	3.66
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0348				
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	0.5	1.1	1.7

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2187167-36 TISSUE 31-AUG-18 09:00 KLCB-YLPR-004-T	L2187167-37 TISSUE 31-AUG-18 09:00 KLCB-YLPR-012-T	L2187167-38 TISSUE 01-SEP-18 09:00 KLOE-WALL-014-T	L2187167-39 TISSUE 30-AUG-18 09:00 KLOW-LKWH-002-T	L2187167-40 TISSUE 30-AUG-18 09:00 KLOW-WALL-011-T
Sample ID		L2187167-36	L2187167-37	L2187167-38	L2187167-39	L2187167-40
Description		TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
Sampled Date		31-AUG-18	31-AUG-18	01-SEP-18	30-AUG-18	30-AUG-18
Sampled Time		09:00	09:00	09:00	09:00	09:00
Client ID		KLCB-YLPR-004-T	KLCB-YLPR-012-T	KLOE-WALL-014-T	KLOW-LKWH-002-T	KLOW-WALL-011-T
TISSUE						
Physical Tests	% Moisture (%)	79.0	78.4	79.1	78.4	80.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	1.07	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.134	0.194	0.114	0.0839	0.0552
	Barium (Ba)-Total (mg/kg wwt)	0.015	0.042	<0.010	<0.010	0.014
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	427	797	88.2	89.9	281
	Cesium (Cs)-Total (mg/kg wwt)	0.0794	0.0374	0.0784	0.0207	0.0466
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.016	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.113	0.138	0.106	0.200	0.133
	Iron (Fe)-Total (mg/kg wwt)	1.63	3.41	1.40	2.49	1.66
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	314	354	301	276	268
	Manganese (Mn)-Total (mg/kg wwt)	0.263	0.517	0.047	0.089	0.086
	Mercury (Hg)-Total (mg/kg wwt)	0.202	0.0991	0.889	0.0768	0.478
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2560	2850	2320	2290	2140
	Potassium (K)-Total (mg/kg wwt)	4400	4510	4580	3810	4050
	Rubidium (Rb)-Total (mg/kg wwt)	9.04	7.68	22.0	4.70	13.5
	Selenium (Se)-Total (mg/kg wwt)	0.221	0.313	0.228	0.202	0.192
	Sodium (Na)-Total (mg/kg wwt)	243	269	322	443	260
	Strontium (Sr)-Total (mg/kg wwt)	0.102	0.170	0.012	0.041	0.047
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00148	0.00151	0.00566	0.00048	0.00598
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	0.031	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.37	3.78	3.26	2.78	3.46
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	1.2	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2187167-41	L2187167-42	L2187167-43	L2187167-44	L2187167-45
	Description	TISSUE	TISSUE	TISSUE	TISSUE	TISSUE
	Sampled Date	31-AUG-18	31-AUG-18	28-AUG-18	21-AUG-18	30-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLOW-WALL-014-T	KLOW-YLPR-007-T	KLSW-LKWH-006-T	KLSW-NRPK-006-T	KLBB-WALL-002-WB
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	79.9	79.3	72.9	80.6	71.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	1.26	<0.40	3.94
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.244	0.0883	0.133	0.0894	0.572
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.013	0.576
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	0.0095
	Calcium (Ca)-Total (mg/kg wwt)	130	86.7	93.5	255	20900
	Cesium (Cs)-Total (mg/kg wwt)	0.109	0.0570	0.0251	0.0367	0.0693
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.015	<0.010	0.020
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0041	<0.0040	0.0149
	Copper (Cu)-Total (mg/kg wwt)	0.116	0.194	0.273	0.123	0.343
	Iron (Fe)-Total (mg/kg wwt)	1.18	2.00	4.60	1.46	19.0
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0278
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	346	337	328	346	594
	Manganese (Mn)-Total (mg/kg wwt)	0.056	0.161	0.149	0.222	1.85
	Mercury (Hg)-Total (mg/kg wwt)	0.955	0.399	0.129	0.171	0.284
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0091
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2470	2400	2500	2480	12500
	Potassium (K)-Total (mg/kg wwt)	4820	4580	4000	4470	3110
	Rubidium (Rb)-Total (mg/kg wwt)	25.4	15.3	4.61	12.6	8.38
	Selenium (Se)-Total (mg/kg wwt)	0.198	0.258	0.344	0.147	0.256
	Sodium (Na)-Total (mg/kg wwt)	271	225	308	194	1300
	Strontium (Sr)-Total (mg/kg wwt)	0.016	0.014	0.035	0.033	5.23
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00432	0.00574	0.00155	0.00528	0.00364
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	0.029	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	0.00101
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.022
	Zinc (Zn)-Total (mg/kg wwt)	3.04	3.89	3.82	3.29	17.5
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	5.9	<0.5	1.0

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2187167-46	L2187167-47			
	Description	TISSUE	TISSUE			
	Sampled Date	31-AUG-18	28-AUG-18			
	Sampled Time	09:00	09:00			
	Client ID	KLOW-WALL-015-T	KLSW-WALL-002-T			
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	78.3	77.1			
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40			
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020			
	Arsenic (As)-Total (mg/kg wwt)	0.363	0.0582			
	Barium (Ba)-Total (mg/kg wwt)	0.023	<0.010			
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020			
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020			
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20			
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010			
	Calcium (Ca)-Total (mg/kg wwt)	185	74.5			
	Cesium (Cs)-Total (mg/kg wwt)	0.0575	0.0694			
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010			
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040			
	Copper (Cu)-Total (mg/kg wwt)	0.273	0.117			
	Iron (Fe)-Total (mg/kg wwt)	3.05	0.76			
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040			
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10			
	Magnesium (Mg)-Total (mg/kg wwt)	338	322			
	Manganese (Mn)-Total (mg/kg wwt)	0.118	0.058			
	Mercury (Hg)-Total (mg/kg wwt)	0.362	1.02			
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040			
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040			
	Phosphorus (P)-Total (mg/kg wwt)	2510	2540			
	Potassium (K)-Total (mg/kg wwt)	4780	4880			
	Rubidium (Rb)-Total (mg/kg wwt)	18.5	17.7			
	Selenium (Se)-Total (mg/kg wwt)	0.207	0.207			
	Sodium (Na)-Total (mg/kg wwt)	306	237			
	Strontium (Sr)-Total (mg/kg wwt)	0.044	0.011			
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040			
	Thallium (Tl)-Total (mg/kg wwt)	0.00545	0.00512			
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020			
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040			
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020			
	Zinc (Zn)-Total (mg/kg wwt)	4.61	3.80			
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040			
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.184	0.433			
Aggregate Organics	Lipid Content (% wwt)	0.5	0.7			

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Duplicate	Calcium (Ca)-Total	DUP-H	L2187167-21, -22, -23, -24, -25, -26, -27, -28, -29, -30, -31, -32, -33, -34, -35, -36, -37, -38, -39, -40
Duplicate	Calcium (Ca)-Total	DUP-H	L2187167-2
Duplicate	Manganese (Mn)-Total	DUP-H	L2187167-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -3, -4, -5, -6, -7, -8, -9
Duplicate	Strontium (Sr)-Total	DUP-H	L2187167-2
Certified Reference Material	Thallium (Tl)-Total	MES	L2187167-21, -22, -23, -24, -25, -26, -27, -28, -29, -30, -31, -32, -33, -34, -35, -36, -37, -38, -39, -40
Certified Reference Material	Thallium (Tl)-Total	MES	L2187167-2

Qualifiers for Individual Parameters Listed:

Qualifier	Description
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.
MES	Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-WET-CVAFS-N-VA	Tissue	Mercury in Tissue by CVAFS (WET)	EPA 200.3, EPA 245.7

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Analysis is by atomic fluorescence spectrophotometry or atomic absorption spectrophotometry, adapted from US EPA Method 245.7.

LIPIDS-GRAV-VA	Tissue	Lipids in Tissue by Gravimetric	EPA 3570, 8290A

A portion of homogenized sample is extracted with dichloromethane. The extract is evaporated to dryness and the lipid content determined gravimetrically.

MEHG-WET-GCAF-VA	Tissue	Methylmercury in Tissue by GCAFS (Wet)	Liang et al. (1994)

This method follows the procedures published by Liang, Bloom and Horvat in Clinical Chemistry (Vol 40, No 4, 1994). Samples are homogenized and then digested in a methanolic potassium hydroxide solution. An aliquot of the digestate is analyzed by aqueous phase ethylation, purge and trap, desorption and GC separation. The separated species are then pyrolized to elemental Hg and quantified by cold vapour atomic fluorescence spectroscopy. Results are reported "as MeHg".

MET-WET-CCMS-N-VA	Tissue	Metals in Tissue by CRC ICPMS (WET)	EPA 200.3/6020A

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).

Method Limitation: This method employs a strong acid/peroxide digestion, and is intended to provide a conservative estimate of bio-available metals. Near complete recoveries are achieved for most toxicologically important metals, but elements associated with recalcitrant minerals may be only partially recovered.

MOISTURE-TISS-VA	Tissue	% Moisture in Tissues	Puget Sound WQ Authority, Apr 1997

This analysis is carried out gravimetrically by drying the sample at 105 C for a minimum of six hours.

** 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
VA	ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

Reference Information

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour 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.
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-adjusted weight of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

ALS Environmental
www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

L2187167-COFC

COC Number: 17 -

Page 1 of 2

Report To	Contact and company name below will appear on the final report
Company:	Greenstone Gold Mines Ltd. / Stantec
Contact:	Mike Johns
Phone:	519-780-8145
	Company address below will appear on the final report
Street:	1-70 Southgate Drive
City/Province:	Guelph, ON
Postal Code:	N1G 4P5
Invoice To	Same as Report To ☐ YES ☑ NO
	Copy of Invoice with Report ☐ YES ☐ NO
Company:	Greenstone Gold Mines Ltd.
Contact:	Accounts Payable

Report Format / Distribution	
Select Report Format:	☑ PDF ☑ EXCEL ☑ EDD (DIGITAL)
Quality Control (QC) Report with Report	☐ YES ☐ NO
☐ Compare Results to Criteria on Report - provide details below if box checked	
Select Distribution:	☑ EMAIL ☐ MAIL ☐ FAX
Email 1	environmental@ggmines.com
Email 2	Aaron.MacDonell@ggmines.com
Email 3	Mike.Johns@stantec.com, Nathan.Burnett@stantec.com

Invoice Distribution	
Select Invoice Distribution:	☑ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax	ap@premiergoldmines.com
Email 2	environmental@ggmines.com

Project Information	
ALS Account # / Quote #:	Q66285
Job #:	160961254
PO / AFE:	
LSD:	

Oil and Gas Required Fields (client use)	
AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Lab Work Order # (lab use only): L2187167

ALS Contact: **Sampler:**

Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)

Regular [R] ☑ Standard TAT if received by 3 pm - business days - no surcharges apply

PRIORITY (Business Days): 4 day [P4-20%] ☐ | 3 day [P3-25%] ☐ | 2 day [P2-50%] ☐

EMERGENCY: 1 Business day [E - 100%] ☐ | Same Day, Weekend or Statutory holiday [E2 -200% (Laboratory opening fees may apply)] ☐

Date and Time Required for all E&P TATs: dd-mmm-yy hh:mm

For tests that can not be performed according to the service level selected, you will be contacted.

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	Metals Tissue CRC ICPMS (WET)	Mercury Tissue CVAFS (WET)	Lipids in Tissue by Gravimetric	% Moisture Tissue	Methyl Mercury Tissue GCAFS (WET)	Lab to create duplicates	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
	GMBY-LKWH-003-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0			
	GMBY-LKWH-005-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0			
	GMBY-LKWH-007-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0			
	GMBY-NRPK-006-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-011-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-013-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-015-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-020-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-NRPK-022-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WALL-008-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WALL-011-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WALL-013-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WALL-015-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WALL-017-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WALL-019-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WALL-024-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WALL-026-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WALL-028-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WALL-030-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WALL-032-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WALL-036-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WALL-039-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WALL-042-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WALL-046-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		

ALS Environmental

www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

L2187167-COFC

COC Number: 17 -

Page 2 of 2

Report To	Contact and company name below will appear on the final report	Report Format / Distribution		Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)	
Company:	Greenstone Gold Mines Ltd. / Stantec	Select Report Format: ☑ PDF ☑ EXCEL ☑ EDD (DIGITAL)		Regular [R] ☑ Standard TAT if received by 3 pm - business days - no surcharges apply	
Contact:	Mike Johns	Quality Control (QC) Report with Report ☐ YES ☐ NO		PRIORITY (Business Days)	4 day [P4-20%] ☐
Phone:	519-780-8145	☐ Compare Results to Criteria on Report - provide details below if box checked			3 day [P3-25%] ☐
	Company address below will appear on the final report	Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX			2 day [P2-50%] ☐
Street:	1-70 Southgate Drive	Email 1	environmental@ggmines.com	EMERGENCY	1 Business day [E - 100%] ☐
City/Province:	Guelph, ON	Email 2	Aaron.MacDonell@ggmines.com		Same Day, Weekend or Statutory holiday [E2 -200% (Laboratory opening fees may apply)] ☐
Postal Code:	N1G 4P5	Email 3	Mike.Johns@stantec.com; Nathan.Burnett@stantec.com	Date and Time Required for all E&P TATs:	dd-mmm-yy hh:mm
Invoice To	Same as Report To ☐ YES ☑ NO	Invoice Distribution		For tests that can not be performed according to the service level selected, you will be contacted.	
	Copy of Invoice with Report ☐ YES ☐ NO	Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX		Analysis Request	
Company:	Greenstone Gold Mines Ltd.	Email 1 or Fax	ap@premiergoldmines.com		
Contact:	Accounts Payable	Email 2	environmental@ggmines.com		

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	Q66285	AFE/Cost Center:	PO#:
Job #:	160961254	Major/Minor Code:	Routing Code:
PO / AFE:		Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (lab use only):	L2187167	ALS Contact:	Sampler:

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below: Metals Tissue CRC ICPMS (WET)	Mercury Tissue CVAFS (WET)	Lipids in Tissue by Gravimetric	% Moisture Tissue	Methyl Mercury Tissue GCAFS (WET)	Lab to create duplicates	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
	GMBY-WALL-048-T	22-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WHSC-025-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-WHSC-026-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	GMBY-YLPR-012-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-YLPR-015-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-YLPR-016-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	GMBY-YLPR-019-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	KLBB-WALL-024-T	3-Sep-18	9:00	Tissue	1	1	1	1	1	0	0		
	KLCB-LKWH-005-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	KLCB-LKWH-006-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	KLCB-WALL-024-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	KLCB-YLPR-004-T	31-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	KLCB-YLPR-012-T	31-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	KLOE-WALL-014-T	1-Sep-18	9:00	Tissue	1	1	1	1	1	0	0		
	KLOW-LKWH-002-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	KLOW-WALL-011-T	30-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	KLOW-WALL-014-T	31-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	KLOW-YLPR-007-T	31-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	KLSW-LKWH-006-T	28-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	KLSW-NRPK-006-T	21-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	KLBB-WALL-002-WB	30-Aug-18	9:00	Tissue	1	1	1	1	1	0	0		
	KLOW-WALL-015-T	31-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
	KLSW-WALL-002-T	28-Aug-18	9:00	Tissue	1	1	1	1	1	1	0		
				Tissue									

Notes, 25-OCT-18 @ 8am

Oct 25 2018 cy 1.4°-temp 250pm

2

L2187167-COFC

Client: Greenstone Gold mines Ltd. / Stantec.

	Verified By	Date	Time	
Sample Layout Verification:	Y	2018 Oct 25	3:00 pm	Sample Integrity Issues Enter information on back page
Labels Verification:	Y			Do any samples require prep? (NO) P F/P

		Sample #:	1-47														
1L	Plastic																
500mL	Plastic																
250mL	Plastic																
145mL	Plastic																
60mL	Plastic																
Micro																	
Toxicity Pail																	
1L	Glass																
500mL	Glass																
250mL	Glass																
120mL	Glass																
60mL	Glass																
40mL	Vial (Glass)																
40mL	Methanol Vials																
Soil Jar (120, 250 or 500mL)																	
Other:	Fish Samples		1														
Other:																	
Total Number of Bottles			1														

Trip/Travel/Field Blank Information

Solids Batch#:	Metals Batch#:	T:	D:
Routine Batch#:	Mercury Batch#:	T:	D:
BOD Batch#:	Cyanide Batch#:	T:	D:
Nutrients Batch#:	OGG Batch#:		
DOC/Carbon Batch#:	Phenols Batch#:		
VOC Batch#:			
Other:			

COOLER TRACKING

EPP		Coleman	
Small		Micro (5QT)	
Med		Sm(9QT)	
Lrg		Med(16QT)	
Micro Box		Lrg(28QT)	
		Lrg(48QT)	1

Greenstone Gold Mines GP INC.
ATTN: Mike Johns
1-70 Southgate Drive
Guelph ON N1G 4P5

Date Received: 01-OCT-18
Report Date: 28-FEB-19 11:40 (MT)
Version: FINAL

Client Phone: 519-780-8145

Certificate of Analysis

Lab Work Order #: L2201773

Project P.O. #: NOT SUBMITTED
Job Reference: 160961254
C of C Numbers:
Legal Site Desc:

<original signed by>

Christine Paradis
Project Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-1	L2201773-2	L2201773-3	L2201773-4	L2201773-5
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	30-AUG-18	30-AUG-18	30-AUG-18	30-AUG-18	30-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLCB-WHSC-010-T	KLCB-WHSC-010-WB	KLCB-WHSC-011-T	KLCB-WHSC-011-WB	KLCB-WHSC-012-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	80.7	72.6	81.7	77.8	83.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	26.7	<0.40	57.7	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	0.0027	<0.0020	0.0085	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.218	0.745	0.271	1.56	0.234
	Barium (Ba)-Total (mg/kg wwt)	0.012	0.713	0.014	0.900	0.018
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0107	<0.0010	0.0224	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	121	12000	94.3	17300	102
	Cesium (Cs)-Total (mg/kg wwt)	0.0165	0.0129	0.0316	0.0276	0.0287
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.079	<0.010	0.196	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0274	<0.0040	0.0535	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.215	1.05	0.272	0.965	0.171
	Iron (Fe)-Total (mg/kg wwt)	3.08	69.8	5.77	140	3.36
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0466	<0.0040	0.101	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	325	466	264	582	251
	Manganese (Mn)-Total (mg/kg wwt)	0.161	4.47	0.155	9.19	0.157
	Mercury (Hg)-Total (mg/kg wwt)	0.0851	0.0537	0.102	0.0701	0.181
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0248	<0.0040	0.0241	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	0.062	<0.040	0.131	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2360	7670	2120	10600	2070
	Potassium (K)-Total (mg/kg wwt)	4160	2980	3910	3070	3900
	Rubidium (Rb)-Total (mg/kg wwt)	4.20	3.04	5.48	4.20	5.76
	Selenium (Se)-Total (mg/kg wwt)	0.208	0.232	0.274	0.305	0.224
	Sodium (Na)-Total (mg/kg wwt)	280	1020	364	953	274
	Strontium (Sr)-Total (mg/kg wwt)	0.023	3.49	0.019	5.63	0.021
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00125	0.00100	<0.00040	0.00076	<0.00040
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.026
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00353	<0.00040	0.00686	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.094	<0.020	0.185	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.27	16.8	4.05	15.7	3.13
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	0.053	<0.040	0.104	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	1.5	5.5	0.8	2.2	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-6 Tissue 30-AUG-18 09:00 KLCB-YLPR-002-T	L2201773-7 Tissue 31-AUG-18 09:00 KLCB-YLPR-003-T	L2201773-8 Tissue 31-AUG-18 09:00 KLCB-YLPR-005-T	L2201773-9 Tissue 31-AUG-18 09:00 KLCB-YLPR-006-T	L2201773-10 Tissue 31-AUG-18 09:00 KLCB-YLPR-007-T
TISSUE						
Physical Tests	% Moisture (%)	80.0	78.8	79.0	78.0	78.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.125	0.139	0.128	0.138	0.0739
	Barium (Ba)-Total (mg/kg wwt)	0.022	<0.010	0.015	0.017	0.037
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	574	179	422	645	732
	Cesium (Cs)-Total (mg/kg wwt)	0.0316	0.0862	0.0694	0.0976	0.0315
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.224
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0049	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.133	0.122	0.184	0.167	0.184
	Iron (Fe)-Total (mg/kg wwt)	2.03	2.58	2.32	1.94	3.50
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	321	325	351	364	381
	Manganese (Mn)-Total (mg/kg wwt)	0.319	0.201	0.280	0.392	0.564
	Mercury (Hg)-Total (mg/kg wwt)	0.0691	0.206	0.0661	0.0571	0.0844
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2470	2570	2730	2900	2880
	Potassium (K)-Total (mg/kg wwt)	4040	4370	4590	4610	4680
	Rubidium (Rb)-Total (mg/kg wwt)	6.64	9.20	9.78	13.5	10.6
	Selenium (Se)-Total (mg/kg wwt)	0.329	0.263	0.282	0.171	0.270
	Sodium (Na)-Total (mg/kg wwt)	233	290	298	257	276
	Strontium (Sr)-Total (mg/kg wwt)	0.123	0.037	0.089	0.178	0.147
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00227	0.00164	0.00146	0.00318	0.00557
	Tin (Sn)-Total (mg/kg wwt)	0.028	<0.020	0.065	0.039	0.022
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.89	3.56	4.20	4.73	4.12
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-11 Tissue 31-AUG-18 09:00 KLCB-YLPR-008-T	L2201773-12 Tissue 31-AUG-18 09:00 KLCB-YLPR-009-T	L2201773-13 Tissue 31-AUG-18 09:00 KLCB-YLPR-010-T	L2201773-14 Tissue 31-AUG-18 09:00 KLCB-YLPR-011-T	L2201773-15 Tissue 01-SEP-18 09:00 KLOE-LKWH-001-T
TISSUE						
Physical Tests	% Moisture (%)	77.8	79.2	78.2	77.8	81.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.58	<0.40	<0.40	0.74	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0864	0.171	0.126	0.201	0.156
	Barium (Ba)-Total (mg/kg wwt)	0.039	0.046	0.022	0.047	0.011
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	653	884	521	852	336
	Cesium (Cs)-Total (mg/kg wwt)	0.0318	0.0436	0.0368	0.0417	0.0124
	Chromium (Cr)-Total (mg/kg wwt)	0.028	0.011	0.033	<0.010	0.017
	Cobalt (Co)-Total (mg/kg wwt)	0.0054	<0.0040	<0.0040	0.0049	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.232	0.184	0.142	0.125	0.113
	Iron (Fe)-Total (mg/kg wwt)	3.38	2.69	2.08	2.61	3.03
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0052	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	378	354	370	346	289
	Manganese (Mn)-Total (mg/kg wwt)	0.541	0.825	0.445	0.560	0.181
	Mercury (Hg)-Total (mg/kg wwt)	0.0832	0.0555	0.0456	0.104	0.0800
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	0.265	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2990	2880	2750	2990	2450
	Potassium (K)-Total (mg/kg wwt)	4770	4460	4610	4340	4140
	Rubidium (Rb)-Total (mg/kg wwt)	10.8	7.66	8.75	7.79	4.77
	Selenium (Se)-Total (mg/kg wwt)	0.289	0.211	0.281	0.331	0.211
	Sodium (Na)-Total (mg/kg wwt)	341	276	267	275	281
	Strontium (Sr)-Total (mg/kg wwt)	0.128	0.209	0.119	0.194	0.143
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00879	0.00129	0.00136	0.00142	0.00128
	Tin (Sn)-Total (mg/kg wwt)	0.050	0.036	0.109	0.048	0.029
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.95	4.94	4.27	3.86	2.59
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	0.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-16	L2201773-17	L2201773-18	L2201773-19	L2201773-20
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	01-SEP-18	01-SEP-18	01-SEP-18	01-SEP-18	01-SEP-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLOE-LKWH-002-T	KLOE-LKWH-003-T	KLOE-LKWH-004-T	KLOE-LKWH-005-T	KLOE-NRPK-001-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	77.9	76.6	78.2	79.1	79.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.109	0.0441	0.205	0.0937	0.0862
	Barium (Ba)-Total (mg/kg wwt)	0.020	<0.010	0.013	<0.010	0.021
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	673	191	545	149	455
	Cesium (Cs)-Total (mg/kg wwt)	0.0131	0.0078	0.0103	0.0118	0.0212
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.046
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.129	0.203	0.198	0.158	0.161
	Iron (Fe)-Total (mg/kg wwt)	2.72	2.34	2.93	2.75	2.15
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	336	278	285	277	312
	Manganese (Mn)-Total (mg/kg wwt)	0.305	0.154	0.241	0.143	0.300
	Mercury (Hg)-Total (mg/kg wwt)	0.0924	0.111	0.128	0.110	0.117
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2790	2380	2670	2310	2540
	Potassium (K)-Total (mg/kg wwt)	4050	3870	3890	3790	3920
	Rubidium (Rb)-Total (mg/kg wwt)	6.71	6.35	4.38	5.56	9.20
	Selenium (Se)-Total (mg/kg wwt)	0.198	0.181	0.217	0.224	0.171
	Sodium (Na)-Total (mg/kg wwt)	382	301	334	468	370
	Strontium (Sr)-Total (mg/kg wwt)	0.327	0.076	0.261	0.057	0.076
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00123	0.00397	0.00244	0.00248	0.00450
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.022	<0.020	0.022	0.042
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.32	3.84	3.82	3.22	4.04
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					0.0791
Aggregate Organics	Lipid Content (% wwt)	1.8	1.6	1.4	0.9	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-21 Tissue 01-SEP-18 09:00 KLOE-NRPK-002-T	L2201773-22 Tissue 03-SEP-18 09:00 KLOE-NRPK-003-T	L2201773-23 Tissue 03-SEP-18 09:00 KLOE-NRPK-004-T	L2201773-24 Tissue 03-SEP-18 09:00 KLOE-NRPK-005-T	L2201773-25 Tissue 03-SEP-18 09:00 KLOE-NRPK-006-T
Sample ID						
Description						
Sampled Date						
Sampled Time						
Client ID						
TISSUE						
Physical Tests	% Moisture (%)	79.2	78.3	78.3	78.8	78.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0891	0.102	0.133	0.0997	0.129
	Barium (Ba)-Total (mg/kg wwt)	0.015	0.010	0.011	<0.010	0.012
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	393	425	329	250	372
	Cesium (Cs)-Total (mg/kg wwt)	0.0250	0.0440	0.0414	0.0345	0.0385
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.194	0.116	0.173	0.161	0.209
	Iron (Fe)-Total (mg/kg wwt)	1.64	1.00	1.99	1.48	1.92
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	302	337	342	340	325
	Manganese (Mn)-Total (mg/kg wwt)	0.280	0.238	0.256	0.198	0.263
	Mercury (Hg)-Total (mg/kg wwt)	0.101	0.250	0.210	0.150	0.152
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2380	2560	2690	2540	2720
	Potassium (K)-Total (mg/kg wwt)	3660	3930	4300	4020	4080
	Rubidium (Rb)-Total (mg/kg wwt)	9.48	10.9	10.8	10.6	10.1
	Selenium (Se)-Total (mg/kg wwt)	0.162	0.179	0.205	0.195	0.179
	Sodium (Na)-Total (mg/kg wwt)	463	405	283	413	490
	Strontium (Sr)-Total (mg/kg wwt)	0.067	0.066	0.055	0.039	0.068
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00788	0.00410	0.00544	0.00530	0.00361
	Tin (Sn)-Total (mg/kg wwt)	0.026	0.025	0.035	0.030	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.99	4.14	4.45	3.64	4.16
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0524	0.162	0.110	0.0719	0.0852
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-26	L2201773-27	L2201773-28	L2201773-29	L2201773-30
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	01-SEP-18	01-SEP-18	01-SEP-18	01-SEP-18	01-SEP-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLOE-WALL-001-T	KLOE-WALL-001-WB	KLOE-WALL-002-T	KLOE-WALL-003-T	KLOE-WALL-003-WB
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	80.2	74.2	78.2	79.2	69.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	0.68
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0813	0.0760	0.0800	0.0812	0.0742
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.345	<0.010	0.013	0.576
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0048	<0.0010	<0.0010	0.0055
	Calcium (Ca)-Total (mg/kg wwt)	76.5	17900	153	352	21300
	Cesium (Cs)-Total (mg/kg wwt)	0.0676	0.0461	0.0675	0.0695	0.0405
	Chromium (Cr)-Total (mg/kg wwt)	0.016	0.036	0.026	<0.010	0.012
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.114	0.265	0.190	0.118	0.280
	Iron (Fe)-Total (mg/kg wwt)	1.63	7.90	1.87	1.69	8.42
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0072	<0.0040	<0.0040	0.0143
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	317	546	332	314	582
	Manganese (Mn)-Total (mg/kg wwt)	0.073	1.31	0.080	0.079	1.22
	Mercury (Hg)-Total (mg/kg wwt)	0.311	0.199	0.334	0.463	0.333
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2420	10900	2580	2520	13100
	Potassium (K)-Total (mg/kg wwt)	4550	3330	4590	4340	3370
	Rubidium (Rb)-Total (mg/kg wwt)	22.7	15.6	21.5	19.6	14.1
	Selenium (Se)-Total (mg/kg wwt)	0.221	0.263	0.181	0.225	0.252
	Sodium (Na)-Total (mg/kg wwt)	182	1060	287	294	1260
	Strontium (Sr)-Total (mg/kg wwt)	<0.010	2.77	0.029	0.055	3.44
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00839	0.00837	0.00736	0.00791	0.00857
	Tin (Sn)-Total (mg/kg wwt)	0.038	<0.020	0.030	0.040	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00046	<0.00040	<0.00040	0.00053
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	2.93	15.1	3.57	2.90	16.3
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0339		0.209	0.111	
Aggregate Organics	Lipid Content (% wwt)	<0.5	1.5	0.5	<0.5	2.4

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-31	L2201773-32	L2201773-33	L2201773-34	L2201773-35
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	01-SEP-18	01-SEP-18	01-SEP-18	01-SEP-18	01-SEP-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLOE-WALL-004-T	KLOE-WALL-005-T	KLOE-WALL-005-WB	KLOE-WALL-006-T	KLOE-WALL-007-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	79.0	80.1	76.5	78.8	79.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	1.57	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0891	0.0518	0.0506	0.0661	0.0522
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	0.470	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	0.0061	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	238	124	16200	217	244
	Cesium (Cs)-Total (mg/kg wwt)	0.0681	0.0697	0.0396	0.0627	0.0609
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.011	0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0108	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.159	0.125	0.296	0.172	0.142
	Iron (Fe)-Total (mg/kg wwt)	1.63	1.38	8.48	1.47	1.65
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0110	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	329	312	492	328	279
	Manganese (Mn)-Total (mg/kg wwt)	0.068	0.067	0.892	0.095	0.079
	Mercury (Hg)-Total (mg/kg wwt)	0.305	0.612	0.362	0.226	0.380
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0045	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	0.088	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2540	2500	9880	2490	2320
	Potassium (K)-Total (mg/kg wwt)	4380	4570	3030	4310	3920
	Rubidium (Rb)-Total (mg/kg wwt)	19.4	19.9	13.3	21.4	17.8
	Selenium (Se)-Total (mg/kg wwt)	0.216	0.219	0.246	0.203	0.200
	Sodium (Na)-Total (mg/kg wwt)	346	354	1230	413	255
	Strontium (Sr)-Total (mg/kg wwt)	0.041	0.020	2.76	0.029	0.043
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00605	0.00663	0.00633	0.00835	0.00635
	Tin (Sn)-Total (mg/kg wwt)	0.028	0.037	<0.020	0.041	0.039
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	0.00054	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.63	3.07	15.8	3.37	3.14
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.192	0.307		0.104	0.298
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	0.5	<0.5	1.7

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-36 Tissue 01-SEP-18 09:00 KLOE-WALL-008-T	L2201773-37 Tissue 01-SEP-18 09:00 KLOE-WALL-009-T	L2201773-38 Tissue 01-SEP-18 09:00 KLOE-WALL-010-T	L2201773-39 Tissue 01-SEP-18 09:00 KLOE-WALL-013-G	L2201773-40 Tissue 01-SEP-18 09:00 KLOE-WALL-013-L
TISSUE						
Physical Tests	% Moisture (%)	78.1	78.2	80.2	72.5	75.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	0.66
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.182	0.0894	0.0955	0.0162	0.0390
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.017	0.012
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	0.0029	0.0989
	Calcium (Ca)-Total (mg/kg wwt)	88.3	178	66.9	267	87.6
	Cesium (Cs)-Total (mg/kg wwt)	0.0749	0.0668	0.0821	0.0588	0.0392
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0462	0.123
	Copper (Cu)-Total (mg/kg wwt)	0.138	0.176	0.115	0.775	1.56
	Iron (Fe)-Total (mg/kg wwt)	1.56	1.89	1.31	35.0	72.1
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	326	307	279	280	203
	Manganese (Mn)-Total (mg/kg wwt)	0.055	0.058	0.057	2.36	1.80
	Mercury (Hg)-Total (mg/kg wwt)	0.404	0.410	0.411	0.0758	0.448
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0109	0.139
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2630	2500	2260	2710	3310
	Potassium (K)-Total (mg/kg wwt)	4740	4250	4160	2850	2810
	Rubidium (Rb)-Total (mg/kg wwt)	19.1	18.8	17.2	15.7	15.8
	Selenium (Se)-Total (mg/kg wwt)	0.232	0.203	0.200	0.704	1.01
	Sodium (Na)-Total (mg/kg wwt)	296	366	150	988	1580
	Strontium (Sr)-Total (mg/kg wwt)	0.013	0.027	<0.010	0.034	0.027
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00702	0.00678	0.00637	0.0126	0.0189
	Tin (Sn)-Total (mg/kg wwt)	0.035	0.023	<0.020	0.027	0.056
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.025
	Zinc (Zn)-Total (mg/kg wwt)	3.14	3.47	2.72	34.2	23.3
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.228	0.211	0.246		
Aggregate Organics	Lipid Content (% wwt)	<0.5	0.5	<0.5	5.0	3.8

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-41 Tissue 01-SEP-18 09:00 KLOE-WALL-013-T	L2201773-42 Tissue 01-SEP-18 09:00 KLOE-WALL-013-WB	L2201773-43 Tissue 03-SEP-18 09:00 KLOE-WALL-017-T	L2201773-44 Tissue 03-SEP-18 09:00 KLOE-WALL-020-T	L2201773-45 Tissue 03-SEP-18 09:00 KLOE-WALL-023-T
TISSUE						
Physical Tests	% Moisture (%)	78.7	67.6	79.4	77.6	80.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.120	0.0816	0.0550	0.422	0.0471
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.216	0.012	0.012	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0018	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	103	10600	241	72.3	83.0
	Cesium (Cs)-Total (mg/kg wwt)	0.0834	0.0550	0.0490	0.0866	0.0730
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.112	0.252	0.113	0.128	0.122
	Iron (Fe)-Total (mg/kg wwt)	1.44	7.09	1.50	1.85	1.37
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0063	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	293	394	297	294	281
	Manganese (Mn)-Total (mg/kg wwt)	0.043	0.490	0.078	0.044	0.058
	Mercury (Hg)-Total (mg/kg wwt)	0.841	0.569	0.424	1.78	1.07
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2350	7000	2310	2440	2310
	Potassium (K)-Total (mg/kg wwt)	4160	3000	3930	4250	4180
	Rubidium (Rb)-Total (mg/kg wwt)	21.3	14.8	13.5	19.8	15.6
	Selenium (Se)-Total (mg/kg wwt)	0.249	0.266	0.226	0.247	0.230
	Sodium (Na)-Total (mg/kg wwt)	326	1160	219	286	305
	Strontium (Sr)-Total (mg/kg wwt)	0.013	1.66	0.040	0.012	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00570	0.00475	0.00487	0.00290	0.00533
	Tin (Sn)-Total (mg/kg wwt)	0.024	<0.020	<0.020	0.030	0.032
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.00	12.6	3.26	3.15	2.94
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	1.04		0.238	1.96	1.20
Aggregate Organics	Lipid Content (% wwt)	<0.5	5.2	<0.5	0.6	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-46 Tissue 03-SEP-18 09:00 KLOE-WALL-024-T	L2201773-47 Tissue 03-SEP-18 09:00 KLOE-WALL-039-T	L2201773-48 Tissue 01-SEP-18 09:00 KLOE-WHSC-001-T	L2201773-49 Tissue 01-SEP-18 09:00 KLOE-WHSC-002-T	L2201773-50 Tissue 01-SEP-18 09:00 KLOE-WHSC-003-T
TISSUE						
Physical Tests	% Moisture (%)	81.1	77.7	81.6	80.5	82.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.123	0.158	0.131	0.117	0.136
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.014	0.026	0.022	0.018
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	211	306	103	127	114
	Cesium (Cs)-Total (mg/kg wwt)	0.102	0.0802	0.0160	0.0120	0.0126
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.032	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0049	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.120	0.148	0.528	0.304	0.262
	Iron (Fe)-Total (mg/kg wwt)	1.27	2.62	9.28	4.88	4.82
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	285	309	251	279	267
	Manganese (Mn)-Total (mg/kg wwt)	0.058	0.095	0.127	0.153	0.138
	Mercury (Hg)-Total (mg/kg wwt)	1.01	1.03	0.214	0.0815	0.182
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2390	2520	1990	2150	2110
	Potassium (K)-Total (mg/kg wwt)	4160	4260	3360	3620	3690
	Rubidium (Rb)-Total (mg/kg wwt)	22.1	22.2	5.26	4.98	5.40
	Selenium (Se)-Total (mg/kg wwt)	0.248	0.238	0.184	0.251	0.197
	Sodium (Na)-Total (mg/kg wwt)	310	305	392	380	280
	Strontium (Sr)-Total (mg/kg wwt)	0.037	0.053	0.019	0.027	0.024
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00256	0.00433	0.00139	<0.00040	<0.00040
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.035	0.025	0.045	0.023
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.18	3.60	4.38	4.10	3.33
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	1.11	1.28			
Aggregate Organics	Lipid Content (% wwt)	0.5	0.6	2.9	1.1	0.9

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-51 Tissue 01-SEP-18 09:00 KLOE-WHSC-004-T	L2201773-52 Tissue 01-SEP-18 09:00 KLOE-WHSC-004-WB	L2201773-53 Tissue 01-SEP-18 09:00 KLOE-WHSC-004-WBLD	L2201773-54 Tissue 01-SEP-18 09:00 KLOE-WHSC-005-T	L2201773-55 Tissue 01-SEP-18 09:00 KLOE-WHSC-005-WB
TISSUE						
Physical Tests	% Moisture (%)	82.0	75.5	74.2	79.6	77.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	8.16	7.59	<0.40	8.03
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.214	0.326	0.322	0.107	0.193
	Barium (Ba)-Total (mg/kg wwt)	0.019	0.429	0.475	0.023	0.704
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0070	0.0070	<0.0010	0.0092
	Calcium (Ca)-Total (mg/kg wwt)	162	10800	12100	215	15400
	Cesium (Cs)-Total (mg/kg wwt)	0.0274	0.0164	0.0158	0.0195	0.0131
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.022	0.025	<0.010	0.026
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0097	0.0103	<0.0040	0.0119
	Copper (Cu)-Total (mg/kg wwt)	0.319	0.890	0.830	0.231	0.835
	Iron (Fe)-Total (mg/kg wwt)	4.92	24.7	25.5	3.71	29.1
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0250	0.0262	<0.0040	0.0279
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	289	400	420	298	502
	Manganese (Mn)-Total (mg/kg wwt)	0.135	4.50	4.32	0.201	7.93
	Mercury (Hg)-Total (mg/kg wwt)	0.208	0.111	0.112	0.157	0.0888
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0132	0.0142	<0.0040	0.0163
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2280	7200	7810	2470	9390
	Potassium (K)-Total (mg/kg wwt)	3840	2810	2810	4140	3030
	Rubidium (Rb)-Total (mg/kg wwt)	7.84	5.57	5.48	7.59	5.20
	Selenium (Se)-Total (mg/kg wwt)	0.168	0.215	0.205	0.191	0.249
	Sodium (Na)-Total (mg/kg wwt)	299	926	915	254	1020
	Strontium (Sr)-Total (mg/kg wwt)	0.033	2.49	2.75	0.051	4.11
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00171	0.00229	0.00231	0.00207	0.00413
	Tin (Sn)-Total (mg/kg wwt)	0.048	<0.020	<0.020	0.041	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00210	0.00227	<0.00040	0.00583
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.031	0.033	<0.020	0.063
	Zinc (Zn)-Total (mg/kg wwt)	3.51	15.4	15.4	3.60	19.4
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	0.048
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.9	2.1	4.1	0.7	3.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-56 Tissue 01-SEP-18 09:00 KLOE-WHSC-006-T	L2201773-57 Tissue 01-SEP-18 09:00 KLOE-WHSC-006-WB	L2201773-58 Tissue 01-SEP-18 09:00 KLOE-WHSC-007-T	L2201773-59 Tissue 01-SEP-18 09:00 KLOE-WHSC-008-T	L2201773-60 Tissue 01-SEP-18 09:00 KLOE-WHSC-009-T
TISSUE						
Physical Tests	% Moisture (%)	78.4	77.9	83.5	81.2	82.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	4.59	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.122	0.254	0.141	0.112	0.152
	Barium (Ba)-Total (mg/kg wwt)	0.026	0.525	0.013	0.021	0.018
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0073	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	290	11900	94.6	154	105
	Cesium (Cs)-Total (mg/kg wwt)	0.0139	0.0091	0.0118	0.0136	0.0140
	Chromium (Cr)-Total (mg/kg wwt)	0.020	0.016	0.019	<0.010	0.027
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0143	0.0047	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.204	1.02	0.334	0.176	0.180
	Iron (Fe)-Total (mg/kg wwt)	3.64	30.7	5.97	2.63	2.98
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0201	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	314	463	251	272	279
	Manganese (Mn)-Total (mg/kg wwt)	0.123	4.08	0.129	0.138	0.141
	Mercury (Hg)-Total (mg/kg wwt)	0.0907	0.0556	0.247	0.130	0.160
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0186	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2420	8540	2140	2170	2070
	Potassium (K)-Total (mg/kg wwt)	3960	3400	3750	3760	3560
	Rubidium (Rb)-Total (mg/kg wwt)	6.09	5.06	4.61	5.52	4.80
	Selenium (Se)-Total (mg/kg wwt)	0.167	0.217	0.191	0.158	0.228
	Sodium (Na)-Total (mg/kg wwt)	298	1020	255	205	360
	Strontium (Sr)-Total (mg/kg wwt)	0.069	2.72	0.016	0.032	0.018
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00082	0.00164	<0.00040	0.00155	0.00064
	Tin (Sn)-Total (mg/kg wwt)	0.029	<0.020	0.049	0.070	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00236	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.045	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.06	15.2	3.40	2.97	3.76
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	1.3	4.6	2.0	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-61 Tissue 01-SEP-18 09:00 KLOE-WHSC-010-T	L2201773-62 Tissue 01-SEP-18 09:00 KLOE-WHSC-010-WB	L2201773-63 Tissue 01-SEP-18 09:00 KLOE-WHSC-010-WBLD	L2201773-64 Tissue 31-AUG-18 09:00 KLOE-YLPR-001-T	L2201773-65 Tissue 31-AUG-18 09:00 KLOE-YLPR-002-T
TISSUE						
Physical Tests	% Moisture (%)	82.4	83.2	82.8	79.0	77.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	22.7	22.9	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	0.0021	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0765	0.215	0.211	0.0961	0.0730
	Barium (Ba)-Total (mg/kg wwt)	0.032	0.981	1.08	0.031	0.020
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0084	0.0092	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	259	18900	18500	609	411
	Cesium (Cs)-Total (mg/kg wwt)	0.0107	0.0088	0.0086	0.0149	0.0477
	Chromium (Cr)-Total (mg/kg wwt)	0.013	0.062	0.062	0.099	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0162	0.0179	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.152	0.830	0.800	0.164	0.154
	Iron (Fe)-Total (mg/kg wwt)	2.75	46.0	46.3	2.75	1.60
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0484	0.0526	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	265	557	565	322	334
	Manganese (Mn)-Total (mg/kg wwt)	0.241	7.70	8.45	0.354	0.224
	Mercury (Hg)-Total (mg/kg wwt)	0.168	0.0764	0.0825	0.0427	0.120
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0182	0.0180	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	0.041	0.046	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2140	10900	10700	2500	2530
	Potassium (K)-Total (mg/kg wwt)	3570	2620	2550	3800	4200
	Rubidium (Rb)-Total (mg/kg wwt)	4.72	3.31	3.29	7.53	10.6
	Selenium (Se)-Total (mg/kg wwt)	0.157	0.208	0.199	0.240	0.269
	Sodium (Na)-Total (mg/kg wwt)	351	1010	996	571	248
	Strontium (Sr)-Total (mg/kg wwt)	0.070	4.48	4.60	0.117	0.080
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00045	0.00141	0.00138	0.00342	0.00625
	Tin (Sn)-Total (mg/kg wwt)	0.022	<0.020	<0.020	0.031	0.048
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00537	0.00555	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.075	0.077	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.07	14.8	15.4	4.04	4.23
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	0.044	0.043	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.7	1.0	3.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-66 Tissue 31-AUG-18 09:00 KLOE-YLPR-003-T	L2201773-67 Tissue 31-AUG-18 09:00 KLOE-YLPR-004-T	L2201773-68 Tissue 31-AUG-18 09:00 KLOE-YLPR-005-T	L2201773-69 Tissue 31-AUG-18 09:00 KLOE-YLPR-006-T	L2201773-70 Tissue 31-AUG-18 09:00 KLOE-YLPR-007-T
TISSUE						
Physical Tests	% Moisture (%)	74.4	78.2	78.0	78.2	78.3
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	0.0024
	Arsenic (As)-Total (mg/kg wwt)	0.121	0.0810	0.0676	0.0751	0.0798
	Barium (Ba)-Total (mg/kg wwt)	0.036	0.298	0.041	0.014	0.022
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	0.0038
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	837	1080	701	153	646
	Cesium (Cs)-Total (mg/kg wwt)	0.0143	0.0119	0.0127	0.0201	0.0229
	Chromium (Cr)-Total (mg/kg wwt)	0.045	<0.010	0.018	<0.010	0.014
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.158	0.161	0.135	0.118	0.197
	Iron (Fe)-Total (mg/kg wwt)	2.47	1.63	1.77	1.54	2.55
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0044	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	309	325	324	315	340
	Manganese (Mn)-Total (mg/kg wwt)	0.428	0.974	0.508	0.159	0.331
	Mercury (Hg)-Total (mg/kg wwt)	0.0584	0.0431	0.0577	0.0806	0.104
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2600	2730	2450	2430	2820
	Potassium (K)-Total (mg/kg wwt)	3920	3780	3620	4180	4370
	Rubidium (Rb)-Total (mg/kg wwt)	7.40	6.25	6.87	8.17	10.6
	Selenium (Se)-Total (mg/kg wwt)	0.272	0.279	0.269	0.361	0.375
	Sodium (Na)-Total (mg/kg wwt)	562	502	533	238	319
	Strontium (Sr)-Total (mg/kg wwt)	0.153	0.280	0.131	0.021	0.094
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00196	0.00604	0.00395	0.00276	0.00763
	Tin (Sn)-Total (mg/kg wwt)	0.061	0.042	0.055	0.050	0.053
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.31	3.91	3.90	3.58	4.73
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.9	<0.5	0.8	<0.5	0.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-71	L2201773-72	L2201773-73	L2201773-74	L2201773-75
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	31-AUG-18	31-AUG-18	31-AUG-18	30-AUG-18	30-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLOE-YLPR-008-T	KLOE-YLPR-009-T	KLOE-YLPR-010-T	KLOW-LKWH-001-T	KLOW-LKWH-002-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	78.3	77.1	79.0	78.5	79.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0909	0.0790	0.0508	0.117	0.136
	Barium (Ba)-Total (mg/kg wwt)	0.027	0.044	0.015	0.013	0.032
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	583	980	184	216	500
	Cesium (Cs)-Total (mg/kg wwt)	0.0208	0.0138	0.0332	0.0244	0.0227
	Chromium (Cr)-Total (mg/kg wwt)	0.021	0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.103	0.153	0.168	0.149	0.151
	Iron (Fe)-Total (mg/kg wwt)	1.86	2.03	1.77	2.11	2.73
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	341	320	346	284	354
	Manganese (Mn)-Total (mg/kg wwt)	0.367	0.507	0.197	0.121	0.491
	Mercury (Hg)-Total (mg/kg wwt)	0.102	0.0686	0.0984	0.0831	0.121
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2610	2610	2330	2470	2730
	Potassium (K)-Total (mg/kg wwt)	4000	3760	3970	3800	4210
	Rubidium (Rb)-Total (mg/kg wwt)	7.58	8.15	8.24	5.26	10.2
	Selenium (Se)-Total (mg/kg wwt)	0.316	0.276	0.325	0.236	0.200
	Sodium (Na)-Total (mg/kg wwt)	184	616	569	293	340
	Strontium (Sr)-Total (mg/kg wwt)	0.102	0.179	0.031	0.113	0.095
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00269	0.00322	0.0110	0.00051	0.00443
	Tin (Sn)-Total (mg/kg wwt)	0.038	0.052	0.043	0.023	0.039
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.51	4.60	4.51	2.76	4.02
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	<0.5	0.9	0.6	1.4	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-76	L2201773-77	L2201773-78	L2201773-79	L2201773-80
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	30-AUG-18	31-AUG-18	31-AUG-18	31-AUG-18	31-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLOW-LKWH-003-T	KLOW-LKWH-004-T	KLOW-LKWH-004-T-B	KLOW-LKWH-005-T	KLOW-NRPK-001-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	78.2	79.0	76.5	79.5	79.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	0.41	0.45
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.125	0.0533	0.199	0.185	0.238
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.023	0.034	0.023	0.033
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0019	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	239	617	792	417	700
	Cesium (Cs)-Total (mg/kg wwt)	0.0115	0.0127	0.0136	0.0224	0.0506
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.193	0.108	0.269	0.112	0.213
	Iron (Fe)-Total (mg/kg wwt)	2.56	3.59	2.61	2.57	3.54
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	318	300	354	304	580
	Manganese (Mn)-Total (mg/kg wwt)	0.157	0.161	0.267	0.207	0.399
	Mercury (Hg)-Total (mg/kg wwt)	0.0925	0.219	0.0908	0.121	0.162
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2600	2850	3030	2680	4900
	Potassium (K)-Total (mg/kg wwt)	4120	3950	4300	4060	7320
	Rubidium (Rb)-Total (mg/kg wwt)	5.85	5.80	6.78	6.58	16.0
	Selenium (Se)-Total (mg/kg wwt)	0.167	0.225	0.189	0.220	0.407
	Sodium (Na)-Total (mg/kg wwt)	378	350	421	168	484
	Strontium (Sr)-Total (mg/kg wwt)	0.102	0.230	0.351	0.165	0.196
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00159	0.00063	0.00203	0.00191	0.00642
	Tin (Sn)-Total (mg/kg wwt)	0.062	0.058	0.035	0.041	0.071
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.34	3.39	4.65	2.63	5.56
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					0.189
Aggregate Organics	Lipid Content (% wwt)	1.1	0.6	1.0	0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-81 Tissue 01-SEP-18 09:00 KLOW-NRPK-003-T	L2201773-82 Tissue 30-AUG-18 09:00 KLOW-WALL-001-T	L2201773-83 Tissue 30-AUG-18 09:00 KLOW-WALL-002-T	L2201773-84 Tissue 30-AUG-18 09:00 KLOW-WALL-003-T	L2201773-85 Tissue 30-AUG-18 09:00 KLOW-WALL-003-WB
TISSUE						
Physical Tests	% Moisture (%)	78.4	78.7	77.4	78.2	71.8
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	0.43
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0966	0.0983	0.0404	0.0615	0.0878
	Barium (Ba)-Total (mg/kg wwt)	0.014	0.013	0.011	0.011	0.352
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	0.0053
	Calcium (Ca)-Total (mg/kg wwt)	450	304	148	117	13900
	Cesium (Cs)-Total (mg/kg wwt)	0.0307	0.0761	0.0471	0.0560	0.0316
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0069
	Copper (Cu)-Total (mg/kg wwt)	0.137	0.180	0.140	0.140	0.319
	Iron (Fe)-Total (mg/kg wwt)	1.05	2.34	1.78	1.34	6.74
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0090
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	329	304	327	324	441
	Manganese (Mn)-Total (mg/kg wwt)	0.244	0.074	0.098	0.068	1.02
	Mercury (Hg)-Total (mg/kg wwt)	0.161	0.855	0.537	0.529	0.329
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0044
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2830	2600	2420	2600	8660
	Potassium (K)-Total (mg/kg wwt)	4260	4300	4010	4400	2990
	Rubidium (Rb)-Total (mg/kg wwt)	9.13	17.6	13.5	14.2	9.49
	Selenium (Se)-Total (mg/kg wwt)	0.168	0.225	0.244	0.265	0.279
	Sodium (Na)-Total (mg/kg wwt)	331	344	354	283	1020
	Strontium (Sr)-Total (mg/kg wwt)	0.085	0.055	0.018	0.014	2.33
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00409	0.00442	0.00559	0.00649	0.00546
	Tin (Sn)-Total (mg/kg wwt)	0.031	0.044	0.066	0.042	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.15	4.33	3.75	3.16	14.0
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.204	1.09	0.643	0.659	
Aggregate Organics	Lipid Content (% wwt)	0.6	0.9	0.7	<0.5	4.2

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-86 Tissue 30-AUG-18 09:00 KLOW-WALL-004-T	L2201773-87 Tissue 30-AUG-18 09:00 KLOW-WALL-006-T	L2201773-88 Tissue 30-AUG-18 09:00 KLOW-WALL-006-WB	L2201773-89 Tissue 30-AUG-18 09:00 KLOW-WALL-006-WBLD	L2201773-90 Tissue 30-AUG-18 09:00 KLOW-WALL-007-T
TISSUE						
Physical Tests	% Moisture (%)	78.2	78.4	73.0	74.9	78.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	0.48	0.49	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0535	0.125	0.121	0.119	0.0587
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	0.396	0.315	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	0.0057	0.0057	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	123	146	17700	12400	210
	Cesium (Cs)-Total (mg/kg wwt)	0.0522	0.0659	0.0409	0.0393	0.0403
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.149
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0057	0.0052	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.115	0.202	0.326	0.324	0.148
	Iron (Fe)-Total (mg/kg wwt)	1.38	2.41	11.5	11.7	2.21
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0061	0.0061	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	289	311	514	413	325
	Manganese (Mn)-Total (mg/kg wwt)	0.067	0.071	1.22	1.00	0.091
	Mercury (Hg)-Total (mg/kg wwt)	0.538	0.546	0.348	0.338	0.186
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0040	0.0044	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2420	2730	10900	8040	2600
	Potassium (K)-Total (mg/kg wwt)	3950	4540	3440	3350	4220
	Rubidium (Rb)-Total (mg/kg wwt)	13.3	17.9	12.6	12.4	15.6
	Selenium (Se)-Total (mg/kg wwt)	0.245	0.233	0.259	0.314	0.212
	Sodium (Na)-Total (mg/kg wwt)	339	312	1060	981	416
	Strontium (Sr)-Total (mg/kg wwt)	0.016	0.022	3.33	2.32	0.030
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00547	0.00630	0.00620	0.00555	0.00637
	Tin (Sn)-Total (mg/kg wwt)	0.028	0.039	0.021	<0.020	0.027
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	0.00058	0.00046	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.35	4.42	21.5	19.6	3.74
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.561	0.552			0.204
Aggregate Organics	Lipid Content (% wwt)	0.7	<0.5	3.0	2.9	0.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-91 Tissue 30-AUG-18 09:00 KLOW-WALL-008-L	L2201773-92 Tissue 30-AUG-18 09:00 KLOW-WALL-008-T	L2201773-93 Tissue 30-AUG-18 09:00 KLOW-WALL-008-WB	L2201773-94 Tissue 30-AUG-18 09:00 KLOW-WALL-009-T	L2201773-95 Tissue 30-AUG-18 09:00 KLOW-WALL-010-T
TISSUE						
Physical Tests	% Moisture (%)	76.5	76.2	70.8	80.9	80.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<1.0	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0279	0.0588	0.0512	0.189	0.0628
	Barium (Ba)-Total (mg/kg wwt)	0.047	0.020	0.470	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.116	<0.0010	0.0017	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	127	539	14500	102	104
	Cesium (Cs)-Total (mg/kg wwt)	0.0203	0.0609	0.0400	0.0569	0.0500
	Chromium (Cr)-Total (mg/kg wwt)	<0.040	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.642	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	1.25	0.157	0.266	0.164	0.143
	Iron (Fe)-Total (mg/kg wwt)	37.7	2.18	6.48	1.65	1.51
	Lead (Pb)-Total (mg/kg wwt)	<0.010	<0.0040	0.0058	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	173	331	456	258	264
	Manganese (Mn)-Total (mg/kg wwt)	1.28	0.101	0.909	0.075	0.056
	Mercury (Hg)-Total (mg/kg wwt)	0.545	0.782	0.441	0.235	0.459
	Molybdenum (Mo)-Total (mg/kg wwt)	0.149	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2340	3060	9520	2130	2210
	Potassium (K)-Total (mg/kg wwt)	2340	4540	3160	3620	4100
	Rubidium (Rb)-Total (mg/kg wwt)	8.92	14.7	10.3	16.4	13.7
	Selenium (Se)-Total (mg/kg wwt)	0.815	0.265	0.297	0.196	0.213
	Sodium (Na)-Total (mg/kg wwt)	1100	335	1060	382	249
	Strontium (Sr)-Total (mg/kg wwt)	0.057	0.095	2.71	0.015	0.013
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.0126	0.00609	0.00504	0.00639	0.00686
	Tin (Sn)-Total (mg/kg wwt)	0.066	0.020	<0.020	<0.020	0.063
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	0.035	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	17.9	4.92	16.3	3.71	3.38
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)		0.889		0.266	0.487
Aggregate Organics	Lipid Content (% wwt)	8.4	2.0	5.0	<0.5	0.7

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-96 Tissue 30-AUG-18 09:00 KLOW-WALL-012-T	L2201773-97 Tissue 31-AUG-18 09:00 KLOW-WALL-013-T	L2201773-98 Tissue 01-SEP-18 09:00 KLOW-WALL-029-T	L2201773-99 Tissue 01-SEP-18 09:00 KLOW-WALL-029-WB	L2201773-100 Tissue 01-SEP-18 09:00 KLOW-WALL-029-WBLD
TISSUE						
Physical Tests	% Moisture (%)	79.3	76.6	79.0	71.0	70.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0512	0.241	0.0514	0.0480	0.0502
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.012	<0.010	0.471	0.358
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	0.0019	0.0016
	Calcium (Ca)-Total (mg/kg wwt)	243	190	139	18400	13000
	Cesium (Cs)-Total (mg/kg wwt)	0.0496	0.107	0.0643	0.0383	0.0389
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.200	0.011	0.011
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0065	0.0060
	Copper (Cu)-Total (mg/kg wwt)	0.117	0.165	0.114	0.336	0.349
	Iron (Fe)-Total (mg/kg wwt)	1.18	2.28	2.43	7.03	6.83
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0159	0.0071
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	285	297	334	534	411
	Manganese (Mn)-Total (mg/kg wwt)	0.095	0.065	0.061	1.04	0.806
	Mercury (Hg)-Total (mg/kg wwt)	0.227	0.782	0.260	0.151	0.147
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2450	2540	2550	11100	8280
	Potassium (K)-Total (mg/kg wwt)	4390	4580	5010	3150	3080
	Rubidium (Rb)-Total (mg/kg wwt)	17.0	23.3	23.8	15.1	15.1
	Selenium (Se)-Total (mg/kg wwt)	0.209	0.206	0.199	0.208	0.224
	Sodium (Na)-Total (mg/kg wwt)	205	301	326	1120	1050
	Strontium (Sr)-Total (mg/kg wwt)	0.036	0.027	0.016	3.21	2.29
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00402	0.00395	0.00798	0.00881	0.00715
	Tin (Sn)-Total (mg/kg wwt)	0.037	0.062	0.033	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.58	4.08	3.14	15.2	13.9
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.229	0.872	0.288		
Aggregate Organics	Lipid Content (% wwt)	<0.5	0.8	<0.5	3.9	4.0

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-101 Tissue 01-SEP-18 09:00 KLOW-WALL-032-G	L2201773-102 Tissue 01-SEP-18 09:00 KLOW-WALL-032-L	L2201773-103 Tissue 01-SEP-18 09:00 KLOW-WALL-032-T	L2201773-104 Tissue 01-SEP-18 09:00 KLOW-WALL-032-WB	L2201773-105 Tissue 30-AUG-18 09:00 KLOW-WHSC-001-T
TISSUE						
Physical Tests	% Moisture (%)	79.4	80.8	77.6	73.1	81.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<1.0	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0142	0.0275	0.0588	0.0557	0.0421
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.029	<0.010	0.435	0.014
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0014	0.0639	<0.0010	0.0013	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	230	46.3	84.6	20200	105
	Cesium (Cs)-Total (mg/kg wwt)	0.0575	0.0285	0.0758	0.0508	0.0092
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.040	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0584	0.200	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.851	1.23	0.129	0.296	0.239
	Iron (Fe)-Total (mg/kg wwt)	26.9	48.1	1.34	6.28	3.32
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.010	<0.0040	0.0120	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	216	154	328	605	285
	Manganese (Mn)-Total (mg/kg wwt)	1.33	0.871	0.070	1.02	0.153
	Mercury (Hg)-Total (mg/kg wwt)	0.0499	0.181	0.455	0.313	0.132
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0074	0.117	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2940	2470	2590	12900	2230
	Potassium (K)-Total (mg/kg wwt)	4030	2660	5150	3980	4030
	Rubidium (Rb)-Total (mg/kg wwt)	20.4	16.3	28.5	20.1	4.30
	Selenium (Se)-Total (mg/kg wwt)	0.545	0.654	0.219	0.256	0.129
	Sodium (Na)-Total (mg/kg wwt)	897	989	277	1360	345
	Strontium (Sr)-Total (mg/kg wwt)	0.021	<0.020	<0.010	3.34	0.014
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00810	0.00869	0.00476	0.00492	0.00115
	Tin (Sn)-Total (mg/kg wwt)	0.062	0.059	0.039	<0.020	0.023
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	0.00058	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	52.4	17.3	3.74	16.4	3.50
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)			0.510		
Aggregate Organics	Lipid Content (% wwt)	1.8	5.8	<0.5	2.7	1.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-106 Tissue 30-AUG-18 09:00 KLOW-WHSC-001-WB	L2201773-107 Tissue 30-AUG-18 09:00 KLOW-WHSC-001-WBLD	L2201773-108 Tissue 30-AUG-18 09:00 KLOW-WHSC-002-T	L2201773-109 Tissue 30-AUG-18 09:00 KLOW-WHSC-002-WB	L2201773-110 Tissue 30-AUG-18 09:00 KLOW-WHSC-003-T
Sample ID						
Description						
Sampled Date						
Sampled Time						
Client ID						
TISSUE						
Physical Tests	% Moisture (%)	70.5	73.7	80.1	75.1	76.3
Metals	Aluminum (Al)-Total (mg/kg wwt)	3.06	3.59	<0.40	45.8	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	0.0028	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.166	0.177	0.103	0.669	0.124
	Barium (Ba)-Total (mg/kg wwt)	0.506	0.515	0.019	0.732	0.023
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0041	0.0040	<0.0010	0.0280	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	12500	13200	138	11700	293
	Cesium (Cs)-Total (mg/kg wwt)	0.0063	0.0064	0.0188	0.0159	0.0182
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.011	<0.010	0.124	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0064	0.0062	<0.0040	0.0386	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.640	0.626	0.173	0.855	0.257
	Iron (Fe)-Total (mg/kg wwt)	17.6	17.9	2.56	110	3.17
	Lead (Pb)-Total (mg/kg wwt)	0.0152	0.0157	<0.0040	0.0949	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	485	476	289	450	294
	Manganese (Mn)-Total (mg/kg wwt)	5.52	5.52	0.153	10.7	0.330
	Mercury (Hg)-Total (mg/kg wwt)	0.0873	0.0837	0.137	0.0807	0.206
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0142	0.0150	<0.0040	0.0239	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	0.097	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	8510	8810	2310	7650	2380
	Potassium (K)-Total (mg/kg wwt)	2960	2910	4320	2780	4090
	Rubidium (Rb)-Total (mg/kg wwt)	3.28	3.18	4.94	3.35	5.54
	Selenium (Se)-Total (mg/kg wwt)	0.191	0.197	0.237	0.313	0.242
	Sodium (Na)-Total (mg/kg wwt)	812	786	222	986	282
	Strontium (Sr)-Total (mg/kg wwt)	3.56	3.62	0.023	2.97	0.060
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00164	0.00158	<0.00040	0.00099	0.00051
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	0.040	<0.020	0.035
	Uranium (U)-Total (mg/kg wwt)	0.00285	0.00293	<0.00040	0.00732	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	0.021	0.022	<0.020	0.147	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	14.7	14.1	3.11	12.9	3.84
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	0.075	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	4.2	4.2	0.9	4.9	1.1

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-111	L2201773-112	L2201773-113	L2201773-114	L2201773-115
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	30-AUG-18	30-AUG-18	30-AUG-18	30-AUG-18	30-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLOW-WHSC-003-WB	KLOW-WHSC-004-T	KLOW-WHSC-004-WB	KLOW-WHSC-004-WBLD	KLOW-WHSC-005-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	71.8	81.5	71.1	65.9	82.3
Metals	Aluminum (Al)-Total (mg/kg wwt)	6.81	<0.40	6.43	6.48	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.220	0.169	0.253	0.259	0.112
	Barium (Ba)-Total (mg/kg wwt)	0.448	0.026	0.590	0.500	0.024
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0104	<0.0010	0.0140	0.0133	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	13700	358	15400	12500	167
	Cesium (Cs)-Total (mg/kg wwt)	0.0117	0.0256	0.0154	0.0164	0.0150
	Chromium (Cr)-Total (mg/kg wwt)	0.019	<0.010	0.015	0.014	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0116	<0.0040	0.0094	0.0103	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.631	0.186	0.641	0.660	0.238
	Iron (Fe)-Total (mg/kg wwt)	24.8	2.44	21.1	21.5	5.50
	Lead (Pb)-Total (mg/kg wwt)	0.0304	<0.0040	0.0274	0.0232	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	515	305	511	446	274
	Manganese (Mn)-Total (mg/kg wwt)	7.68	0.345	8.54	6.77	0.189
	Mercury (Hg)-Total (mg/kg wwt)	0.114	0.174	0.110	0.112	0.170
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0209	<0.0040	0.0176	0.0165	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	8990	2610	10100	8380	2320
	Potassium (K)-Total (mg/kg wwt)	3030	4510	2840	2910	4350
	Rubidium (Rb)-Total (mg/kg wwt)	4.19	6.53	4.34	4.46	4.84
	Selenium (Se)-Total (mg/kg wwt)	0.258	0.170	0.250	0.250	0.163
	Sodium (Na)-Total (mg/kg wwt)	1070	268	791	755	315
	Strontium (Sr)-Total (mg/kg wwt)	3.10	0.074	3.66	2.89	0.029
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00052	0.00121	0.00190	0.00168	0.00056
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.052	<0.020	<0.020	0.032
	Uranium (U)-Total (mg/kg wwt)	0.00289	<0.00040	0.00323	0.00274	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	0.061	<0.020	0.044	0.035	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	14.7	3.23	17.4	15.7	3.39
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	5.1	<0.5	2.7	2.8	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-116 Tissue 30-AUG-18 09:00 KLOW-WHSC-006-T	L2201773-117 Tissue 30-AUG-18 09:00 KLOW-WHSC-007-T	L2201773-118 Tissue 30-AUG-18 09:00 KLOW-WHSC-008-T	L2201773-119 Tissue 30-AUG-18 09:00 KLOW-WHSC-009-T	L2201773-120 Tissue 31-AUG-18 09:00 KLOW-WHSC-010-T
TISSUE						
Physical Tests	% Moisture (%)	80.6	79.4	82.5	81.3	80.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.126	0.173	0.162	0.185	0.0880
	Barium (Ba)-Total (mg/kg wwt)	0.027	0.021	0.034	0.029	0.014
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	172	224	522	340	97.2
	Cesium (Cs)-Total (mg/kg wwt)	0.0163	0.0153	0.0137	0.0118	0.0114
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0044	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.266	0.152	0.317	0.149	0.358
	Iron (Fe)-Total (mg/kg wwt)	6.50	2.39	5.16	2.57	4.74
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	292	305	273	302	269
	Manganese (Mn)-Total (mg/kg wwt)	0.237	0.277	0.439	0.302	0.115
	Mercury (Hg)-Total (mg/kg wwt)	0.264	0.0908	0.0893	0.145	0.183
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2530	2530	2500	2520	2030
	Potassium (K)-Total (mg/kg wwt)	4670	4700	4250	4590	3870
	Rubidium (Rb)-Total (mg/kg wwt)	4.92	4.91	5.07	3.73	4.02
	Selenium (Se)-Total (mg/kg wwt)	0.242	0.193	0.204	0.202	0.239
	Sodium (Na)-Total (mg/kg wwt)	297	232	264	237	304
	Strontium (Sr)-Total (mg/kg wwt)	0.026	0.047	0.127	0.074	0.015
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	<0.00040	<0.00040	0.00119	0.00065	0.00049
	Tin (Sn)-Total (mg/kg wwt)	0.032	0.038	0.057	0.055	0.022
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.75	3.81	3.63	3.35	4.42
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.7	<0.5	0.7	<0.5	0.7

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-121 Tissue 31-AUG-18 09:00 KLOW-YLPR-001-T	L2201773-122 Tissue 31-AUG-18 09:00 KLOW-YLPR-002-T	L2201773-123 Tissue 31-AUG-18 09:00 KLOW-YLPR-003-T	L2201773-124 Tissue 31-AUG-18 09:00 KLOW-YLPR-004-T	L2201773-125 Tissue 31-AUG-18 09:00 KLOW-YLPR-005-T
TISSUE						
Physical Tests	% Moisture (%)	78.6	78.5	77.5	78.4	79.5
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0865	0.0619	0.0887	0.0434	0.0551
	Barium (Ba)-Total (mg/kg wwt)	0.068	0.042	0.047	0.021	0.069
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	793	1650	1050	445	1010
	Cesium (Cs)-Total (mg/kg wwt)	0.0168	0.0292	0.0208	0.0319	0.0118
	Chromium (Cr)-Total (mg/kg wwt)	0.128	0.014	0.019	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.165	0.161	0.182	0.176	0.141
	Iron (Fe)-Total (mg/kg wwt)	2.56	1.53	1.73	1.55	1.46
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	319	323	327	334	353
	Manganese (Mn)-Total (mg/kg wwt)	0.800	0.523	0.457	0.376	1.05
	Mercury (Hg)-Total (mg/kg wwt)	0.0823	0.0818	0.0514	0.0897	0.0721
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2610	3040	2590	2410	2750
	Potassium (K)-Total (mg/kg wwt)	4290	4250	4030	3980	4210
	Rubidium (Rb)-Total (mg/kg wwt)	8.04	10.6	7.71	11.6	6.13
	Selenium (Se)-Total (mg/kg wwt)	0.200	0.205	0.236	0.202	0.178
	Sodium (Na)-Total (mg/kg wwt)	351	418	556	580	223
	Strontium (Sr)-Total (mg/kg wwt)	0.127	0.239	0.226	0.048	0.140
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00529	0.00552	0.00645	0.0104	0.0118
	Tin (Sn)-Total (mg/kg wwt)	0.144	0.045	0.065	<0.020	0.024
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.51	4.79	5.05	4.72	4.42
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0881				
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-126 Tissue 31-AUG-18 09:00 KLOW-YLPR-006-T	L2201773-127 Tissue 31-AUG-18 09:00 KLOW-YLPR-008-T	L2201773-128 Tissue 02-SEP-18 09:00 KLOW-YLPR-009-T	L2201773-129 Tissue 02-SEP-18 09:00 KLOW-YLPR-010-T	L2201773-130 Tissue 02-SEP-18 09:00 KLOW-YLPR-011-T
TISSUE						
Physical Tests	% Moisture (%)	78.9	78.1	78.1	79.2	72.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0857	0.0595	0.0876	0.0587	0.0580
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.019	0.015	0.025	0.025
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	256	625	322	688	687
	Cesium (Cs)-Total (mg/kg wwt)	0.0553	0.0317	0.0220	0.0173	0.0178
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.055	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.117	0.129	0.160	0.172	0.101
	Iron (Fe)-Total (mg/kg wwt)	1.50	1.68	1.14	2.60	0.89
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	334	304	317	379	329
	Manganese (Mn)-Total (mg/kg wwt)	0.187	0.229	0.241	0.351	0.378
	Mercury (Hg)-Total (mg/kg wwt)	0.488	0.152	0.137	0.0658	0.144
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2530	2350	2410	2850	2470
	Potassium (K)-Total (mg/kg wwt)	4470	3690	4350	5090	3940
	Rubidium (Rb)-Total (mg/kg wwt)	15.5	9.75	11.7	11.9	6.79
	Selenium (Se)-Total (mg/kg wwt)	0.250	0.234	0.157	0.168	0.350
	Sodium (Na)-Total (mg/kg wwt)	217	399	265	316	212
	Strontium (Sr)-Total (mg/kg wwt)	0.046	0.103	0.047	0.137	0.092
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00604	0.00513	0.00382	0.00305	0.00348
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.039	0.021	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.79	3.44	4.47	4.67	3.93
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-131 Tissue 28-AUG-18 09:00 KLSW-LKWH-001-T	L2201773-132 Tissue 28-AUG-18 09:00 KLSW-LKWH-002-T	L2201773-133 Tissue 28-AUG-18 09:00 KLSW-LKWH-003-T	L2201773-134 Tissue 28-AUG-18 09:00 KLSW-LKWH-004-T	L2201773-135 Tissue 28-AUG-18 09:00 KLSW-LKWH-005-T
TISSUE						
Physical Tests	% Moisture (%)	74.8	77.8	75.4	76.2	78.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	2.32	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.136	0.136	0.292	0.0856	0.196
	Barium (Ba)-Total (mg/kg wwt)	0.010	0.013	0.012	0.018	0.011
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	417	332	439	508	345
	Cesium (Cs)-Total (mg/kg wwt)	0.0277	0.0114	0.0178	0.0181	0.0171
	Chromium (Cr)-Total (mg/kg wwt)	0.013	0.075	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.169	0.154	0.204	0.107	0.115
	Iron (Fe)-Total (mg/kg wwt)	3.06	3.88	4.53	1.77	2.03
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	334	297	271	299	300
	Manganese (Mn)-Total (mg/kg wwt)	0.164	0.165	0.189	0.222	0.133
	Mercury (Hg)-Total (mg/kg wwt)	0.172	0.186	0.0857	0.129	0.174
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2840	2630	2420	2600	2660
	Potassium (K)-Total (mg/kg wwt)	4320	4340	3720	4270	4670
	Rubidium (Rb)-Total (mg/kg wwt)	4.84	3.60	3.88	5.61	5.39
	Selenium (Se)-Total (mg/kg wwt)	0.344	0.217	0.250	0.201	0.223
	Sodium (Na)-Total (mg/kg wwt)	272	292	320	298	277
	Strontium (Sr)-Total (mg/kg wwt)	0.169	0.118	0.166	0.207	0.114
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00171	0.00177	0.00199	0.00336	0.00214
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.36	3.48	4.25	3.69	3.11
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	1.8	1.0	2.5	<0.5	0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-136 Tissue 28-AUG-18 09:00 KLSW-LKWH-007-T	L2201773-137 Tissue 28-AUG-18 09:00 KLSW-LKWH-008-T	L2201773-138 Tissue 28-AUG-18 09:00 KLSW-LKWH-009-T	L2201773-139 Tissue 28-AUG-18 09:00 KLSW-LKWH-010-T	L2201773-140 Tissue 28-AUG-18 09:00 KLSW-LKWH-011-T
TISSUE						
Physical Tests	% Moisture (%)	79.0	78.4	79.1	79.8	77.4
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0491	0.154	0.322	0.128	0.171
	Barium (Ba)-Total (mg/kg wwt)	0.010	0.025	0.011	0.011	0.027
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	321	498	401	286	760
	Cesium (Cs)-Total (mg/kg wwt)	0.0113	0.0186	0.0186	0.0185	0.0142
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0057	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.164	0.103	0.093	0.077	0.152
	Iron (Fe)-Total (mg/kg wwt)	4.34	1.61	2.19	3.73	2.68
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	295	294	286	270	341
	Manganese (Mn)-Total (mg/kg wwt)	0.145	0.168	0.123	0.113	0.359
	Mercury (Hg)-Total (mg/kg wwt)	0.270	0.149	0.0881	0.158	0.108
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2560	2570	2610	2200	3060
	Potassium (K)-Total (mg/kg wwt)	4320	4700	4510	3960	4990
	Rubidium (Rb)-Total (mg/kg wwt)	4.84	6.35	6.61	3.63	5.89
	Selenium (Se)-Total (mg/kg wwt)	0.254	0.153	0.230	0.186	0.179
	Sodium (Na)-Total (mg/kg wwt)	476	305	322	404	324
	Strontium (Sr)-Total (mg/kg wwt)	0.095	0.219	0.135	0.093	0.273
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00190	0.00169	0.00127	0.00124	0.00328
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.18	2.92	2.84	2.70	3.84
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	0.7	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-141 Tissue 28-AUG-18 09:00 KLSW-LKWH-012-T	L2201773-142 Tissue 28-AUG-18 09:00 KLSW-LKWH-013-T	L2201773-143 Tissue 28-AUG-18 09:00 KLSW-LKWH-014-T	L2201773-144 Tissue 28-AUG-18 09:00 KLSW-NRPK-001-T	L2201773-145 Tissue 28-AUG-18 09:00 KLSW-NRPK-002-T
TISSUE						
Physical Tests	% Moisture (%)	78.6	78.7	79.6	81.5	78.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.150	0.0871	0.0938	0.0421	0.103
	Barium (Ba)-Total (mg/kg wwt)	0.013	<0.010	0.013	0.015	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	360	142	343	344	147
	Cesium (Cs)-Total (mg/kg wwt)	0.0241	0.0105	0.0163	0.0201	0.0368
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	0.031
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.137	0.116	0.111	0.144	0.130
	Iron (Fe)-Total (mg/kg wwt)	1.82	2.04	1.94	1.55	1.48
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	317	296	281	282	286
	Manganese (Mn)-Total (mg/kg wwt)	0.224	0.117	0.159	0.232	0.122
	Mercury (Hg)-Total (mg/kg wwt)	0.0829	0.209	0.125	0.159	0.242
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2530	2550	2600	2270	2300
	Potassium (K)-Total (mg/kg wwt)	4530	4500	4890	4040	4100
	Rubidium (Rb)-Total (mg/kg wwt)	6.79	3.77	7.23	8.86	11.3
	Selenium (Se)-Total (mg/kg wwt)	0.174	0.262	0.173	0.147	0.159
	Sodium (Na)-Total (mg/kg wwt)	358	333	261	150	345
	Strontium (Sr)-Total (mg/kg wwt)	0.151	0.028	0.121	0.043	0.013
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00189	0.00266	0.00218	0.00640	0.00459
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.30	3.06	3.14	4.06	3.62
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)				0.153	0.228
Aggregate Organics	Lipid Content (% wwt)	<0.5	0.9	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-146 Tissue 28-AUG-18 09:00 KLSW-NRPK-003-T	L2201773-147 Tissue 28-AUG-18 09:00 KLSW-NRPK-004-T	L2201773-148 Tissue 30-AUG-18 09:00 KLSW-NRPK-005-T	L2201773-149 Tissue 30-AUG-18 09:00 KLSW-SPSH-COMP1	L2201773-150 Tissue 30-AUG-18 09:00 KLSW-SPSH-COMP2
TISSUE						
Physical Tests	% Moisture (%)	77.9	78.3	79.9	77.8	74.9
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	1.51	2.23
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0451	0.0644	0.0855	0.314	0.324
	Barium (Ba)-Total (mg/kg wwt)	0.016	<0.010	0.013	0.520	0.530
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	0.0046	0.0042
	Calcium (Ca)-Total (mg/kg wwt)	450	307	189	7160	7800
	Cesium (Cs)-Total (mg/kg wwt)	0.0275	0.0299	0.0358	0.0160	0.0152
	Chromium (Cr)-Total (mg/kg wwt)	0.011	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0065	0.0062
	Copper (Cu)-Total (mg/kg wwt)	0.141	0.155	0.121	0.476	0.527
	Iron (Fe)-Total (mg/kg wwt)	1.73	1.30	1.28	13.2	13.3
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0043	0.0055
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	305	318	322	397	405
	Manganese (Mn)-Total (mg/kg wwt)	0.293	0.208	0.184	2.37	2.33
	Mercury (Hg)-Total (mg/kg wwt)	0.244	0.192	0.271	0.0442	0.0525
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	0.0160	0.0142
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2630	2410	2350	5900	6300
	Potassium (K)-Total (mg/kg wwt)	4370	4030	4090	3000	2980
	Rubidium (Rb)-Total (mg/kg wwt)	9.85	10.3	11.7	5.19	5.11
	Selenium (Se)-Total (mg/kg wwt)	0.172	0.173	0.155	0.327	0.367
	Sodium (Na)-Total (mg/kg wwt)	396	397	167	551	554
	Strontium (Sr)-Total (mg/kg wwt)	0.058	0.036	0.020	2.02	2.12
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00526	0.00439	0.00572	0.00505	0.00535
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.038
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	0.00067	0.00053
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.08	4.31	3.44	43.0	45.6
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.209	0.162	0.213	0.0527	0.0587
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	3.3	3.0

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-151	L2201773-152	L2201773-153	L2201773-154	L2201773-156
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	30-AUG-18	30-AUG-18	30-AUG-18	28-AUG-18	28-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLSW-SPSH-COMP3	KLSW-SPSH-COMP4	KLSW-SPSH-COMP5	KLSW-WALL-001-T	KLSW-WALL-003-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	76.6	77.8	75.5	76.4	76.3
Metals	Aluminum (Al)-Total (mg/kg wwt)	1.45	1.92	2.48	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.308	0.310	0.296	0.0519	0.0609
	Barium (Ba)-Total (mg/kg wwt)	0.629	0.531	0.538	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0055	0.0048	0.0042	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	8350	7050	7650	167	82.4
	Cesium (Cs)-Total (mg/kg wwt)	0.0142	0.0156	0.0161	0.0676	0.0670
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.051	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0062	0.0070	0.0067	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.494	0.490	0.491	0.111	0.118
	Iron (Fe)-Total (mg/kg wwt)	13.7	13.9	12.2	0.78	1.39
	Lead (Pb)-Total (mg/kg wwt)	0.0041	0.0047	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	385	383	433	328	326
	Manganese (Mn)-Total (mg/kg wwt)	2.72	2.27	2.38	0.073	0.086
	Mercury (Hg)-Total (mg/kg wwt)	0.0485	0.0502	0.0478	1.30	0.679
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0158	0.0155	0.0157	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	0.042	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	6510	5760	6200	2540	2400
	Potassium (K)-Total (mg/kg wwt)	2930	2990	3040	4640	4810
	Rubidium (Rb)-Total (mg/kg wwt)	4.85	4.97	5.40	17.0	21.4
	Selenium (Se)-Total (mg/kg wwt)	0.359	0.345	0.371	0.213	0.267
	Sodium (Na)-Total (mg/kg wwt)	530	554	564	220	257
	Strontium (Sr)-Total (mg/kg wwt)	2.31	2.02	2.05	0.021	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00465	0.00472	0.00485	0.00492	0.00538
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	0.029	0.055	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00061	0.00053	0.00054	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	47.0	40.6	43.7	3.98	3.93
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0576	0.0599	0.0611	1.07	0.664
Aggregate Organics	Lipid Content (% wwt)	3.5	3.3	2.9	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-157 Tissue 28-AUG-18 09:00 KLSW-WALL-004-T	L2201773-158 Tissue 28-AUG-18 09:00 KLSW-WALL-007-T	L2201773-159 Tissue 28-AUG-18 09:00 KLSW-WALL-008-T	L2201773-160 Tissue 28-AUG-18 09:00 KLSW-WALL-009-T	L2201773-161 Tissue 28-AUG-18 09:00 KLSW-WALL-010-G
TISSUE						
Physical Tests	% Moisture (%)	76.6	78.4	78.1	77.5	68.3
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0713	0.0479	0.173	0.0556	0.0170
	Barium (Ba)-Total (mg/kg wwt)	0.012	<0.010	0.015	<0.010	0.013
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	0.0025
	Calcium (Ca)-Total (mg/kg wwt)	296	226	369	151	366
	Cesium (Cs)-Total (mg/kg wwt)	0.0535	0.0779	0.0533	0.0836	0.0655
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0621
	Copper (Cu)-Total (mg/kg wwt)	0.316	0.110	0.135	0.174	0.799
	Iron (Fe)-Total (mg/kg wwt)	3.46	1.45	2.20	1.72	26.6
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	295	334	307	313	248
	Manganese (Mn)-Total (mg/kg wwt)	0.107	0.085	0.101	0.077	3.33
	Mercury (Hg)-Total (mg/kg wwt)	0.534	0.764	0.497	1.02	0.214
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0114
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2640	2470	2410	2350	2920
	Potassium (K)-Total (mg/kg wwt)	4490	4790	4370	4410	2960
	Rubidium (Rb)-Total (mg/kg wwt)	15.3	18.8	18.0	21.6	15.4
	Selenium (Se)-Total (mg/kg wwt)	0.223	0.195	0.217	0.216	0.561
	Sodium (Na)-Total (mg/kg wwt)	347	267	293	261	720
	Strontium (Sr)-Total (mg/kg wwt)	0.033	0.024	0.048	0.019	0.027
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00724	0.00640	0.00822	0.00825	0.0112
	Tin (Sn)-Total (mg/kg wwt)	0.024	<0.020	0.036	0.026	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.82	4.04	3.76	3.79	47.7
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.548	0.743	0.383	1.07	
Aggregate Organics	Lipid Content (% wwt)	1.6	<0.5	0.6	0.7	9.9

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-162 Tissue 28-AUG-18 09:00 KLSW-WALL-010-L	L2201773-163 Tissue 28-AUG-18 09:00 KLSW-WALL-010-T	L2201773-164 Tissue 28-AUG-18 09:00 KLSW-WALL-010-WB	L2201773-165 Tissue 28-AUG-18 09:00 KLSW-WALL-011-T	L2201773-167 Tissue 28-AUG-18 09:00 KLSW-WALL-012-T
TISSUE						
Physical Tests	% Moisture (%)	77.6	80.2	69.5	79.6	79.3
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.50	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0341	0.0560	0.0582	0.0640	0.0471
	Barium (Ba)-Total (mg/kg wwt)	0.010	<0.010	0.192	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0671	<0.0010	0.0014	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	175	71.4	8420	115	101
	Cesium (Cs)-Total (mg/kg wwt)	0.0453	0.0903	0.0685	0.0719	0.0805
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.011	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0995	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	1.32	0.087	0.287	0.143	0.102
	Iron (Fe)-Total (mg/kg wwt)	83.3	0.81	6.49	1.87	1.23
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	164	285	348	292	311
	Manganese (Mn)-Total (mg/kg wwt)	1.34	0.062	0.506	0.057	0.054
	Mercury (Hg)-Total (mg/kg wwt)	0.749	1.14	0.637	0.445	0.619
	Molybdenum (Mo)-Total (mg/kg wwt)	0.114	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2820	2130	5950	2260	2310
	Potassium (K)-Total (mg/kg wwt)	2710	4090	3230	4650	4580
	Rubidium (Rb)-Total (mg/kg wwt)	13.8	20.6	16.2	18.6	23.5
	Selenium (Se)-Total (mg/kg wwt)	0.785	0.182	0.237	0.202	0.193
	Sodium (Na)-Total (mg/kg wwt)	900	193	937	261	248
	Strontium (Sr)-Total (mg/kg wwt)	0.032	<0.010	1.02	0.012	<0.010
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.0111	0.00430	0.00367	0.00496	0.00582
	Tin (Sn)-Total (mg/kg wwt)	0.026	0.029	<0.020	0.024	0.041
	Uranium (U)-Total (mg/kg wwt)	0.00047	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	18.8	2.81	12.2	3.61	3.08
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)		0.775		0.437	0.604
Aggregate Organics	Lipid Content (% wwt)	5.4	<0.5	9.3	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-168 Tissue 28-AUG-18 09:00 KLSW-WALL-012-WB	L2201773-169 Tissue 28-AUG-18 09:00 KLSW-WALL-013-T	L2201773-170 Tissue 28-AUG-18 09:00 KLSW-WALL-014-T	L2201773-171 Tissue 28-AUG-18 09:00 KLSW-WALL-015-T	L2201773-172 Tissue 28-AUG-18 09:00 KLSW-WALL-015-WB
TISSUE						
Physical Tests	% Moisture (%)	64.3	79.4	78.6	79.1	68.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	0.60
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0531	0.0744	0.0638	0.0774	0.0777
	Barium (Ba)-Total (mg/kg wwt)	0.233	<0.010	<0.010	0.016	0.466
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0040	<0.0010	<0.0010	<0.0010	0.0053
	Calcium (Ca)-Total (mg/kg wwt)	10600	110	132	280	13100
	Cesium (Cs)-Total (mg/kg wwt)	0.0554	0.135	0.0667	0.0683	0.0459
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.136	0.025	0.010	0.033
	Cobalt (Co)-Total (mg/kg wwt)	0.0048	<0.0040	<0.0040	<0.0040	0.0094
	Copper (Cu)-Total (mg/kg wwt)	0.298	0.106	0.111	0.191	0.347
	Iron (Fe)-Total (mg/kg wwt)	6.66	2.27	1.30	1.77	10.2
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0086
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	0.12
	Magnesium (Mg)-Total (mg/kg wwt)	383	316	283	311	415
	Manganese (Mn)-Total (mg/kg wwt)	0.656	0.071	0.072	0.107	1.79
	Mercury (Hg)-Total (mg/kg wwt)	0.316	0.928	0.445	0.388	0.192
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0048	<0.0040	<0.0040	<0.0040	0.0067
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	7220	2140	2120	2320	8420
	Potassium (K)-Total (mg/kg wwt)	3380	4040	4410	4380	3180
	Rubidium (Rb)-Total (mg/kg wwt)	17.5	23.0	17.0	17.3	12.6
	Selenium (Se)-Total (mg/kg wwt)	0.246	0.149	0.193	0.186	0.233
	Sodium (Na)-Total (mg/kg wwt)	1030	348	301	341	1090
	Strontium (Sr)-Total (mg/kg wwt)	1.26	0.013	0.013	0.036	1.87
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00488	0.00508	0.00399	0.00510	0.00428
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	0.032	0.023	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	0.00061
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	13.7	4.06	3.45	4.24	15.7
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)		1.07	0.471	0.418	
Aggregate Organics	Lipid Content (% wwt)	2.6	<0.5	<0.5	<0.5	4.9

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-173 Tissue 28-AUG-18 09:00 KLSW-WALL-016-T	L2201773-174 Tissue 28-AUG-18 09:00 KLSW-WALL-017-T	L2201773-175 Tissue 28-AUG-18 09:00 KLSW-WALL-018-T	L2201773-176 Tissue 28-AUG-18 09:00 KLSW-WALL-019-T	L2201773-177 Tissue 28-AUG-18 09:00 KLSW-WALL-020-T
TISSUE						
Physical Tests	% Moisture (%)	78.6	78.5	79.1	78.5	79.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0623	0.0440	0.0304	0.0530	0.142
	Barium (Ba)-Total (mg/kg wwt)	<0.010	<0.010	0.013	<0.010	0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	0.0032
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	95.7	93.2	279	187	244
	Cesium (Cs)-Total (mg/kg wwt)	0.0793	0.0746	0.0707	0.0649	0.0750
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.022	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.111	0.124	0.103	0.138	0.160
	Iron (Fe)-Total (mg/kg wwt)	1.30	1.29	1.45	1.42	1.60
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	301	274	304	324	331
	Manganese (Mn)-Total (mg/kg wwt)	0.059	0.052	0.078	0.063	0.081
	Mercury (Hg)-Total (mg/kg wwt)	0.517	0.538	0.854	0.772	0.482
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2150	2250	2270	2360	2290
	Potassium (K)-Total (mg/kg wwt)	4290	4540	4420	4560	4230
	Rubidium (Rb)-Total (mg/kg wwt)	16.4	17.0	16.2	14.1	13.9
	Selenium (Se)-Total (mg/kg wwt)	0.199	0.197	0.192	0.225	0.167
	Sodium (Na)-Total (mg/kg wwt)	296	329	284	317	290
	Strontium (Sr)-Total (mg/kg wwt)	<0.010	<0.010	0.033	0.018	0.030
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00426	0.00479	0.00441	0.00631	0.00605
	Tin (Sn)-Total (mg/kg wwt)	0.021	<0.020	<0.020	<0.020	0.029
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.13	3.80	3.28	3.56	4.31
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.576	0.615	0.873	0.688	0.424
Aggregate Organics	Lipid Content (% wwt)	<0.5	0.5	0.5	<0.5	1.3

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-178 Tissue 28-AUG-18 09:00 KLSW-WALL-020-WB	L2201773-179 Tissue 28-AUG-18 09:00 KLSW-WALL-021-T	L2201773-180 Tissue 28-AUG-18 09:00 KLSW-WALL-022-T	L2201773-181 Tissue 28-AUG-18 09:00 KLSW-WALL-023-T	L2201773-182 Tissue 28-AUG-18 09:00 KLSW-WALL-024-T
TISSUE						
Physical Tests	% Moisture (%)	68.2	78.9	80.2	79.0	79.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.123	0.0380	0.0576	0.0709	0.0428
	Barium (Ba)-Total (mg/kg wwt)	0.590	<0.010	0.013	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	0.0027	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0021	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	22800	152	240	106	149
	Cesium (Cs)-Total (mg/kg wwt)	0.0508	0.0742	0.0626	0.0687	0.0700
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0051	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.579	0.098	0.178	0.173	0.179
	Iron (Fe)-Total (mg/kg wwt)	7.94	1.09	2.63	1.68	1.84
	Lead (Pb)-Total (mg/kg wwt)	0.0093	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	631	307	264	287	317
	Manganese (Mn)-Total (mg/kg wwt)	1.54	0.060	0.092	0.068	0.081
	Mercury (Hg)-Total (mg/kg wwt)	0.297	0.541	0.706	0.459	0.416
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0076	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	15000	2260	2200	2290	2210
	Potassium (K)-Total (mg/kg wwt)	3410	4490	4060	4570	4240
	Rubidium (Rb)-Total (mg/kg wwt)	10.8	18.7	12.1	17.6	17.4
	Selenium (Se)-Total (mg/kg wwt)	0.218	0.182	0.204	0.199	0.196
	Sodium (Na)-Total (mg/kg wwt)	1150	286	294	325	387
	Strontium (Sr)-Total (mg/kg wwt)	3.33	0.013	0.028	<0.010	0.015
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00629	0.00551	0.00356	0.00670	0.00635
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00055	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	18.3	3.83	4.58	4.41	4.25
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)		0.599	0.779	0.441	0.466
Aggregate Organics	Lipid Content (% wwt)	3.7	<0.5	0.5	0.7	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-183 Tissue 28-AUG-18 09:00 KLSW-WALL-025-T	L2201773-184 Tissue 28-AUG-18 09:00 KLSW-WALL-026-T	L2201773-185 Tissue 28-AUG-18 09:00 KLSW-WALL-028-T	L2201773-186 Tissue 28-AUG-18 09:00 KLSW-WALL-034-T	L2201773-187 Tissue 30-AUG-18 09:00 KLSW-WALL-040-T
TISSUE						
Physical Tests	% Moisture (%)	77.9	77.6	78.0	80.5	79.1
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0470	0.0792	0.0511	0.0608	0.0450
	Barium (Ba)-Total (mg/kg wwt)	0.013	<0.010	0.022	<0.010	<0.010
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	264	116	640	120	116
	Cesium (Cs)-Total (mg/kg wwt)	0.0591	0.0736	0.0808	0.0618	0.0763
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.135	0.131	0.127	0.153	0.188
	Iron (Fe)-Total (mg/kg wwt)	1.59	1.45	1.46	1.72	2.27
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	289	293	331	274	291
	Manganese (Mn)-Total (mg/kg wwt)	0.064	0.058	0.152	0.062	0.077
	Mercury (Hg)-Total (mg/kg wwt)	1.43	0.676	0.681	0.492	0.639
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2340	2180	2570	2200	2310
	Potassium (K)-Total (mg/kg wwt)	4190	4260	4450	4280	4290
	Rubidium (Rb)-Total (mg/kg wwt)	15.6	22.3	18.7	16.1	17.6
	Selenium (Se)-Total (mg/kg wwt)	0.209	0.183	0.202	0.183	0.198
	Sodium (Na)-Total (mg/kg wwt)	296	299	341	350	301
	Strontium (Sr)-Total (mg/kg wwt)	0.030	0.010	0.074	0.014	0.016
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00523	0.00682	0.00612	0.00637	0.00466
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.021	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.50	3.63	4.72	3.98	3.91
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	1.13	0.663	0.457	0.534	0.668
Aggregate Organics	Lipid Content (% wwt)	2.5	0.7	0.6	0.7	0.6

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-188 Tissue 30-AUG-18 09:00 KLSW-WALL-041-T	L2201773-189 Tissue 30-AUG-18 09:00 KLSW-WALL-042-T	L2201773-190 Tissue 30-AUG-18 09:00 KLSW-WALL-043-T	L2201773-191 Tissue 28-AUG-18 09:00 KLSW-WHSC-001-T	L2201773-192 Tissue 28-AUG-18 09:00 KLSW-WHSC-002-T
TISSUE						
Physical Tests	% Moisture (%)	81.4	80.0	80.0	81.0	83.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	0.61
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0624	0.114	0.0764	0.0722	0.0488
	Barium (Ba)-Total (mg/kg wwt)	<0.010	0.010	<0.010	0.019	0.029
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	82.6	152	106	183	365
	Cesium (Cs)-Total (mg/kg wwt)	0.0576	0.0756	0.0685	0.0155	0.0164
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.146	0.136	0.142	0.174	0.200
	Iron (Fe)-Total (mg/kg wwt)	2.03	2.21	2.17	2.74	3.69
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	294	293	312	280	291
	Manganese (Mn)-Total (mg/kg wwt)	0.058	0.087	0.079	0.289	0.302
	Mercury (Hg)-Total (mg/kg wwt)	0.780	0.594	0.601	0.220	0.209
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2080	2210	2310	2150	2220
	Potassium (K)-Total (mg/kg wwt)	3930	4130	4340	3750	3980
	Rubidium (Rb)-Total (mg/kg wwt)	13.5	18.2	16.0	5.13	4.85
	Selenium (Se)-Total (mg/kg wwt)	0.210	0.202	0.213	0.174	0.183
	Sodium (Na)-Total (mg/kg wwt)	283	333	353	270	242
	Strontium (Sr)-Total (mg/kg wwt)	0.011	0.015	<0.010	0.036	0.070
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00508	0.00480	0.00547	0.00078	0.00080
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.032
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.23	3.31	4.21	3.30	2.73
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.812	0.515	0.572		
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	0.7	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-193 Tissue 28-AUG-18 09:00 KLSW-WHSC-003-T	L2201773-194 Tissue 28-AUG-18 09:00 KLSW-WHSC-004-T	L2201773-195 Tissue 28-AUG-18 09:00 KLSW-WHSC-004-WB	L2201773-196 Tissue 28-AUG-18 09:00 KLSW-WHSC-005-T	L2201773-197 Tissue 28-AUG-18 09:00 KLSW-WHSC-006-T
TISSUE						
Physical Tests	% Moisture (%)	81.9	81.0	71.4	82.9	79.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	15.4	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0526	0.0589	0.126	0.0313	0.0433
	Barium (Ba)-Total (mg/kg wwt)	0.036	0.023	1.34	<0.010	0.013
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	0.0098	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	348	209	25000	94.9	136
	Cesium (Cs)-Total (mg/kg wwt)	0.0192	0.0190	0.0122	0.0152	0.0113
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.048	<0.010	0.015
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0141	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.149	0.191	0.692	0.158	0.235
	Iron (Fe)-Total (mg/kg wwt)	1.72	3.07	40.0	3.06	2.82
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0405	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	326	345	692	270	301
	Manganese (Mn)-Total (mg/kg wwt)	0.228	0.199	10.2	0.114	0.146
	Mercury (Hg)-Total (mg/kg wwt)	0.162	0.218	0.113	0.181	0.113
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	0.0173	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2660	2550	15700	2010	2180
	Potassium (K)-Total (mg/kg wwt)	4780	4730	3120	3660	3920
	Rubidium (Rb)-Total (mg/kg wwt)	5.72	6.08	3.84	4.62	4.00
	Selenium (Se)-Total (mg/kg wwt)	0.263	0.260	0.331	0.144	0.162
	Sodium (Na)-Total (mg/kg wwt)	236	301	1320	262	177
	Strontium (Sr)-Total (mg/kg wwt)	0.066	0.043	6.90	<0.010	0.020
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00057	0.00051	0.00093	0.00052	<0.00040
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	0.00837	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	0.121	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.74	3.77	22.8	2.80	3.64
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	4.4	1.7	2.3

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-198 Tissue 28-AUG-18 09:00 KLSW-WHSC-006-WB	L2201773-199 Tissue 28-AUG-18 09:00 KLSW-WHSC-008-T	L2201773-200 Tissue 28-AUG-18 09:00 KLSW-WHSC-009-T	L2201773-201 Tissue 28-AUG-18 09:00 KLSW-WHSC-009-WB	L2201773-202 Tissue 28-AUG-18 09:00 KLSW-WHSC-013-T
TISSUE						
Physical Tests	% Moisture (%)	75.8	81.1	82.9	73.1	83.8
Metals	Aluminum (Al)-Total (mg/kg wwt)	22.7	<0.40	<0.40	22.2	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0977	0.0857	0.0490	0.116	0.0217
	Barium (Ba)-Total (mg/kg wwt)	0.511	0.026	0.026	1.00	0.012
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0057	<0.0010	<0.0010	0.0104	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	12000	173	245	18300	184
	Cesium (Cs)-Total (mg/kg wwt)	0.0100	0.0168	0.0170	0.0126	0.0157
	Chromium (Cr)-Total (mg/kg wwt)	0.069	<0.010	<0.010	0.065	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	0.0172	<0.0040	<0.0040	0.0185	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.569	0.211	0.320	0.662	0.203
	Iron (Fe)-Total (mg/kg wwt)	46.8	2.84	5.25	54.3	3.04
	Lead (Pb)-Total (mg/kg wwt)	0.0344	0.0067	<0.0040	0.0341	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	453	310	277	592	293
	Manganese (Mn)-Total (mg/kg wwt)	4.60	0.171	0.209	9.74	0.157
	Mercury (Hg)-Total (mg/kg wwt)	0.0750	0.122	0.215	0.128	0.140
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0162	<0.0040	<0.0040	0.0163	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	0.046	<0.040	<0.040	0.042	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	7680	2010	2190	11300	2150
	Potassium (K)-Total (mg/kg wwt)	3090	3640	3910	2950	3940
	Rubidium (Rb)-Total (mg/kg wwt)	3.21	6.05	6.53	4.62	5.11
	Selenium (Se)-Total (mg/kg wwt)	0.214	0.152	0.154	0.213	0.189
	Sodium (Na)-Total (mg/kg wwt)	810	200	237	996	271
	Strontium (Sr)-Total (mg/kg wwt)	2.75	0.026	0.044	4.04	0.031
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00066	0.00155	0.00190	0.00229	0.00050
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00500	<0.00040	<0.00040	0.00774	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	0.078	<0.020	<0.020	0.112	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	11.7	3.66	3.82	19.3	2.64
	Zirconium (Zr)-Total (mg/kg wwt)	0.042	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)					
Aggregate Organics	Lipid Content (% wwt)	3.5	1.7	0.8	4.4	0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-203	L2201773-204	L2201773-205	L2201773-206	L2201773-207
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	28-AUG-18	28-AUG-18	28-AUG-18	28-AUG-18	28-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLSW-WHSC-015-T	KLSW-WHSC-015-WB	KLSW-WHSC-016-T	KLSW-YLPR-004-T	KLSW-YLPR-005-T
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	80.4	72.3	80.1	80.3	80.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	16.6	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0637	0.126	0.0834	0.0168	0.0137
	Barium (Ba)-Total (mg/kg wwt)	0.014	0.515	0.025	0.020	0.021
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	0.0077	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	161	10600	249	780	696
	Cesium (Cs)-Total (mg/kg wwt)	0.0148	0.0121	0.0136	0.0437	0.0370
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.055	<0.010	<0.010	0.018
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	0.0146	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.219	0.999	0.174	0.109	0.164
	Iron (Fe)-Total (mg/kg wwt)	2.17	37.8	1.98	1.28	1.68
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0298	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	279	425	309	325	306
	Manganese (Mn)-Total (mg/kg wwt)	0.125	3.28	0.189	0.242	0.279
	Mercury (Hg)-Total (mg/kg wwt)	0.151	0.0869	0.145	0.365	0.155
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	0.0201	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2010	7070	2460	2540	2510
	Potassium (K)-Total (mg/kg wwt)	3700	3040	4410	3830	3940
	Rubidium (Rb)-Total (mg/kg wwt)	4.58	3.75	7.11	12.6	12.6
	Selenium (Se)-Total (mg/kg wwt)	0.210	0.260	0.150	0.239	0.205
	Sodium (Na)-Total (mg/kg wwt)	234	891	328	370	460
	Strontium (Sr)-Total (mg/kg wwt)	0.028	2.39	0.048	0.084	0.074
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00154	0.00139	0.00254	0.00535	0.00550
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	0.022	0.021	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	0.00458	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	0.074	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.27	13.1	4.49	3.54	4.19
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	0.041	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)				0.364	0.146
Aggregate Organics	Lipid Content (% wwt)	2.0	4.7	0.7	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-208 Tissue 28-AUG-18 09:00 KLSW-YLPR-006-T	L2201773-209 Tissue 28-AUG-18 09:00 KLSW-YLPR-007-T	L2201773-210 Tissue 28-AUG-18 09:00 KLSW-YLPR-008-T	L2201773-211 Tissue 28-AUG-18 09:00 KLSW-YLPR-009-T	L2201773-212 Tissue 28-AUG-18 09:00 KLSW-YLPR-010-T
TISSUE						
Physical Tests	% Moisture (%)	79.0	80.2	78.5	80.5	81.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0350	0.0422	0.0300	0.0145	0.0246
	Barium (Ba)-Total (mg/kg wwt)	0.043	0.029	0.043	0.022	0.026
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	295	612	934	1010	449
	Cesium (Cs)-Total (mg/kg wwt)	0.0153	0.0246	0.0147	0.0369	0.0175
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	0.036	0.017
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.144	0.126	0.142	0.150	0.124
	Iron (Fe)-Total (mg/kg wwt)	1.46	1.26	1.59	1.70	1.92
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	328	312	336	294	281
	Manganese (Mn)-Total (mg/kg wwt)	0.218	0.389	0.585	0.245	0.280
	Mercury (Hg)-Total (mg/kg wwt)	0.0609	0.0862	0.0650	0.346	0.166
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2470	2530	2850	2620	2310
	Potassium (K)-Total (mg/kg wwt)	4350	4220	4590	3710	3860
	Rubidium (Rb)-Total (mg/kg wwt)	7.84	10.5	7.07	10.7	6.88
	Selenium (Se)-Total (mg/kg wwt)	0.231	0.245	0.293	0.229	0.228
	Sodium (Na)-Total (mg/kg wwt)	253	225	236	440	249
	Strontium (Sr)-Total (mg/kg wwt)	0.035	0.088	0.122	0.113	0.049
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00408	0.00663	0.00683	0.00456	0.00308
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	0.00057	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.07	3.86	4.10	4.17	3.42
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0735	0.113	0.0779	0.449	0.212
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-213 Tissue 28-AUG-18 09:00 KLSW-YLPR-011-T	L2201773-214 Tissue 28-AUG-18 09:00 KLSW-YLPR-012-T	L2201773-215 Tissue 28-AUG-18 09:00 KLSW-YLPR-013-T	L2201773-216 Tissue 28-AUG-18 09:00 KLSW-YLPR-014-T	L2201773-217 Tissue 28-AUG-18 09:00 KLSW-YLPR-015-T
TISSUE						
Physical Tests	% Moisture (%)	78.6	78.9	80.1	79.2	81.6
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0334	0.0146	0.0271	0.0200	0.0346
	Barium (Ba)-Total (mg/kg wwt)	0.046	0.016	0.027	0.022	0.032
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	1000	592	457	650	640
	Cesium (Cs)-Total (mg/kg wwt)	0.0236	0.0390	0.0190	0.0482	0.0215
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.012	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.143	0.210	0.101	0.170	0.153
	Iron (Fe)-Total (mg/kg wwt)	1.92	1.82	1.40	1.72	1.46
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	0.0087
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	328	339	304	325	281
	Manganese (Mn)-Total (mg/kg wwt)	0.552	0.229	0.258	0.327	0.272
	Mercury (Hg)-Total (mg/kg wwt)	0.108	0.177	0.116	0.159	0.0927
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2910	2580	2330	2620	2260
	Potassium (K)-Total (mg/kg wwt)	4460	4370	3800	4250	3500
	Rubidium (Rb)-Total (mg/kg wwt)	8.10	12.6	6.20	14.2	9.35
	Selenium (Se)-Total (mg/kg wwt)	0.311	0.226	0.286	0.194	0.226
	Sodium (Na)-Total (mg/kg wwt)	262	263	334	252	485
	Strontium (Sr)-Total (mg/kg wwt)	0.131	0.068	0.058	0.071	0.084
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00705	0.00463	0.00226	0.00607	0.00502
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	0.022
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	4.43	3.97	3.01	4.36	3.63
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.129	0.230	0.111	0.235	0.132
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-218 Tissue 28-AUG-18 09:00 KLSW-YLPR-016-T	L2201773-219 Tissue 28-AUG-18 09:00 KLSW-YLPR-017-T	L2201773-220 Tissue 28-AUG-18 09:00 KLSW-YLPR-018-T	L2201773-221 Tissue 28-AUG-18 09:00 KLSW-YLPR-019-T	L2201773-222 Tissue 28-AUG-18 09:00 KLSW-YLPR-020-T
TISSUE						
Physical Tests	% Moisture (%)	82.4	82.3	79.4	80.5	81.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0280	0.0184	0.0274	0.0201	0.0102
	Barium (Ba)-Total (mg/kg wwt)	0.037	0.012	0.032	0.026	0.015
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	809	353	878	985	553
	Cesium (Cs)-Total (mg/kg wwt)	0.0157	0.0366	0.0186	0.0341	0.0424
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.119	0.145	0.117	0.154	0.096
	Iron (Fe)-Total (mg/kg wwt)	1.16	1.32	1.87	1.71	0.99
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	300	292	343	347	301
	Manganese (Mn)-Total (mg/kg wwt)	0.433	0.166	0.343	0.322	0.184
	Mercury (Hg)-Total (mg/kg wwt)	0.0520	0.308	0.0954	0.273	0.418
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2400	2200	2870	2870	2530
	Potassium (K)-Total (mg/kg wwt)	3800	3710	4560	4240	4270
	Rubidium (Rb)-Total (mg/kg wwt)	6.57	10.9	7.49	10.2	12.2
	Selenium (Se)-Total (mg/kg wwt)	0.252	0.207	0.286	0.272	0.221
	Sodium (Na)-Total (mg/kg wwt)	186	179	270	430	166
	Strontium (Sr)-Total (mg/kg wwt)	0.096	0.041	0.104	0.109	0.055
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00299	0.00487	0.00389	0.00356	0.00428
	Tin (Sn)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Uranium (U)-Total (mg/kg wwt)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.29	3.45	4.52	4.18	3.65
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0704	0.417	0.108	0.297	0.438
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-223 Tissue 28-AUG-18 09:00 KLSW-YLPR-021-T	L2201773-224 Tissue 28-AUG-18 09:00 KLSW-YLPR-022-T	L2201773-225 Tissue 28-AUG-18 09:00 KLSW-YLPR-023-T	L2201773-226 Tissue 28-AUG-18 09:00 KLSW-YLPR-024-T	L2201773-227 Tissue 28-AUG-18 09:00 KLSW-YLPR-025-T
TISSUE						
Physical Tests	% Moisture (%)	81.5	79.5	82.7	79.9	78.0
Metals	Aluminum (Al)-Total (mg/kg wwt)	<0.40	<0.40	<0.40	<0.40	<0.40
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.0414	0.0280	0.0690	0.198	0.0633
	Barium (Ba)-Total (mg/kg wwt)	0.050	0.052	0.047	0.033	0.079
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Calcium (Ca)-Total (mg/kg wwt)	1220	1320	761	931	1820
	Cesium (Cs)-Total (mg/kg wwt)	0.0262	0.0297	0.0177	0.0317	0.0188
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	<0.010	0.011	<0.010	<0.010
	Cobalt (Co)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Copper (Cu)-Total (mg/kg wwt)	0.135	0.162	0.130	0.182	0.158
	Iron (Fe)-Total (mg/kg wwt)	1.85	1.65	1.88	2.74	1.81
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	288	322	287	367	340
	Manganese (Mn)-Total (mg/kg wwt)	0.357	0.333	0.299	0.341	0.441
	Mercury (Hg)-Total (mg/kg wwt)	0.183	0.115	0.0842	0.151	0.0781
	Molybdenum (Mo)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	2660	2660	2330	2620	2840
	Potassium (K)-Total (mg/kg wwt)	3910	3740	3650	3960	3690
	Rubidium (Rb)-Total (mg/kg wwt)	9.06	12.1	8.04	11.9	9.15
	Selenium (Se)-Total (mg/kg wwt)	0.306	0.246	0.272	0.260	0.257
	Sodium (Na)-Total (mg/kg wwt)	493	629	245	694	605
	Strontium (Sr)-Total (mg/kg wwt)	0.164	0.173	0.117	0.126	0.261
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00154	0.00345	0.00310	0.00303	0.00325
	Tin (Sn)-Total (mg/kg wwt)	<0.020	0.034	0.385	0.046	<0.020
	Uranium (U)-Total (mg/kg wwt)	0.00049	<0.00040	<0.00040	<0.00040	0.00044
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	3.67	4.25	3.47	4.73	4.43
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.223	0.139	0.104	0.189	0.0944
Aggregate Organics	Lipid Content (% wwt)	<0.5	<0.5	<0.5	<0.5	<0.5

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L2201773-228	L2201773-229	L2201773-230	L2201773-231	L2201773-232
	Description	Tissue	Tissue	Tissue	Tissue	Tissue
	Sampled Date	30-AUG-18	30-AUG-18	30-AUG-18	30-AUG-18	30-AUG-18
	Sampled Time	09:00	09:00	09:00	09:00	09:00
	Client ID	KLSW-YLPR-COMP1	KLSW-YLPR-COMP2	KLSW-YLPR-COMP3	KLSW-YLPR-COMP4	KLSW-YLPR-COMP5
Grouping	**Analyte**					
TISSUE						
Physical Tests	% Moisture (%)	79.6	80.7	79.4	79.9	77.7
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.82	1.10	0.86	1.13	1.15
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Arsenic (As)-Total (mg/kg wwt)	0.112	0.0997	0.107	0.0995	0.106
	Barium (Ba)-Total (mg/kg wwt)	0.412	0.382	0.405	0.405	0.431
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	<0.20
	Cadmium (Cd)-Total (mg/kg wwt)	0.0040	0.0036	0.0031	0.0038	0.0030
	Calcium (Ca)-Total (mg/kg wwt)	11300	11300	11500	11100	11600
	Cesium (Cs)-Total (mg/kg wwt)	0.0235	0.0220	0.0220	0.0196	0.0222
	Chromium (Cr)-Total (mg/kg wwt)	<0.010	0.025	0.016	0.012	0.012
	Cobalt (Co)-Total (mg/kg wwt)	0.0049	0.0050	0.0046	0.0051	0.0059
	Copper (Cu)-Total (mg/kg wwt)	0.447	0.418	0.437	0.405	0.403
	Iron (Fe)-Total (mg/kg wwt)	12.8	10.5	11.1	11.4	12.0
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	<0.10
	Magnesium (Mg)-Total (mg/kg wwt)	401	413	406	372	431
	Manganese (Mn)-Total (mg/kg wwt)	2.92	3.46	3.01	3.05	3.18
	Mercury (Hg)-Total (mg/kg wwt)	0.0577	0.0556	0.0518	0.0548	0.0528
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0125	0.0115	0.0130	0.0136	0.0129
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
	Phosphorus (P)-Total (mg/kg wwt)	7780	7660	7840	7130	7770
	Potassium (K)-Total (mg/kg wwt)	3280	3150	3230	2970	3190
	Rubidium (Rb)-Total (mg/kg wwt)	7.59	7.53	7.71	6.43	6.85
	Selenium (Se)-Total (mg/kg wwt)	0.270	0.239	0.251	0.234	0.251
	Sodium (Na)-Total (mg/kg wwt)	826	775	792	729	837
	Strontium (Sr)-Total (mg/kg wwt)	2.32	2.17	2.14	2.22	2.30
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
	Thallium (Tl)-Total (mg/kg wwt)	0.00569	0.00509	0.00608	0.00549	0.00595
	Tin (Sn)-Total (mg/kg wwt)	0.022	<0.020	<0.020	0.027	0.022
	Uranium (U)-Total (mg/kg wwt)	0.00051	0.00051	0.00069	0.00058	0.00059
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	<0.020
	Zinc (Zn)-Total (mg/kg wwt)	21.2	21.4	21.9	20.2	20.8
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	<0.040
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0666	0.0747	0.0587	0.0719	0.0692
Aggregate Organics	Lipid Content (% wwt)	1.7	1.8	1.8	1.6	0.9

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L2201773-233 Tissue 30-AUG-18 09:00 KLSW-YLPR-COMP6	L2201773-234 Tissue 30-AUG-18 09:00 KLSW-YLPR-COMP7	L2201773-235 Tissue 30-AUG-18 09:00 KLSW-YLPR-COMP8	L2201773-244 Tissue 25-AUG-18 09:00 KLCB-YLPR-013-T	
TISSUE						
Physical Tests	% Moisture (%)	77.2	78.3	80.0	78.0	
Metals	Aluminum (Al)-Total (mg/kg wwt)	0.64	1.85	2.32	<0.40	
	Antimony (Sb)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	
	Arsenic (As)-Total (mg/kg wwt)	0.0946	0.127	0.122	0.169	
	Barium (Ba)-Total (mg/kg wwt)	0.430	0.469	0.504	0.022	
	Beryllium (Be)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	
	Bismuth (Bi)-Total (mg/kg wwt)	<0.0020	<0.0020	<0.0020	<0.0020	
	Boron (B)-Total (mg/kg wwt)	<0.20	<0.20	<0.20	<0.20	
	Cadmium (Cd)-Total (mg/kg wwt)	0.0038	0.0080	0.0041	0.0011	
	Calcium (Ca)-Total (mg/kg wwt)	11500	10800	11000	528	
	Cesium (Cs)-Total (mg/kg wwt)	0.0242	0.0217	0.0219	0.0338	
	Chromium (Cr)-Total (mg/kg wwt)	0.012	0.014	0.012	<0.010	
	Cobalt (Co)-Total (mg/kg wwt)	0.0049	0.0075	0.0060	<0.0040	
	Copper (Cu)-Total (mg/kg wwt)	0.451	0.533	0.447	0.143	
	Iron (Fe)-Total (mg/kg wwt)	11.8	14.5	13.8	2.11	
	Lead (Pb)-Total (mg/kg wwt)	<0.0040	0.0049	0.0047	<0.0040	
	Lithium (Li)-Total (mg/kg wwt)	<0.10	<0.10	<0.10	<0.10	
	Magnesium (Mg)-Total (mg/kg wwt)	428	389	393	339	
	Manganese (Mn)-Total (mg/kg wwt)	3.12	3.42	3.63	0.333	
	Mercury (Hg)-Total (mg/kg wwt)	0.0581	0.0489	0.0533	0.0679	
	Molybdenum (Mo)-Total (mg/kg wwt)	0.0133	0.0164	0.0141	<0.0040	
	Nickel (Ni)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	
	Phosphorus (P)-Total (mg/kg wwt)	8100	7430	7640	2730	
	Potassium (K)-Total (mg/kg wwt)	3230	3190	3150	4550	
	Rubidium (Rb)-Total (mg/kg wwt)	7.23	7.24	7.26	6.93	
	Selenium (Se)-Total (mg/kg wwt)	0.284	0.263	0.269	0.372	
	Sodium (Na)-Total (mg/kg wwt)	766	834	731	267	
	Strontium (Sr)-Total (mg/kg wwt)	2.47	2.42	2.43	0.107	
	Tellurium (Te)-Total (mg/kg wwt)	<0.0040	<0.0040	<0.0040	<0.0040	
	Thallium (Tl)-Total (mg/kg wwt)	0.00815	0.00622	0.00644	0.00265	
	Tin (Sn)-Total (mg/kg wwt)	0.098	0.041	<0.020	0.034	
	Uranium (U)-Total (mg/kg wwt)	0.00059	0.00076	0.00064	<0.00040	
	Vanadium (V)-Total (mg/kg wwt)	<0.020	<0.020	<0.020	<0.020	
	Zinc (Zn)-Total (mg/kg wwt)	25.6	24.8	24.5	4.12	
	Zirconium (Zr)-Total (mg/kg wwt)	<0.040	<0.040	<0.040	<0.040	
Speciated Metals	Methylmercury (as MeHg) (mg/kg wwt)	0.0735	0.0683	0.0741		
Aggregate Organics	Lipid Content (% wwt)	2.2	1.9		<0.5	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Duplicate	Calcium (Ca)-Total	DUP-H	L2201773-189, -190, -191, -192, -193, -194, -196, -197, -199, -200, -202, -203, -205, -206, -207, -208, -209, -210, -211, -212
Duplicate	Chromium (Cr)-Total	DUP-H	L2201773-211
Duplicate	Lead (Pb)-Total	DUP-H	L2201773-124, -125, -126, -127, -128, -129, -130, -131, -132, -133, -134, -135, -136, -137, -138, -139, -140, -141, -142, -143
Duplicate	Strontium (Sr)-Total	DUP-H	L2201773-189, -190, -191, -192, -193, -194, -196, -197, -199, -200, -202, -203, -205, -206, -207, -208, -209, -210, -211, -212
Duplicate	Strontium (Sr)-Total	DUP-H	L2201773-102, -91
Duplicate	Chromium (Cr)-Total	DUP-H,J	L2201773-27, -33, -42, -52, -53, -62, -63
Certified Reference Material	Thallium (Tl)-Total	MES	L2201773-71, -72, -73, -74, -75, -76, -77, -78, -79, -80, -81, -82, -83, -84, -86, -87, -90, -92, -94
Certified Reference Material	Thallium (Tl)-Total	MES	L2201773-102, -91

Qualifiers for Individual Parameters Listed:

Qualifier	Description
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.
DUP-H,J	Duplicate results outside ALS DQO, due to sample heterogeneity. Duplicate results and limits are expressed in terms of absolute difference.
MES	Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-WET-CVAFS-N-VA	Tissue	Mercury in Tissue by CVAFS (WET)	EPA 200.3, EPA 245.7

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Analysis is by atomic fluorescence spectrophotometry or atomic absorption spectrophotometry, adapted from US EPA Method 245.7.

HG-WET-MICR-CVAF-VA	Tissue	Mercury in Tissue by CVAFS Micro (WET)	EPA 200.3, EPA 245.7

This method is adapted from US EPA Method 200.3 "Sample Procedures for Spectrochemical Determination of Total Recoverable Elements in Biological Tissues" (1996). Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with repeated additions of hydrogen peroxide. Analysis is by atomic fluorescence spectrophotometry or atomic absorption spectrophotometry, adapted from US EPA Method 245.7.

LIPIDS-GRAV-VA	Tissue	Lipids in Tissue by Gravimetric	EPA 3570, 8290A

A portion of homogenized sample is extracted with dichloromethane. The extract is evaporated to dryness and the lipid content determined gravimetrically.

MEHG-WET-GCAF-VA	Tissue	Methylmercury in Tissue by GCAFS (Wet)	Liang et al. (1994)

This method follows the procedures published by Liang, Bloom and Horvat in Clinical Chemistry (Vol 40, No 4, 1994). Samples are homogenized and then digested in a methanolic potassium hydroxide solution. An aliquot of the digestate is analyzed by aqueous phase ethylation, purge and trap, desorption and GC separation. The separated species are then pyrolized to elemental Hg and quantified by cold vapour atomic fluorescence spectroscopy. Results are reported "as MeHg".

MET-WET-CCMS-N-VA	Tissue	Metals in Tissue by CRC ICPMS (WET)	EPA 200.3/6020A

This method is conducted following British Columbia Lab Manual method "Metals in Animal Tissue and Vegetation (Biota) - Prescriptive". Tissue samples are homogenized and sub-sampled prior to hotblock digestion with nitric and hydrochloric acids, in combination with addition of hydrogen peroxide. Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).

Method Limitation: This method employs a strong acid/peroxide digestion, and is intended to provide a conservative estimate of bio-available metals. Near complete recoveries are achieved for most toxicologically important metals, but elements associated with recalcitrant minerals may be only partially recovered.

MET-WET-MICR-HRMS-VA	Tissue	Metals in Tissue by HR-ICPMS Micro (WET)	EPA 200.3/200.8

Trace metals in tissue are analyzed by high resolution inductively coupled plasma mass spectrometry (HR-ICPMS) modified from US EPA Method 200.8, (Revision 5.5). The sample preparation procedure is modified from US EPA 200.3. Analytical results are reported on wet weight basis.

Method Limitation: This method employs a strong acid/peroxide digestion, and is intended to provide a conservative estimate of bio-available metals. Near complete recoveries are achieved for most toxicologically important metals, but elements associated with recalcitrant minerals may be only

Reference Information

partially recovered.

MOISTURE-TISS-VA Tissue % Moisture in Tissues Puget Sound WQ Authority, Apr 1997

This analysis is carried out gravimetrically by drying the sample at 105 C for a minimum of six hours.

** 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
VA	ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour 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.
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-adjusted weight of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

Appendix F
Kenogamisis Lake Fish Tissue Assessment

This page is a place holder for a future report addendum. Fish tissue lab data were not yet available at the time of report production.