Annual Reclamation Report
Cover Letter Summary Table

Company:	**Myra Falls Mine Ltd**	
Mine Name:	**Myra Falls**	
***Mines Act* Permit #:**	**M-26**	
	Previous Report (e.g., 2021)	**Current Report (e.g., 2022)**
Total Disturbance Area (ha)	**184.8**	**184.6**
Total Reclaimed Area (ha)	**22.3**	**22.3**
Total Exempt Area (ha) (i.e., pit walls)	**7.5**	**14.1**
Mining Production (annual total)	**741,320**	**879,180**
Milling Production (annual total)	**501,323**	**611,315**
Total Liability Estimate	**$117,178,651**	**$115,958,237**
Date for next Five Year Mine Plan and Reclamation Plan update (if required)	**January 31, 2026**	
Notes:	**Total disturbance area was assessed for Myra Falls by WSP.** **Detailed cost estimates to be provided as a separate confidential report**	

REPORT NO. 212024/2

MYRA FALLS MINE

2022 RECLAMATION REPORT FOR MINES ACT PERMIT M-26

Submitted to:

Myra Falls Mine
A Trafigura Group Company

Myra Falls Mine

Prepared by:

Robertson GeoConsultants Inc.
Consulting Engineers and Scientists for the Mining Industry
www.robertsongeoconsultants.com

March 2023

Executive Summary

General

This is the 2022 Reclamation Report for the Myra Falls Mine (MFM). This report was prepared by Robertson GeoConsultants Inc. (RGC) and MFM's Environment Department as part of annual reporting for *Mines Act* Permit M-26. Key aspects of this report are summarized below.

Overview – Construction, Mining Operations, and Surface Activities

A total of 879,180 tonnes were mined in 2022. MFM achieved an average of 53,558 tonnes of ore per month with 73,265 tonnes mined per month in 2022. Approximately 83% of the ore produced in 2022 was produced from the HW Zone, which includes the Marshall, Ridge, and Battle Gap ore bodies. The remaining ore was produced from the Price Zone, which was actively mined throughout 2022. No active mining took place in the Lynx or Myra zones underground in 2022. Approximately 236,483 tonnes of waste rock was produced in 2022, all of which was produced from the HW Zone. Approximately 611,315 tonnes were milled in 2022. The monthly milling rate ranged from 36,709 tonnes in December 2022 to 65,692 tonnes in April 2022, with an average monthly milling rate of approximately 50,943 tonnes per month.

Mine Waste Characterization Results

Approximately 50% of the waste rock produced in 2022 was dumped in Waste Rock Dump 6 (WRD6). The other 50% was used as construction material for the 373.5 m Lynx Tailings Disposal Facility (TDF) raise. Six samples of Run-of-Mine (ROM) waste rock were collected in 2022. Each of the samples of ROM waste rock was classified as Potentially Acid Generating (PAG) material. Ten monthly tailings samples were collected in 2022, as required by Permit M-26. Monthly samples for November and December were collected in January 2023 due to limited safe access to the Lynx TDF in late 2022. Each tailings sample was classified as PAG material. Further details on these samples and other samples collected in 2022 are provided in Section 2.

Authorized Effluent Discharges and Effluent Monitoring

In total, 12,831,900 m^3 of treated effluent was discharged to Myra Creek from the Myra Ponds in 2022. Monthly average treated discharge rates ranged from 838,185 m^3 in September 2022 to 1,304,320 m^3 in January 2022. Daily effluent discharge rates in 2022 ranged from 14,140 m^3/day (on September 15th) to 101,769 m^3/day (on December 26th). The average daily effluent discharge rate in 2022 was 35,300 m^3/day, or 12,700 m^3/d lower than the 48,000 m^3/day that is authorized by Effluent Permit PE-6858. Daily average discharge rates in 2022 were therefore compliant with Effluent Permit PE-6858. None of the grab samples of treated effluent (at 11A-Runoff) collected in 2022 exceeded Metal and Diamond Mine Effluent Regulations (MDMER) limits.

Unauthorized Discharge Event – December 26th

There was one unauthorized discharge event in 2022. This unauthorized discharge event happened when the HW Sump overtopped during a heavy rainfall event on December 26th. The event occurred when the discharge line for the back-up diesel pump failed to operate. An estimated 15 m^3 of water was released to Myra Creek during this event. Total Suspended Solids (TSS) and total Zn concentrations in the flows to the creek exceeded MDMER limits. The toxicity sample taken on December 26th from the inflow to the HW Sump was deemed to be toxic at the 100% concentration by the third-party laboratory. There was not, however, enough water remaining in the sampling bucket when it arrived at the lab to run dilution tests on the sample. This unauthorized discharge event is the only permit non-compliance event for 2022.

Routine Water Quality Monitoring Results – Permit M-26

None of the seeps that are required to be sampled were sampled in 2022 due to lack of flows. Zn concentrations in groundwater captured by the Old TDF under-drains did not show any clear trends in 2022 and concentrations observed at the individual under-drain segments were consistent with long-term observations. Groundwater quality immediately downgradient of the Old TDF under-drains in 2022 suggested occasional minimal bypass along the Medium segment of the NOD. Note that the system of under-drains was not operated consistently throughout 2022 and average captured groundwater flows were approximately 20% lower compared to the long-term average. Future monitoring with consistent operation of the SIS is needed to comment on water quality trends.

Seepage Interception System (SIS) Performance

In 2022, the Old TDF under-drains continued to operate at reduced capacity until end of May when the sump level was decreased to allow the individual drain segments to drain freely into the sump as intended. In late July 2022, operation was switched to a set rate (150 L/s) rather than a set level resulting in reduced flows throughout the summer period compared to long-term averages. The under-drains were operated as intended for the remainder of 2022 (October to December). Groundwater flows captured by the Old TDF under-drains (and pumped to the Superpond via Pumphouse No. 4) were approximately 20% lower than the long-term average flow. The Phase I Lynx SIS was operated at reduced capacity in 2022, as pumping well PW14-01 was not operating for the first half of 2022. Moreover, PW14-04 only operated intermittently at very low rates possibly due to scaling of the pressure transducer and well screen.

The combined Zn load captured by the Phase I Lynx SIS in 2022 was estimated to represent approximately 48% of the total Zn load captured by the Old TDF under-drains. The Phase I Lynx SIS therefore captured a considerable load of Zn and other constituents from groundwater in the Lynx Reach (upgradient of the Old TDF under-drains) in 2022. The loads captured by the Phase I Lynx SIS in 2022 are, however, lower than in preceding years due to a decline in the performance of the system, mainly due to delays in maintenance due to long lead times and back ordered components. The environmental implications of this deteriorating performance in 2022 were minimal, however, given that it was a relatively dry year and that the Phase I Lynx SIS operates upgradient of the Old TDF under-drains.

The Interim Phase II Lynx SIS did not operate in 2022 due to technical issues but was operating again as of February 1st, 2023. Nearby monitoring wells continued to show the seasonal presence of moderately impacted shallow groundwater upgradient of the Interim Phase II Lynx SIS during wet winter months. Water quality samples collected from the PW18 pumping wells and nearby monitoring wells in summer 2022 showed low Zn concentrations of approximately 1 mg/L Zn.

Water Quality Impacts to Myra Creek

Chronic BC WQGs for Al-d, Cd-d, Cu-d, and Zn-t are typically exceeded in Myra Creek downstream of the site at stations MC-TP4 and MC-M2. Acute BC WQGs for these metals are also often exceeded, mainly due to the discharge of Acid Rock Drainage/Metal Leaching (ARD/ML) impacted groundwater to Myra Creek that is not captured/intercepted by the Phase I Lynx SIS in the Lynx Reach or by the Old TDF under-drains in the Lower Old TDF Reach. In 2022, the highest metal concentrations were observed in late summer to early fall (September to November), when streamflows in Myra Creek were lowest, which is consistent with historic trends. Peak concentrations in the summer months in 2022 were much lower than

those observed in 2021. This suggests a return to normal conditions and that elevated concentrations were due to the temporary operation of the under-drains at an increased sump level and hence reduced flows.

An abrupt decrease in the concentrations of most metals and other constituents in Myra Creek at MC-TP4 occurred on November 26th, 2022, after the collection sump at MC-TP4 was cleaned and other maintenance of the auto-sampler collection system was completed on that day. Hygiene and maintenance activities for the auto-sampler collection system by MFM staff were subsequently enhanced as well, which explains lower concentrations of Zn and other metals in Myra Creek that follow the same trend observed before the upgrade event.

2022 Reclamation Activities Completed

Phase 1 of the final closure plan for the Old TDF was implemented in 2022 and sections of the final drainage channels were completed, and the area regraded to final configuration. The completed sections were hydroseeded with a native plant mixture. Other reclamation activities completed in 2022 are detailed in Section 6.9.

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List of Acronyms and Abbreviations

ABA	Acid Base Accounting
AP	Acid Generating Potential
APA	Amalgamated Paste Area
ARD	Acid Rock Drainage
CRAB	Core Rack Area Borrow
DSI	Dam Safety Inspection
DDSD	Diversion Ditch Springs Drain
EMLI	Ministry of Energy, Mines and Low Carbon Innovation
EMS	Environmental Management System
FLNRO	Forests, Lands, Natural Resource Operations
HSRC	Health, Safety, and Reclamation Code
IEG	Integral Ecology Group
LDS	Low-Density Sludge
MAC	Mining Association of Canada
MDMER	Metal and Diamond Mine Effluent Regulations
MERS	Mine Effluent Reporting System
MFM	Myra Falls Mine
ML	Metal Leaching
MoECCS	Ministry of Environment and Climate Change Strategy
MVA	Myra Valley Aquifer
NOD	New Outer Drain
NP	Neutralization Potential
NPR	Neutralization Potential Ratio
OMS	Operation, Maintenance, and Surveillance
PAG	Potentially Acid Generating
PSP	Precision Service & Pumps
PUP	Park Use Permit
QA/QC	Quality Assurance/Quality Control
RGC	Robertson GeoConsultants Inc.
ROM	Run-of-Mine
SIS	Seepage Interception System
TDF	Tailings Disposal Facility
TDG	Transportation of Dangerous Goods
TSM	Towards Sustainable Mining
TSS	Total Suspended Solids
VFD	Variable Frequency Drive
WHMIS	Workplace Hazardous Materials Information System
WLBM	Water and Load Balance Model
WQG	Water Quality Guideline
WRD	Waste Rock Dump
WTP	Water Treatment Pond

MYRA FALLS MINE

2022 RECLAMATION REPORT FOR MINES ACT PERMIT M-26

1 INTRODUCTION

1.1 GENERAL

This is the 2022 Reclamation Report for the Myra Falls Mine (MFM). This report was prepared by Robertson GeoConsultants Inc. (RGC) and the MFM Environment Department as part of annual reporting for *Mines Act* Permit M-26.

1.2 TERMS OF REFERENCE

MFM is a base metal mine located at the south end of Buttle Lake on Vancouver Island approximately 90 km southwest of the city of Campbell River. The mining and milling operations primarily produce zinc, copper, and lead concentrates that are trucked to a port terminal in Campbell River for shipment abroad. The mine has been operated since 1966 by various operators and is located within the 'Class B' Strathcona-Westmin Provincial Park (**Figure 1-1**), wherein MFM is allowed to carry out its mining operations. Myra Falls also operates under Park Use Permits (PUPs) issued by B.C. Parks. These permits authorize the use of 'Class B' parklands for mining, power generation, power transmission, and roads.

The current land use in Myra Valley is designated for mining and mining-related purposes. The 3,328-hectare (ha) area of Strathcona-Westmin 'Class B' Provincial Park is held as crown grants and mining leases issued under the *Mines Act* by the Ministry of Energy, Mines, and Low Carbon Innovation (EMLI). The mine property is comprised of six Crown-granted mining leases that are wholly owned by Myra Falls Mine Ltd. (see **Figure 1-1** for mining leases). Site offices are located within L1344 Being Bear Paw Mineral Claim, Clayoquot District.

Physiographically, the mine site is located in the lower reaches of the Myra Creek valley. Myra Creek flows eastward through the site before discharging into Buttle Lake approximately 1.5 km downstream of the original (or "Old") Tailings Disposal Facility (TDF). Thelwood Valley is south of Myra Valley and is largely unaffected by mining activities. There is a hydroelectric dam (Jim Mitchell Dam) and related access roads

in Thelwood Valley and the Price 4-level, Price 5-level, and Price 13-level portals are located in Thelwood valley. The mine site is located at an elevation of 300 m to 350 m above mean sea level (m asl). Elevations on site are adjusted to maintain positive elevations for the underground workings[1]. Mean annual precipitation (MAP) is 2,521 mm, approximately 80% of which occurs from October through March as rainfall or snow.

Figure 1-2 shows the key features of the mine site, including the Waste Rock Dumps (WRDs), the original (or "Old") TDF, the Lynx TDF, and the mill and other mine-related infrastructure, including the Superpond and the Myra Ponds that comprise the site's water treatment system. WRD1 is the largest of the historic WRDs and is partially buried by tailings in the Old TDF. Some of the waste rock in the other historic WRDs, e.g., WRD2, WRD3, has been used to construct the Lynx TDF embankment berm. The Surge Pond[2] in the former Reclaim Sand Area (RSA) and various portals to the Lynx and Myra underground workings are shown in **Figure 1-2**. The current General Site Plan, as of December 31st, 2022, is provided in **Figure 1-3** as required by *Mines Act* Permit M-26 (see also WSP, 2023a). Underground mine workings (not shown) are extensive within Myra Valley and extend to Thelwood Valley. Descriptions of site components are provided as necessary throughout this report and further details are provided in MFM's Operations, Maintenance, and Surveillance (OMS) manual (MFM, 2023).

Most of the mine site is underlain by the Myra Valley Aquifer (MVA), which is comprised of permeable sediments that have accumulated in the valley bottom. Groundwater quality in the MVA and Myra Creek is impacted by Acid Rock Drainage/Metal Leaching (ARD/ML). The historic WRDs, e.g. WRD1, and Lynx berm, which is constructed primarily using sulfide-bearing waste rock, are the largest sources of ARD/ML to groundwater in the MVA. Contaminant loads to groundwater from tailings are relatively minor in comparison to contaminant loads from the WRDs and Lynx berm. Flows of underground mine water only affect groundwater quality locally in some areas of the site. Further details on contaminant sources and groundwater and surface water quality impacts are provided in RGC (2020). RGC (2020) documents the latest conceptual hydrogeological model and numerical groundwater model for the site, and the site-wide Water and Load Balance Model (WLBM), which simulates concentrations of zinc (Zn) and other constituents related to ARD/ML in Myra Creek from 2012 to 2019.

[1] 3,048 m (or 10,000 feet) is added to all elevations on site or in any mine plans or drawings. MFM also maintains a local grid coordinate system that is translated and rotated relative to UTM Zone 10. The origin of the mine coordinate system is UTM 10 5494371.316N 308000.103E and the coordinate grid is rotated 50.12° relative to the UTM grid (or 48° relative to true north).

[2] The Reclaim Sand Area was converted to a Surge Pond in 2016. The Surge Pond receives precipitation runoff (contact water) from the Old TDF. The pond is lined and was installed in tailings.

MFM operates a site-wide Seepage Interception System (SIS) to capture ARD/ML-impacted groundwater from the MVA downgradient of the major point sources of ARD/ML to groundwater on site. The SIS consists of the Old TDF under-drain system, the Phase I Lynx SIS, and the Interim Phase II Lynx SIS. The Old TDF under-drain system is comprised of the Tailings Inner Drain, the original (or "Old") Outer Drains, and the New Outer Drain (NOD). The NOD was constructed in 2008 to augment the performance of the Old Outer Drains and ensure there was an operable under-drain system in case the original drains were damaged during construction of the Seismic Upgrade Berm for the Old TDF. The Phase I Lynx SIS consists of a fence of pumping wells (PW14-01, PW14-03, and PW14-04) screened in the MVA in the Mill area and near the Lynx TDF. These pumping wells were installed in 2014 and have been operating since September 30th, 2017. The Interim Phase II Lynx SIS consists of a fence of shallow pumping wells (PW18 series) downstream of the Car Bridge. The Interim Phase II Lynx SIS has operated intermittently since March 2019. The Interim Phase II Lynx SIS is intended to capture shallow acidic seepage that was observed to express along the creek bank immediately downgradient of the Car Bridge following high rainfall periods (RGC, 2018). This system was installed following consultation with the Ministry of Environment and Climate Change Strategy (MoECCS) when the seepage was discovered (RGC, 2018).

ARD/ML-impacted groundwater, mine water, and precipitation runoff are directed to the water treatment system for treatment. The system is a Low-Density Sludge (LDS) system that consists of two lime silos, two sets of mixing/reactor tanks, a primary settling pond called the Superpond, and a series of six polishing ponds (the 'Myra Ponds') on the south side of Myra Creek. Treated effluent is discharged to Myra Creek from the right-hand (south) creek bank, as per Effluent Permit PE-6858. Water quality in Myra Creek is impacted, to some degree, by the discharge of treated effluent, which accounts for approximately 20% of the Zn load in Myra Creek downstream of the site. Contaminant loads from ARD/ML-impacted groundwater to the creek account for most of the remaining Zn load in Myra Creek (see RGC, 2020). Reducing contaminant loads in Myra Creek during mining operations is a key objective of the site-wide SIS, hence details on MFM's efforts in this regard are provided in the current report. Cadmium (Cd), copper (Cu), and zinc (Zn) are the key parameters of concern in Myra Creek, as concentrations of each consistently exceed acute (and chronic) provincial Water Quality Guidelines (WQGs). Concentrations of Cd, Cu, and Zn can also exceed WQGs for Buttle Lake. Further details are provided in Section 4 of this report and in the 2022 Monitoring Report for Effluent Permit PE-6858.

Reclamation activities and aspects of the mining operation and construction activities that are relevant to environmental conditions at surface are detailed in this report. Most of the surface construction activities in 2022 (and recent years) have focused on constructing the Lynx TDF embankment berm. In 2022 construction materials for the Lynx TDF were sourced from WRD6 and Run-of-Mine (ROM) waste rock that is generated by mining activities. Reclamation work in 2022 included Phase 1 of the Old TDF closure cover. Further details on dam construction are provided in Wood (2023b) and references therein. Waste rock volumes and the geochemical characteristics of re-located waste rock and other materials are provided in Section 2 of this report.

1.3 REPORT OBJECTIVES

The objectives of this report are to:

- Summarize construction and mining activities in 2022, as required for Permit M-26.
- Summarize the recent performance of the site-wide SIS and water quality trends in Myra Creek.
- Review required water monitoring results for Permit M-26.
- Summarize reclamation activities completed in 2022.

1.4 SCOPE OF WORK

MFM's Environment Department requested that RGC organize the preparation of the 2022 Reclamation Report and prepare sections that pertain to waste rock geochemistry, recent SIS performance, and environmental impacts due to ARD/ML. RGC compiled and interpreted the geochemical data gathered by MFM in 2022, as per the ARD/ML Management Plan. Nicole Pesonen (MFM's Environment & Community Engagement Manager) prepared the tables that are required by the EMLI for the Annual Reclamation Report and related text, and Section 5, which describes reclamation activities completed in 2022.

Seepage sampling and groundwater quality monitoring of selected wells is required by *Mines Act* Permit M-26. The water quality results that are required are intended to provide some indication of the performance of the Old TDF under-drains and groundwater bypass to the MVA downgradient of the under-drains and Myra Creek. This is needed to provide the EMLI with some indication of current water quality impacts due to mine waste disposal at surface and the effectiveness of the SIS that is operating.

An overview of the performance of the site-wide SIS, with an emphasis on groundwater flows and contaminant loads captured to support the discussion of recent water quality trends for groundwater and Myra Creek, is therefore provided in this report. A comprehensive assessment of SIS performance that includes an evaluation of the hydraulic performance of the system is beyond the scope of this report. Additional information on SIS performance is provided in RGC (2020), wherein the latest update of the site-wide WLBM is documented.

1.5 REPORT ORGANIZATION

This report consists of the following sections:

- *Section 1. Introduction.* This section provides background information and outlines the objectives and scope of this report.
- *Section 2. Construction and Mining Operations.* This section summarizes construction and mining operations in 2022 and provides the key tables that are required by EMLI in a reclamation report. The geochemical characteristics of mine waste materials produced in 2022 are also discussed.
- *Section 3. Effluent Monitoring Results.* This section summarizes effluent water quality in 2022 with respect to MDMER limits and summarizes key events and incidents in 2022.

- *Section 3. Water Quality Monitoring Results and SIS Performance.* This section provides seepage and groundwater quality monitoring results that are required for *Mines Act* Permit M-26. A discussion of SIS performance, with an emphasis on flows and loads captured, is provided to support the discussion of recent water quality trends for groundwater and Myra Creek.
- *Section 5. Reclamation Activities.* This section details reclamation activities completed in 2022, including vegetation monitoring, erosion and sediment control activities, and ongoing reclamation research.
- *Section 6. Summary.* This section summarizes key monitoring results and reclamation activities completed in 2022.

1.6 COMPANY INFO AND KEY CONTACTS

The operating company is registered as ***822638-5, Myra Falls Mine Ltd.*** The company contacts for the location are:

Contact	Position	Phone #s	Email
Main Office		(250) 287-9271	
Adam Foulstone	General Manager	(250) 287-9271 ext. 3279 (250) 202-9187	Adam.Foulstone@myrafallsmine.com
Nicole Pesonen	Environmental & Community Manager	(250) 287-9271 ext. 3316 (250) 202-9468 (cell)	Nicole.Pesonen@myrafallsmine.com
Thomas Pattinson	Surface Manager	(250) 287-9271 ext. 3855	Thomas.pattinson@myrafallsmine.com
Jeff May	Surface Superintendent	(250) 287-9271 ext.3335	Jeff.may@myrafallsmine.com
Josh Fry	Environmental Projects Coordinator	(250) 287-9271 ext.3871	Joshua.fry@myrafallsmine.com
Kirsten Simons	Environmental Technician	(250) 287-9271 ext.3397	Kirsten.simons@myrafallsmine.com
Control Room	Mill Control	(250) 287-9271 ext.3216	

Other key contact information for Myra Falls Mine is as follows:

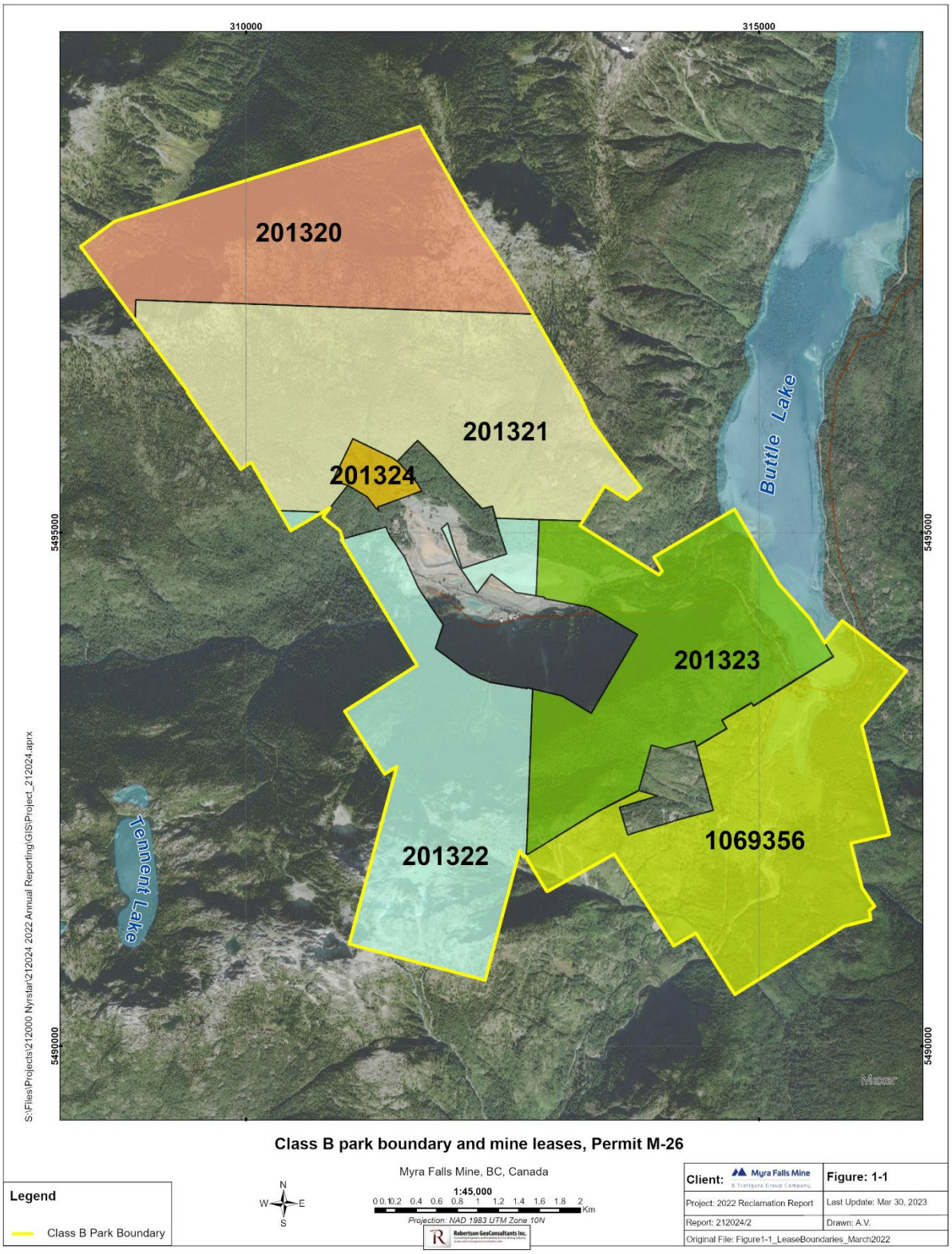
Trafigura Branch Office:

Trafigura PTE Ltd.

1, rue de Jargonnant

1207 Geneva

Switzerland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Tennent Lake
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Myra Falls Mine, BC, Canada
Legend
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Projection: NAD 1983 UTM Zone 10N
Robertson GeoConsultants Inc.
Client: Myra Falls Mine
A Trafigura Group Company
Figure: 1-1
Project: 2022 Reclamation Report
Last Update: Mar 30, 2023
Report: 212024/2
Drawn: A.V.
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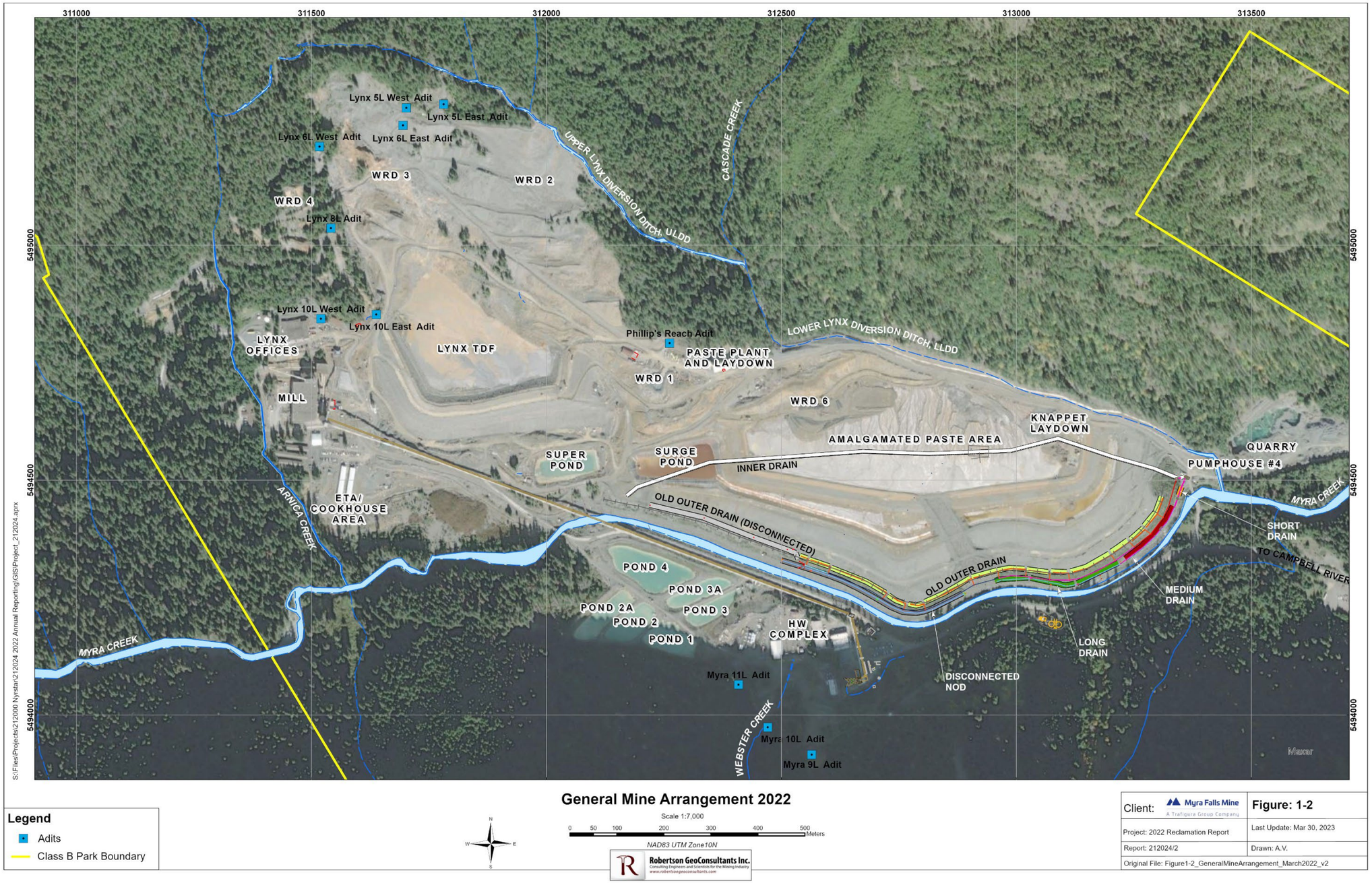

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Legend
- Adits
- Class B Park Boundary

General Mine Arrangement 2022

Scale 1:7,000

0 50 100 200 300 400 500 Meters

NAD83 UTM Zone10N

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Consulting Engineers and Scientists for the Mining Industry
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Client: Myra Falls Mine, A Trafigura Group Company	**Figure: 1-2**
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Report: 212024/2	Drawn: A.V.
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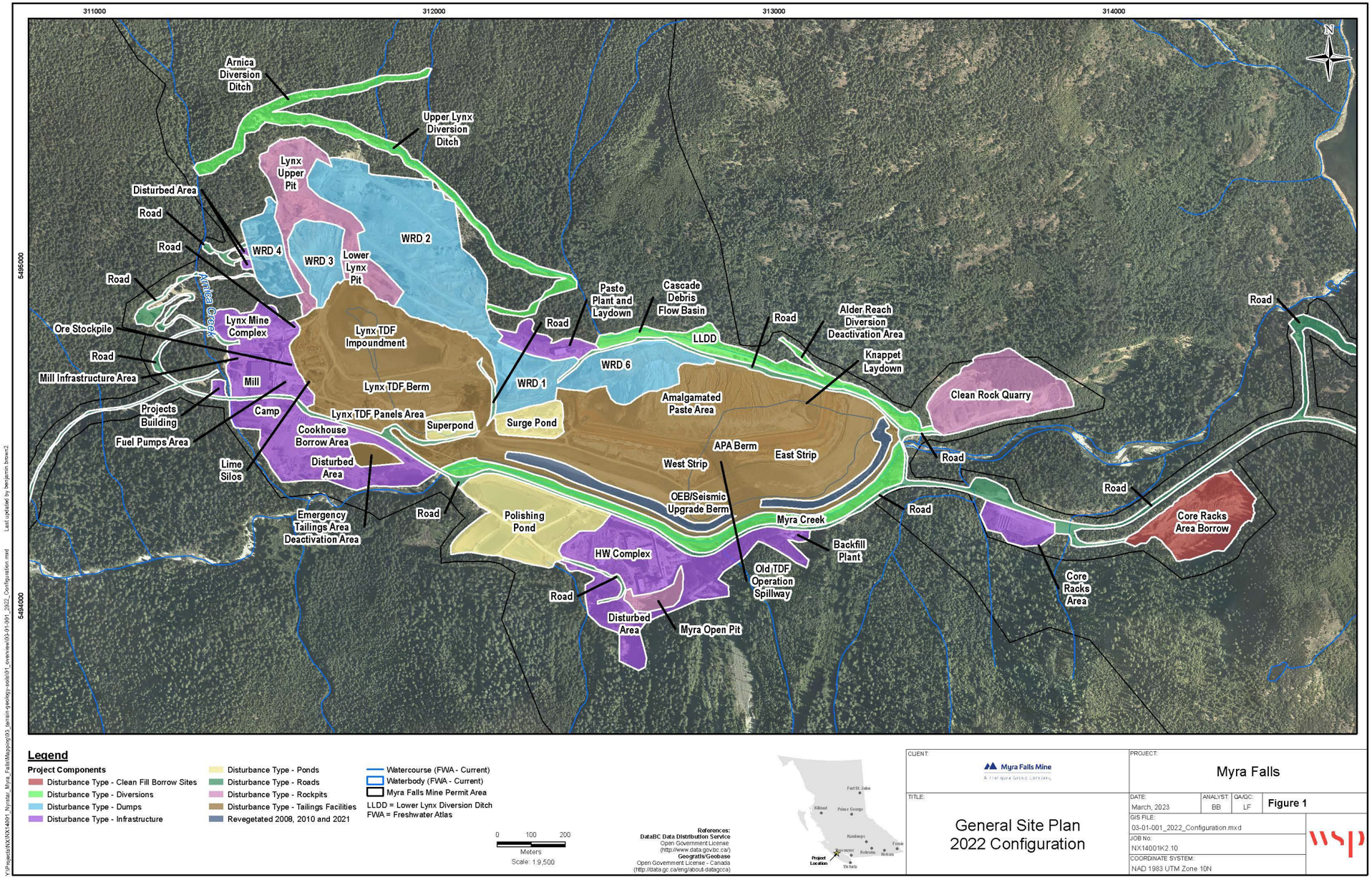


Figure 1-3. General Site Plan. 2022 Configuration

2 CONSTRUCTION AND MINING OPERATIONS

2.1 MINING AND MILLING PRODUCTION – 2022

MFM restarted operations in 2018 and has continued to ramp up toward full production through 2022. A total of 879,180 tonnes were mined in 2022, as depicted in **Table 2-1** (EMLI Table 3). MFM targeted an increased monthly production to 62,000 tonnes of ore per month in 2022, with further ramp-up to full production. MFM achieved an average of 53,558 tonnes of ore per month with 73,265 tonnes per month overall in 2022.

The Price Zone was actively mined throughout 2022, with a total of 108,348 tonnes mined. 108,348 tonnes of ore were transported by cart through the Price 13 Portal and hauled to the mill stockpile via surface haul truck; no waste was mined in Price in 2022. The HW Zone includes the Marshall, Ridge, and Battle Gap ore bodies. A total of 770,832 tonnes were mined from the HW Zone in 2022. 534,349 tonnes of ore and 236,483 tonnes of waste were mined in the HW area. Effectively, all of the waste mined in the HW zones was trucked to surface. No active mining took place in the Lynx or Myra zones underground in 2022.

A total of 611,315 tonnes were milled in 2022, as depicted in **Table 2-1** (EMLI Table 3). The EMLI Table 4 has not been included, as no specialized milling was completed in 2022. At currently anticipated mining and depletion rates, a mine life of at least five years is expected. This estimate would be entirely dependent on forecasted and prevailing metal prices, currency exchange rates, as well as fluctuating costs of mining and processing.

Table 2-1 (EMLI Table 3)

Monthly mining and milling production, as of December 31st, 2022

COMPANY: MYRA FALLS MINE LTD. PERMIT NO.: M-26

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Mining Production (tonnes)													
Price Ore	7,596	6,640	13,936	6,513	5,051	4,041	3,498	11,993	13,104	11,194	17,847	6,935	108,348
Pr. Waste	0	0	0	0	0	0	0	0	0	0	0	0	0
HW Ore	45,020	52,461	48,078	51,241	52,379	37,794	52,460	38,803	45,233	35,492	37,153	38,235	534,349
HW Waste	21,198	18,394	17,607	17,149	19,486	20,345	18,580	22,843	28,748	17,785	14,870	19,478	236,483
Totals	**73,814**	**77,495**	**79,621**	**74,903**	**76,916**	**62,180**	**74,538**	**73,639**	**87,085**	**64,471**	**69,870**	**64,648**	**879,180**
Milling Production (tonnes)													
MFM Mill	47,493	54,141	56,935	65,692	59,657	56,492	46,302	48,424	45,837	49,174	44,458	36,709	611,315
Milling Total	**47,493**	**54,141**	**56,935**	**65,692**	**59,657**	**56,492**	**46,302**	**48,424**	**45,837**	**49,174**	**44,458**	**36,709**	**611,315**
Paste Tailings (tonnes)													
Lynx TDF	27,525	38,229	32,902	40,693	29,506	38,146	27,559	29,957	32,740	31,971	33,805	22,787	385,820
Paste Underground	14,918	9,769	17,308	17,227	23,187	13,688	11,708	11,572	8,295	11,897	6,146	10,586	156,301
Tailings Total	**42,443**	**47,998**	**50,210**	**57,920**	**52,693**	**51,834**	**39,267**	**41,529**	**41,035**	**43,868**	**39,951**	**33,373**	**542,119**

Milling Capacity	2,040	tonnes per day

Include:

- All mining locations (both underground and surface, including borrow areas)
- All milling locations (both on-site and off-site)

2.2 SURFACE DEVELOPMENT AND DISTURBED AREAS

2.2.1 *Existing Surface Development – Status 2022*

Surface development to date is shown in the General Site Plan (see **Figure 1-3**) (WSP, 2023a). In 2022, the direct disturbance footprint totals 184.6 ha, excluding hydro dam infrastructure, which is outside the Mine's Act permit boundary permitted through BC Parks under Park Use Permit 102663. The majority of the disturbance footprint is within Myra Valley with some additional mining infrastructure in the adjacent Thelwood Valley. The previous estimate of the direct disturbance footprint (198.7 ha) was re-assessed as part of the Habitat Loss Mitigation Plan submitted in 2019 (see Wood, 2019). Approximately one-third (31.9%) of the direct disturbance footprint is related to the TDFs. The original, or "Old" TDF is near the eastern boundary of the site, operated from 1984 to 2011 and is inactive; the Old TDF was subject to active reclamation work in 2022 where Phase 1 of the closure cover design was completed in 2022. The Lynx TDF has operated since 2008 and is the only active surface tailings on site. Tailings have been deposited in one of the two TDFs since 1984, when tailings deposition to the south end of Buttle Lake ceased. WRDs represent approximately the second largest (15.4%) component of the direct disturbance footprint. Other components of the direct disturbance footprint, including roads and mine-related infrastructure are provided in **Table 2-2 (EMLI Table 1)**.

WRD1 is the largest of the historic WRDs and is partially buried beneath tailings in the Old TDF. WRD2 is located along the hillslope to the north of the Superpond and Lynx TDF and WRD3 is located near the back of the Lynx pit. Most of the waste rock from WRD3 has been removed, however, as it is being used to construct the Lynx TDF embankment berm. WRD7 was mined out for construction materials in 2019. WRD6 is located above the road to the Paste Plant on top of the exposed portion of WRD1. Construction efforts in 2022 focused on areas within the existing mine footprint, in particular the Lynx TDF dam raise and Phase 1 of the Old TDF Closure Cover. The Lynx raise was completed using waste rock from underground and waste rock stored in construction stockpiles located on WRD6. Boulders from the stockpiles on WRD6 were crushed as required for use as fine materials as needed for bedding material and to blend with waste rock when it did not meet the material specifications for fine content (see WSP, 2023b).

2.2.2 *Projected Surface Development (Next Five Years)*

Mining at Myra Falls is confined to underground operations. Future surface development is limited to surface waste facilities, infrastructure upgrades, and the development of clean fill borrow sites. Annual berm raises of the Lynx TDF are planned to continue over the life of the facility (estimated five years). Over the next five years, it is anticipated that the Lynx Berm will continue in incremental lifts to its ultimate permitted elevation and footprint utilizing both waste rock directly from underground and excavated from the WRDs 2, 3 and 6 under the stabilization plan for closure of those facilities (Amec Foster Wheeler, 2017). Lifts will

be constructed to the final outer shell including the closure cover as depicted in the Lynx Berm Face Cover Design (Wood, 2020).

It is anticipated that over the next four years the dam construction schedule will utilize the majority of waste rock brought to surface. The Lynx Berm will continue to act as the active waste rock dump during the majority of the year. Wood has provided specifications on material placement outside of the normal construction window that will allow MFM to maximize the productivity of these efforts in off-season conditions. It is expected that WRD3 will be mined to completion in 2023, with WRD2 used as the primary construction material in 2023 and 2024, when the available excess waste is expected to be largely exhausted from this source.

The Clean Quarry expansion will continue with topsoil salvage in 2024, and rock quarry activities as needed based on construction activities each year following. This expansion will facilitate the clean-fill and drainage rock components of the Old TDF Closure Cover as well as the Lynx TDF Closure Spillway, Lynx Spring Drain, and Lynx Closure Cover. MFM will reclaim these areas to the maximum extent possible annually, as described in the Environmental Protection Program section.

Table 2-2 (EMLI Table 1)

Summary of areas disturbed and reclaimed, as of December 31st, 2022

DISTURBANCE	MINING		RECLAMATION								
	AREA DISTURBED (ha)		AREA RECONTOURED (ha)		AREA SEEDED/PLANTED (ha)		AREA FERTILIZED (ha)		AREA REVEGETATED* (ha)		LAND USE OBJECTIVES**
	2022	TOTAL***	2022	TOTAL***	2022	TOTAL***	2022	TOTAL***	2022	TOTAL***	
WASTE DUMPS	-0.4	28.4	0.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	
TAILINGS STORAGE FACILITIES	0.5	58.9	8.1	9.3	8.1	12.3	8.1	11.5	0.0	1.4	
ALL INFRASTRUCTURE FEATURES	-0.2	30.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
ROADS	-0.1	22.1	0.0	17.3	1.9	23.2	1.9	23.2	0.0	14.3	
PIT	7.5	14.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
STOCKPILES	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CLEAN FILL BORROW SITES	-7.5	5.9	0.0	1.4	0.0	1.4	0.0	0.0	0.0	0.0	
STREAM DIVERSIONS	0.0	14.4	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	
WATER HOLDING AND TREATMENT PONDS	0.0	10.2	0.0	11.7	0.0	7.5	0.0	7.0	0.0	7.0	
TOTAL	**-0.2**	**184.6**	**8.1**	**50.3**	**10.0**	**44.4**	**10.0**	**41.7**	**0.0**	**22.7**	

EXEMPT e.g., pit high walls	14.1	ha	Please specify what the exempt areas are (with maps) in the body of the annual reclamation report including rationale as to why they are considered exempt. This number should already be included in the total disturbed ha.

* In order for an area to be recorded as "revegetated", it must have supported vegetation that will lead to the designated land use objective for at least one year. Please provide monitoring data in the Annual Reclamation Report to support the areas reported here.

** Specify land use. Options include: forestry, grazing, wildlife habitat, recreation, agricultural, industrial, residential, and other. Indicate all options that apply.

*** Total up to December 31, 2022.

2.3 MINE WASTE CHARACTERIZATION RESULTS

A total of thirty-two (32) samples were collected in 2022 and submitted for Acid Base Accounting (ABA) and near-total metal concentrations (by Aqua Regia digestion). ABA results for waste rock samples collected in 2022 are provided in **Table 2-3**. ABA results for tailings and underground paste backfill are provided in **Table 2-4.** Near-total metal concentrations for samples collected in 2022 are provided in **Table 2-5**. Neutralization Potential (NP), Acid Generating Potential (AP), S_{total}, and Neutralization Potential Ratio (NPR) values for waste rock and tailings samples are plotted in **Figure 2-1** and **Figure 2-2**. Values for samples collected in 2020 and 2021 are plotted with the values for 2022 for comparison. Previous data and information on the terms above are provided in the ARD/ML Management Plan. Further details on the mine waste characterization results for 2022 are provided in the sub-sections below.

2.3.1 *Development Rock*

One sample of development rock was obtained from a drilled vent raise (Raise 18-01) in 2022. The rock that was drilled from Raise 18-01 was relocated first to the Knappet Laydown Area and then to the Quarry Non-PAG construction stockpile. The sample is classified as Non-PAG material with very low AP (1.8 kg $CaCO_3$ eq./t) and substantial NP (124 kg $CaCO_3$ eq./t). Approximately 2,500 tonnes of Non-PAG materials were relocated from this area to be used as construction materials.

2.3.2 *Run-of-Mine Waste Rock*

Six samples of ROM waste rock were collected in 2022. ROM waste rocks were consisted of waste rock from underground (HW Zone) and waste rock stored in construction stockpiles, including materials from the Old TDF construction, materials removed from check dams and ditch clean-outs, sump cleaning, snow dump clean-up, etc.) all located on WRD6 and used for Lynx TDF raise. Among the six samples, three samples were composite waste rock samples that were collected from 2,400 m^3 upstream lift placement on Lynx TDF, with samples collected from the eastern to western half of the berm. During compilation of several 0.5 m lifts, another three samples were obtained from several zones over a period of three weeks. All waste rock samples from ROM are classified as PAG materials. The average AP and NP value are 101 and 38 kg $CaCO_3$ eq./t, respectively (**Table 2-3**). Compared to ABA results for ROM waste rock in 2020 and 2021, the 2022 results indicate an average of 25% higher AP and 50-80% lower NPR (**Figure 2-1** and **2-2**).

2.3.3 *Waste Rock near Myra Ponds*

In 2022, WSP completed a Dam Safety Inspection (DSI) for the Myra Ponds on the south side of Myra Creek (see WSP, 2022). The DSI was completed as part of an initial assessment of the Myra Ponds that was undertaken to determine which of the structures qualified as a dam. WSP is completing this work so that MFM can comply with an order received from EMLI in November 2018 (EMLI, 2018), which requires

the Myra Ponds and Superpond be brought into compliance with Health, Safety, and Reclamation Code for Mines in British Columbia (HSRC) (see WSP, 2022 for further details). During drilling between Myra Pond 3 and Myra Pond 3A, six samples of material from the roadway between these two ponds were collected near the location of an orange stain that has been observed by MFM staff at certain times of the year. Samples were collected at depth intervals 1-1.5 ft, 1.5-3 ft, 3-4.5 ft, 4.5-6.5 ft, 6.5-8 ft, and 8-10 ft during drilling of borehole BH21-PP-04. Samples were analyzed for ABA and near total metal concentrations to determine if the roadway foundation materials are the source of stain. Five out of six samples are classified as PAG material with up to six weight percent (wt. %) sulphide concentration. Average AP and NP values are 120 and 37 kg $CaCO_3$ eq./t, respectively. These PAG materials are therefore highly-acid generating and are the likely cause of the ARD that causes the stain observed by MFM staff. The distribution of PAG materials within the berms cannot be determine from the limited data that are available but additional investigation/sampling is warranted, as this waste rock could represent an additional contaminant source to groundwater that is not represented in the site-wide WLBM (see RGC, 2020).

2.3.4 *Waste Rock – Old TDF Spillway 3 Construction*

As part of Old TDF reclamation program, several small spillways have been excavated with the aim of keeping runoff water away from the Old TDF. Four samples of material excavated during the excavation of Spillway 3 were collected. This is the eastern-most spillway and had the deepest cut into the Seismic Upgrade Berm. The objective was to determine if the excavation went through the core of the berm where PAG materials are known to exist. A sample collected from the deepest point of the spillway was suspected to be PAG material based on colour (due to staining), the degree of compaction, and rinse tests completed in the field. This material was clearly distinguishable in the field and approximately 15 tonnes of it were transferred to the Lynx TDF. ABA results (see **Table 2-3**) later confirmed this material to be PAG material. The other samples collected during spillway construction were characterized by less than 0.05 wt. % sulphide, and hence were classified as non-sulphidic materials.

Table 2-3

ABA results for waste rock samples, 2022

Sample ID	Sampling Date	Paste pH	S_{total} wt%	S_{SO4} wt%	$S_{sulphide}$ wt%	AP kg $CaCO_3$ eq./t	NP kg $CaCO_3$ eq./t	NNP kg $CaCO_3$ eq./t	NPR	Class
Development Rock										
23238	10-Mar-2022	8.2	0.09	0.03	0.1	1.8	124	122	69	Non-PAG
Run-of-Mine Waste Rock										
55676	29-Jun-2022	8.2	2.4	0.03	2.4	74	28	-46	0.4	PAG
55677	28-Sep-2022	8.2	3.9	0.10	3.8	119	39	-80	0.3	PAG
55678	28-Sep-2022	8.1	3.0	0.08	2.9	90	46	-45	0.5	PAG
55679	28-Sep-2022	8.2	4.5	0.1	4.4	137	36	-101	0.3	PAG
55680	28-Sep-2022	8.2	3.2	0.1	3.1	97	43	-54	0.4	PAG
55681	28-Sep-2022	8.1	3.0	0.10	2.9	91	36	-54	0.4	PAG
*Waste Rock near Myra Ponds***										
23232	12-Jan-2022	5.7	2.1	1.2	0.9	27	7.7	-19	0.3	PAG
23233	12-Jan-2022	6.8	13	0.2	13	403	20	-383	0.05	PAG
23234	12-Jan-2022	7.7	6.0	0.08	6.0	186	41	-145	0.2	PAG
23235	12-Jan-2022	7.7	1.5	0.06	1.5	46	24	-22	0.5	PAG
23236	12-Jan-2022	8.3	0.4	0.03	0.4	12	38	26	3.3	Non-PAG
23237	12-Jan-2022	8.1	1.6	0.08	1.5	48	93	45	1.9	PAG
Waste Rock - Old TDF Spillway 3 Construction										
23247	28-Jun-2022	7.4	1.6	0.2	1.4	43	21	-22	0.5	PAG
23248	28-Jun-2022	7.9	0.05	0.01	0.04	1.1	7.0	5.9	6.4	Non-Sulphidic***
23249	28-Jun-2022	8.3	0.04	0.01	0.03	0.8	10	9.5	13	Non-Sulphidic
23250	28-Jun-2022	8.5	0.04	0.01	0.03	0.9	40	39	44	Non-Sulphidic

*Red text denotes a concentration below the indicated detection limit

**Samples were collected during drilling of a geotechnical borehole. The listed samples (from top to bottom) are representative of 0-1.5, 1.5-3, 3-4.5, 4.5-6.5, 6.5-8, and 8-10 ft dee

***Samples with S_{total}<0.05 wt% classify as Non-Sulfidic.

2.3.5 *Tailings*

Ten monthly tailings samples were collected in 2022 (from January to October). The monthly tailings samples for November and December were collected in January 2023 due to limited safe access to the Lynx TDF in late 2022. The spigots in the Lynx TDF were moved to several locations in 2022, so tailings samples were collected from the tailings beach close to the monthly discharge locations, of the Lynx TDF in 2022 (see **Appendix A**). ABA and metal results of the tailing samples are shown in **Tables 2-4** and **2-5,** respectively.

S_{total} values for monthly tailings samples range from 4.0 to 8.4 wt.% and the samples are characterized by up to 0.2 wt. % S_{SO4}. Hence the majority of S_{total} is unoxidized sulphide ($S_{sulphide}$). Each of the tailings samples collected in 2022 is classified as PAG material, with NP values between 23 to 36 kg $CaCO_3$ eq./t with an average of 28 kg $CaCO_3$ eq./t. Compared to 2020 and 2021, ABA results for 2022 fall between 2020 and 2021 (**Figure 2-1** and **2-2**). ABA results on 2022 indicate an average of five times lower sulphate, 17% higher AP and 25% lower NP than 2021 suggesting that the tailings were less oxidized during 2022.

2.3.6 *Paste Tailings Samples from Paste Test Cylinders*

Three underground pasted tailings samples (with flaky, hard, and soft texture) were collected from Paste Test Cylinders on February 25th, 2022. The cylinders were remnant paste samples from different paste pours after the 30 day break tests had been completed. Based on the ABA results (**Table 2-4**), all samples are classified as PAG material. These samples represent paste tailings mixed with a cement binder, which explains the elevated paste pH values (pH 10 to 12) for these samples and NP values (77 to 156 kg $CaCO_3$ eq./t) that are substantially higher than the paste tailings deposited in the Lynx TDF.

Table 2-4

ABA results for tailings samples, 2022

Sample ID	Sampling Date	Paste pH	S_{total} wt%	S_{SO4} wt%	$S_{sulphide}$ wt%	AP kg $CaCO_3$ eq./t	NP kg $CaCO_3$ eq./t	NNP kg $CaCO_3$ eq./t	NPR	Class
Paste Tailings Samples from Paste Test Cylinders										
23239 [1]	25-Feb-2022	10.8	6.1	0.4	5.6	175	93	-83	0.5	PAG
23240 [2]	25-Feb-2022	12.0	6.0	0.5	5.5	171	156	-14	0.9	PAG
23241 [3]	25-Feb-2022	10.2	6.3	0.7	5.6	175	77	-98	0.4	PAG
Monthly Tailings Samples										
21275	27-Jan-2022	8.7	6.9	0.09	6.8	213	28	-185	0.1	PAG
23246	24-Feb-2022	7.6	5.6	0.1	5.5	173	26	-147	0.1	PAG
23245	11-Mar-2022	7.8	5.4	0.1	5.3	166	34	-132	0.2	PAG
23242	8-Apr-2022	8.4	5.0	0.1	4.9	152	36	-116	0.2	PAG
23243	25-May-2022	7.5	6.7	0.1	6.6	205	24	-181	0.1	PAG
23244	29-Jun-2022	7.4	8.0	0.2	7.8	244	28	-216	0.1	PAG
55682	28-Jul-2022	7.3	8.4	0.06	8.4	262	32	-230	0.1	PAG
55683	26-Aug-2022	7.8	5.9	0.06	5.9	184	24	-160	0.1	PAG
55684	28-Sep-2022	8.2	4.4	0.05	4.4	137	23	-113	0.2	PAG
55685	28-Oct-2022	7.6	4.0	0.08	4.0	124	29	-94	0.2	PAG
55686	18-Jan-2023[4]	7.9	4.2	0.05	4.2	130	28	-103	0.2	PAG
55867	18-Jan-2023[4]	8.1	5.9	0.09	5.8	183	29	-154	0.2	PAG
	Minimum	7.3	4.0	0.1	4.0	124	23	-230	0.1	-
	Maximum	8.7	8.4	0.2	8.4	262	36	-94	0.2	-
	Average	7.8	5.9	0.1	5.8	181	28	-153	0.2	-

[1] Sample texture is described as "flaky".

[2] Sample texture is described as "hard".

[3] Sample texture is described as "soft".

[4] November and December 2022 sampling were postponed to January, 2023 due to health and safety.

Table 2-5

Selected near-total metal concentrations in waste rock, and tailings, 2022

Sample ID	Sampling Date	S	As	Cd	Co	Cu	Fe	Mn	Mo	Ni	Pb	U	Zn
		%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Development Rock													
23238	10-Mar-2022	0.1	8.0	1.6	25	53	5.4	1,389	0.3	23	39	0.7	409
Run-of-Mine Waste Rock													
55676	29-Jun-2022	2.4	48	18	11	567	3.7	1,669	7.2	15	957	0.3	3,985
55677	28-Sep-2022	3.7	213	72	17	1,080	4.6	1,216	5.3	17	882	0.3	10,000
55678	28-Sep-2022	3.1	53	17	16	634	4.5	1,425	6.8	14	419	0.3	3,784
55679	28-Sep-2022	4.2	204	65	11	1,549	4.7	662	12	17	546	0.9	10,000
55680	28-Sep-2022	3.2	62	25	15	1,085	4.8	1,037	6.3	17	501	0.4	5,520
55681	28-Sep-2022	3.0	59	23	15	734	4.8	949	5.8	15	440	0.3	5,208
Waste Rock near Myra Ponds													
23232	12-Jan-2022	2.3	31	11	15	309	5.2	552	4.3	20	944	0.2	2,873
23233	12-Jan-2022	5.0	67	12	24	999	12	537	14	19	239	0.2	3,265
23234	12-Jan-2022	5.0	27	21	29	575	7.4	750	6.3	19	463	0.2	5,052
23235	12-Jan-2022	1.7	15	1.9	15	213	3.7	781	1.3	9.0	38	0.1	591
23236	12-Jan-2022	0.5	9.0	4.8	14	251	4.1	754	2.5	12	214	0.3	1,549
23237	12-Jan-2022	1.6	52	32	22	1,349	4.8	879	6.1	37	1,018	0.4	7,562
Waste Rock - Old TDF Spillway 3 Construction													
23247	28-Jun-2022	1.6	27	11	17	416	5.5	812	5.0	15	154	0.3	2,216
23248	28-Jun-2022	0.05	4.0	0.7	30	162	6.7	1,124	0.5	29	19	0.2	192
23249	28-Jun-2022	0.03	3.0	0.4	25	90	5.8	1,058	0.4	18	5.3	0.3	134
23250	28-Jun-2022	0.04	2.0	0.3	21	44	5.6	1,078	0.9	7.0	5.1	0.2	106
Paste Tailings Samples from Paste Test Cylinders													
23239	25-Feb-2022	5.0	107	17	8.0	946	5.3	409	26	25	954	2.0	4,193
23240	25-Feb-2022	5.0	91	16	8.1	909	5.4	400	29	24	810	2.0	4,032
23241	25-Feb-2022	5.0	96	16	7.0	844	5.1	384	26	26	933	2.1	4,250
Monthly Tailings Samples													
21275	27-Jan-2022	5.0	158	36	7.5	2,131	5.7	417	18	22	1,469	2.1	10,000
23246	24-Feb-2022	5.0	95	20	8.2	828	7.3	589	21	28	872	1.4	4,799
23245	11-Mar-2022	5.0	237	21	7.9	1,183	5.9	362	14	27	1,033	1.9	4,620
23242	8-Apr-2022	5.0	120	16	9.0	995	5.3	706	16	24	1,045	1.3	3,714
23243	25-May-2022	5.0	105	16	8.2	1,106	5.4	678	20	26	1,005	1.2	3,614
23244	29-Jun-2022	5.0	73	11	8.3	694	5.1	586	15	24	704	1.0	2,629
55682	28-Jul-2022	5.0	109	25	8.6	884	6.5	477	21	34	1,243	2.2	6,627
55683	26-Aug-2022	4.7	327	105	7.6	1,858	4.1	398	24	29	1,982	2.0	10,000
55684	28-Sep-2022	3.7	110	9.7	6.3	704	3.7	361	12	21	792	1.2	2,749
55685	28-Oct-2022	4.0	164	19	9.1	868	4.2	631	19	41	1,061	2.1	4,308
55686	18-Jan-2023	4.1	130	19	9.8	752	4.4	711	22	39	1,040	1.9	4,466
55867	18-Jan-2023	5.0	99	18	11	772	6.1	993	17	30	968	1.1	4,303

*Red text denotes a concentration below the indicated detection limit

2.4 EXISTING QUANTITIES OF MINE WASTE MATERIALS AT SURFACE

Table 2-6 (EMLI Table 2) summarizes the quantities of existing waste rock, tailings, low-grade ore, coarse reject, and other mine waste materials, as of December 31st, 2022. Paste tailings were deposited in the Lynx TDF in 2022. In 2022, a total of 126,780 tonnes of ROM waste rock was used to construct the Lynx TDF Berm. An additional 125,076 tonnes of ROM waste rock was placed in WRD6 in 2022. All of this waste rock was classified as PAG material.

Table 2-6 (EMLI Table 2)

Quantities of waste rock, tailings, low grade ore, coarse reject, and other mine waste as of December 31st, 2022**.** Note: All quantities are in tonnes.

Name of Waste Pile or Pond	Acid Generating Waste		Potentially Acid Generating Waste		Non-Acid Generating Waste	
Waste Dumps	**2022**	**Total**	**2022**	**Total**	**2022**	**Total**
1	0	0	0	5,848,627	0	0
2	0	0	0	794,203	0	0
3	0	0	0	83,028	0	0
4	0	0	0	163,085	0	0
6	0	0	125,076	492,407	0	0
Lynx TDF Berm	0	0	126,780	4,583,517	0	15,532
Construction Stockpiles	0	0	0	96,913	0	24,233
Total	**0**	**0**	**251,856**	**12,061,780**	**0**	**39,765**
Tailings Ponds	**2022**	**Total**	**2022**	**Total**	**2022**	**Total**
Old (Myra TDF)	0	0	0	11,592,647	11,105	11,105
Lynx TDF	0	0	385,820	3,139,295	0	0
Total	**0**	**0**	**385,820**	**14,731,942**	**11,105**	**11,105**

2.5 GROWTH MEDIUM SAMPLING RESULTS

The growth medium stockpile in the Quarry (stripped from the CRAB (Core Rack Area Borrow) area during the development of the clean fill borrow source) was used in its entirety in 2022 on the Old TDF Closure cover as depicted in **Table 2-7**. No samples were collected from the existing stockpile in 2022.

Table 2-7 (EMLI Table 5)

Quantities of soil & overburden salvaged & stockpiled for reclamation use, as of December 31st, 2022

Area Salvaged (Location and Area in ha)		Salvage Volumes to Stockpile Locations (m^3)		
	Stockpile 1 (Quarry)	Old TDF Closure Cover	Total Salvage Volumes (m^3)	# of Samples for Suitability
CRAB 4.7 ha	5239 m^3	0 m^3	5239 m^3	0
Stockpile 1	-5239 m^3	5239 m^3	0 m^3	0
Totals	0 m^3	5239 m^3	5239 m^3	0

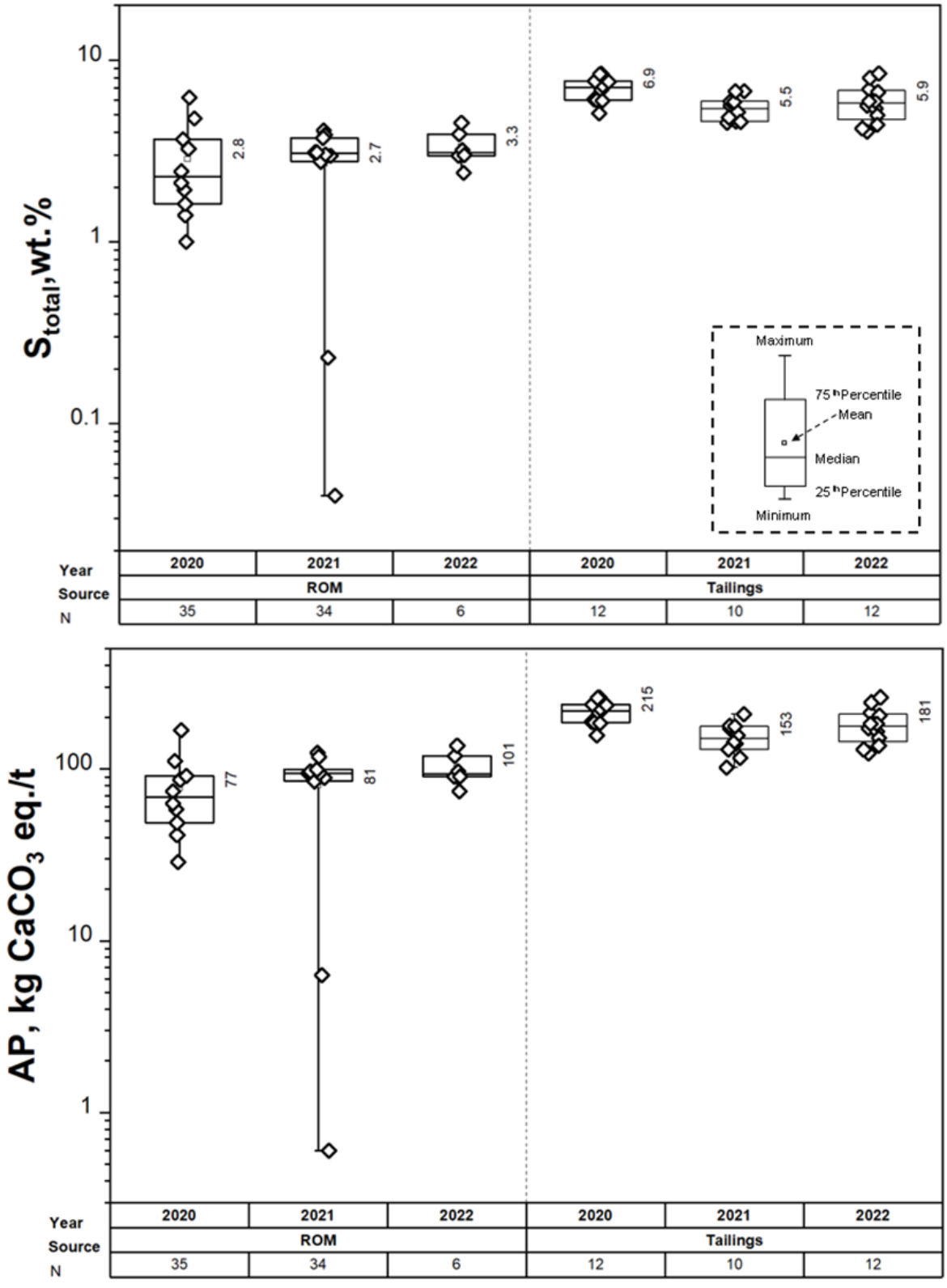


Figure 2-1. S_{total} and AP values for ROM waste materials and tailings, 2020, 2021, and 2022

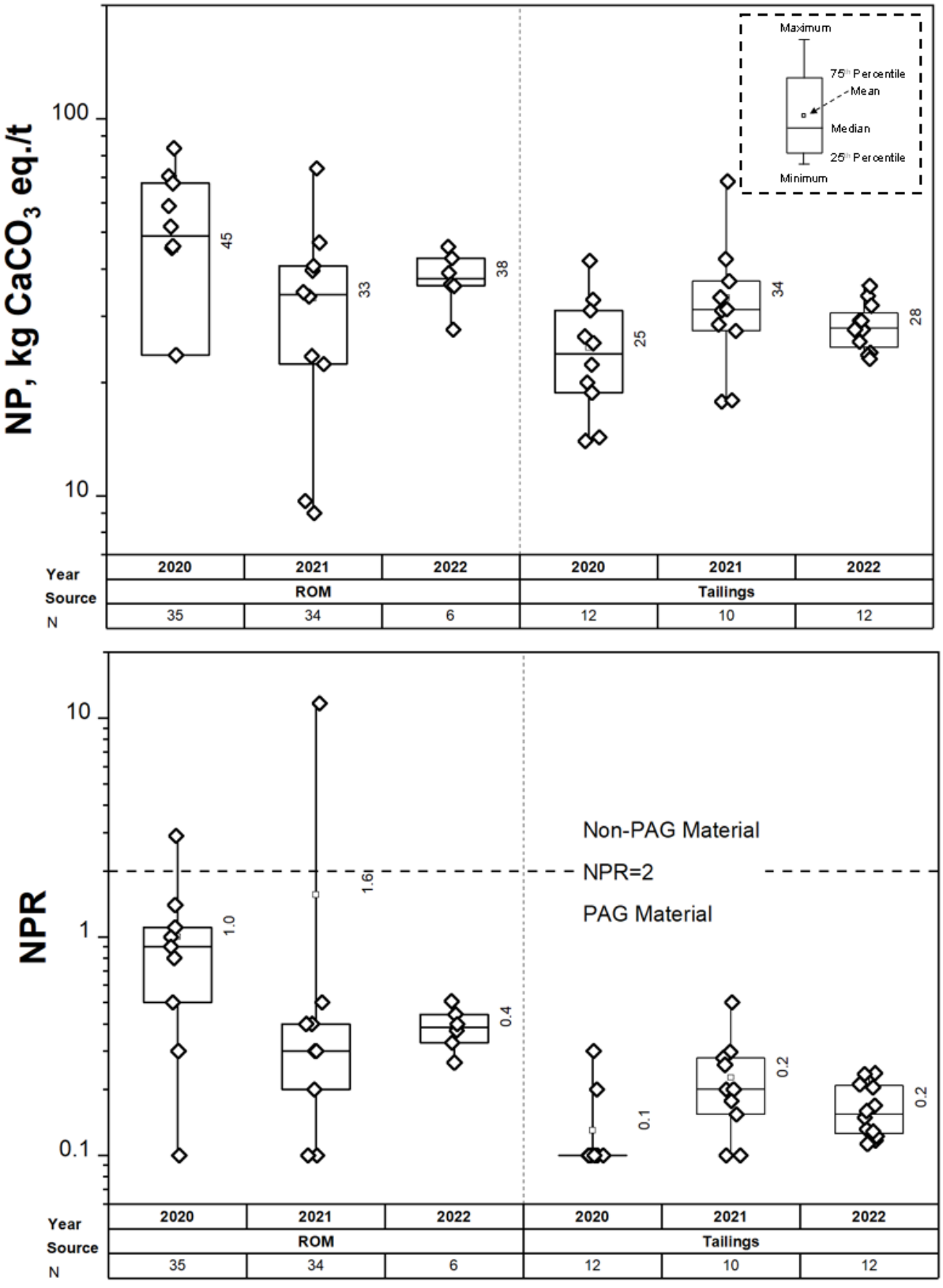


Figure 2-2. NP and NPR values for ROM waste materials and tailings, 2020, 2021, and 2022

3 EFFLUENT MONITORING RESULTS

3.1 EFFLUENT MONITORING REQUIREMENTS (MDMER)

3.1.1 *Physical and Chemical Parameter Monitoring*

Surface water quality monitoring for Environment Canada's Metal and Diamond Mine Effluent Regulations (MDMER) consists of two major components: Effluent Monitoring and Environmental Effects Monitoring (EEM), each of which involves multiple monitoring programs. Effluent is monitored weekly for pH, flow, and total concentrations of arsenic, copper, cyanide[3], lead, nickel, zinc, total suspended solids, and radium-226[4].

Quarterly grab samples are analyzed for hardness, alkalinity, and total concentrations of aluminum, cadmium, iron, mercury, molybdenum, ammonia, nitrate, selenium, temperature, total and dissolved organic carbon, phosphorus, chloride, fluoride, sulphate, dissolved oxygen, and EC. Myra Creek upstream and downstream of the effluent discharge point is monitored quarterly for the same list of deleterious substances as treated effluent. Streamflows in Myra Creek are monitored continuously at station MYR-BDG-US (near the Car Bridge) and MYR-BDG (across from the former backfill plant).

3.1.2 *Biological Monitoring Studies*

The acute toxicity of effluent is tested quarterly using juvenile rainbow trout and *Daphnia magna* LC50 tests. Sub-lethal (chronic) toxicity effects of effluent on a fish, invertebrate, aquatic plant, and algal species are tested semi-annually with one test typically in May and another in November.

3.1.3 *Reporting*

Water quality and toxicity results from MDMER monitoring are reported online using Environment Canada's Mine Effluent Reporting System (MERS) within the Environment Canada Single Window Information Manager (SWIM) data platform (https://ec.ss.ec.gc.ca/en/cs). Biological monitoring studies are submitted as full reports to the MDMER Program Scientists via the Environmental Effect Monitoring Electronic Reporting System (EEMERS) also within the SWIM. Monitoring of the ecosystem health is completed in a three-year cycle. MFM completed Year 3 of Cycle 6 in 2020 which completed the analysis reporting on

[3] Cyanide is not used at MFM and is therefore not required to be monitored.
[4] Monitoring results for Radium 226 below method detection limit, frequency reduced to quarterly.

Cycle 6 of the Environmental Effects Monitoring (EEM). In 2021, a study design report was developed for Cycle 7 of the EEM and fieldwork was completed in support of cycle 7 in 2022. No measurable differences in the EEM that could be attributed to the quality of the treated effluent from MFM were found in the Cycle 6 program (see Nautilus Environmental, 2020).

3.2 2022 Effluent Water Quality and Toxicity Testing Results

3.2.1 *Effluent Water Quality*

There were no exceedances of MDMER limit values in 2022. Further details and time trends for treated effluent are provided in the 2022 Monitoring Report for Effluent Permit PE-6858.

3.2.2 *Toxicity Testing Results*

Appendix B provides toxicity testing results for 2022. All quarterly samples for 96-hour LC50 test results were >100% vol./vol. survival rate for rainbow trout.

3.3 Events Outside of Normal Operational Parameters

Table 3-1 summarizes events outside of normal operational parameters with respect to MDMER. Each event was communicated to regulatory authorities and follow-up reports detailing the cause and mitigation efforts were submitted to MoECCS and Environment Canada as appropriate (see **Appendix C**). Other agencies, such as the Vancouver Island Health Authority and BC Parks, were also notified of the events. The most notable of the events outside of normal operational parameters in 2022 was an unauthorized discharge event in late December 2022 when the HW Run-off Sump overtopped. This occurred during a period of intense rainfall (> 8 mm/hr) between 02:00 to 07:00 on December 26th, 2022. Total rainfall during this five-hour period was 57.2 mm. Following this rain event, the two electric pumps in the HW Run-off Sump were not able to keep up with the inflow to the sump. Hence, the back-up diesel pumps started to operate. However, due to weeks of temperature below freezing, the lay-flat discharge pipe was frozen in sections where water from the testing remained in the pipe.

Despite previous efforts to remove the ice blockage inside the pipe, the discharge pipe failed to operate on the morning of December 26th. As a result, the water level had risen above the concrete sump box and a large puddle had formed around it. It was observed that water was flowing across the road and entering Webster Creek (just above the culverts to Myra Creek) and Myra Creek over the public road. MFM personnel estimated that approximately 15 m^3 (15,000L) of water were released between 03:30 and 07:00 on December 26th, which corresponds to approximately 0.001 to 0.0015 m^3/s to the Myra Creek. For comparison, the average streamflow rate in Myra Creek on December 26th was 46.7 m^3/s. Further details on the unauthorized discharge event are provided in DGIR report 225399, which is included in **Appendix J**. This unauthorized discharge event is a permit non-compliance event for Permit M-26 in 2022.

Table 3-1

Summary of events outside normal operating procedures, 2022

Incident Date	Incident Type	Station or Location	Incident Description	Cause of Incident	Permit M-26 Non-Compliance?
Jan 12	Anemometer failure	Camp	Anemometer crushed, missing wind data from January 13th to April 13th	Heavy snow accumulation	No
Jan 28	Missed sample	MC-TP4	Missed daily composite sample	Auto-sampler malfunction	No
Mar 25	Spill	Knappet Lay Down	150-200L of dyed diesel	A truck fuel tank overtopped during fueling due to failure of locking mechanism of fuel nozzle.	No
Apr 5	Spill	Lynx TDF (D-Ramp)	5 m^3 of thickened tailings sprayed on berm/roadway on D-Ramp	A Victaulic coupling on a 8"-6" reducer split from the two pipes due to high pressure.	No
Apr 6	Spill	HW Waste Complex	10L of SA 160 & Flocculant	Spill from punctured chemical tote were mistakenly placed in garbage bins	No
Apr 13	Rain gauge failure	Met Station	Missed logging precipitation from April 13th to June 7th	Rain gauge failure after station was serviced	No
Apr 20	Spill	Public Road	85-90kg copper concentrate spill on public road	Trailer of the hauling truck was damaged.	No
Apr 27	Permit limit exceedance	HW STP	Sample exceeded 5-day BOD permit limit	Agitator failure	No
Apr 30	Spill	Public Road	400-500kg zinc concentrate spill on public road	The clams of the hauling truck were not fully closed.	No
May 2	Missed sample	MC-TP4	Missed daily composite sample	Auto-sampler malfunction	No
Jun 24	Spill	Lynx Shop Parking	5-10L of motor oil	Leaking from a parked equipment.	No
Sep 1	Spill	6-1 Zimpro	Approximately 1L of slime spilled from Zimpro	Cause unknown	No
Sep 21	Spill	Ore Pad 3	105L hydraulic oil spill from AD30 UG Haul Truck (612)	Hydraulic system valves were left open.	No
Third Quarter	Missed samples	MW-D and MW-F	Missed quarterly sample	Monitoring wells thought to be dry during sampling	Yes
Oct 16	Missed sample	MP-EFF	Missed daily composite sample	Auto-sampler malfunction	No

Table 3-1 (continued)

Summary of events outside normal operating procedures in 2022

Incident Date	Incident Type	Station or Location	Incident Description	Cause of Incident	Permit M-26 Non-Compliance?
Nov 9	Permit limit exceedance	MYRA STP	Sample exceeded 5-day BOD permit limit	Bear breaking into the septic system near camp to consume the solids in the tank.	No
Dec 1	Equipment Damage	25 Sump Road	Damage to SIS. No water was through the system at the time, so no spill occurred.	Snowplow struck a water discharge line resulting in damage to SIS.	No
Dec 14	Spill	Surface Portal	110L Hydraulic oil	A broken hydraulic hose led to leakage of oil.	No
Dec 20	Spill	Surface Portal	100L of dyed diesel	Human error led to spill during filling an equipment fuel tank.	No
Dec 26	Unauthorized discharge	HW Sump	HW Sump overtopped and 15 m^3 water discharged into the Myra Creek	Retained water in the discharge line on the back-up diesel pump was frozen leading to failure of the pipe in discharging the pumped water from the HW sump after an intensive rain event.	Yes
Fourth Quarter	Missed sample	Out-Drain	Missed quarterly sample	Field error, as the drain was thought to be dry	Yes
Multiple	Missed bimonthly samples	HENSHAW	Missed samples from 100 m depth	Lake is 68-70 m deep; no sample was collected at depths deeper than 60 m, even though, it was possible to take a sample at 1m above the bottom of the lake and report it as HEN-100.	No

4 WATER QUALITY MONITORING RESULTS AND SIS PERFORMANCE

4.1 MONITORING NETWORKS

4.1.1 *Groundwater Monitoring Network*

Groundwater monitoring wells and pumping wells at the site are shown in **Figure 4-1**. A close-up view of the Lynx Reach is provided in **Figure 4-2** for reference. Note, the orthophoto shown in these figures is from September 2019, so the current (status 2022) extent of the Lynx TDF berm and other recent changes on site are not reflected. Construction details for all the monitoring wells and pumping wells on site are summarized in **Table 4-1** and **Table 4-2**. Forty-one of these wells, i.e. the 'MW13' and 'TD13' well series, were installed in 2013 as part of RGC's initial hydrogeological field investigation. Other monitoring wells were installed during previous site investigations in 2011 or earlier (see RGC, 2014, for additional details) or as part of recent hydrogeological and geotechnical investigations. Recent hydrogeological investigations included the installation of twenty monitoring wells in 2017 to augment the monitoring well network in the Upper Old TDF Reach to support performance monitoring for the NOD and Phase I Lynx SIS. In 2018, a total of six monitoring wells and the five PW18 pumping wells that comprise the Interim Phase II Lynx SIS were installed in response to acidic seepage observed along the northern creek bank immediately downstream of the Car Bridge (see RGC, 2018).

In 2022, replacement wells for MW04-01 and MW04-02 were installed along the disconnected portion of the Old Outer Drain, as the MW04 wells were damaged and could no longer be monitored. At each location, a pair of monitoring wells was installed, i.e., a shallow well and a deep well, with both wells screened in the MVA. A pair of monitoring wells (MW21-05S/D) was installed on the south side of Myra Creek to (i) refine the local inferred groundwater flow field in this area and (ii) characterize potential bypass of ARD/ML-impacted shallow seepage from the Car Bridge area. Another pair of monitoring wells (MW21-04S/D) was installed between Myra Pond 3 and Myra Pond 3A to characterize the hydrostratigraphy of this area and characterize local groundwater quality impacts in the MVA. These wells were installed as part of the Water Treatment Pond (WTP) site investigation completed by WSP in 2022 (WSP, 2022).

The four pairs of monitoring wells mentioned above were supervised by WSP staff with input from RGC regarding target depths in the MVA. Note, the monitoring wells are labeled with the prefix MW21 because they were planned to be installed in 2021 but were drilled and installed in January 2022. These wells are referenced in WSP (2022) with the MW21 prefix so it was not changed here. Further details on wells MW21-04S/D and MW21-05S/D are provided in WSP (2022). Details on the replacement wells mentioned above are not provided in WSP (2022) but were provided to RGC by email.

4.1.2 *Surface Water Monitoring Stations*

Surface water monitoring stations are shown in **Figure 4-3**. Myra Creek is monitored upstream of the mine site at station MC-M1 and downstream of the mine site near Buttle Lake at station MC-M2. Stations MC-S11 (near the Car Bridge) and MC-TP4 (downstream of the Old TDF) are within the confines of the mine site. Daily composite samples are collected from Myra Creek at station MC-TP4 with an auto-sampler. Water quality grab samples are collected at other stations as part of routine surface water quality monitoring for Effluent Report PE-6858 (see RGC, 2023, for further details). Note, Myra Creek has been divided into three reaches based on water quality observations for the creek: the Lynx Reach, the Upper Old TDF Reach, and the Lower Old TDF Reach. The Lynx Reach extends from Arnica Creek (near the mill) to chainage marker MC+50 which is approximately 100 m downstream of the Car Bridge. The Lynx Reach therefore includes the Mill area, the ETA/Cookhouse area, and the Lynx TDF. The Upper Old TDF Reach extends from station MC+100 to the rock outcrop on the north bank of Myra Creek near chainage marker MC+850. WRD1 and WRD6 are located within the Upper Old TDF Reach. The Lower Old TDF Reach extends from chainage marker MC+850 to MC+1350, where the connected portion of the NOD is located.

MFM staff typically conduct monthly water quality surveys along Myra Creek adjacent to the Old TDF on a voluntary basis when the creek can be safely accessed. These surveys (sometimes referred to as “creek profiles”) involve collecting water quality samples from thirty (30) locations from chainage marker MC-100 (upstream of the Car Bridge) to MC+1350 (where the auto-sampler at MC-TP4 is located). Creek surveys also involve collecting samples of seepages that express near Myra Creek, including the Car Bridge Seep and the Pipe Bridge Seep and a seep near chainage marker MC+800. Metal concentrations in daily samples of treated effluent collected with an auto-sampler at station ‘Runoff 11A’ (near the Parshall flume) are also determined. Other surface water monitoring stations are ‘3-Runoff’ at a small seep in the Lynx switchback area and at the mouth of Arnica Creek at ‘7-Arnica’.

Table 4-1

Groundwater monitoring wells and pumping wells installed in 2011, 2013, 2014, and 2022

Well ID	Installation Date	UTM Location (NAD 1983 UTM Zone 10N)		Depth Drilled	Stickup	TOC Elevation	Screening Interval		Screened Material	Hydrostratigraphic Unit
		Easting	Northing	m bgs	m	m MD	Top m bgs	Bottom m bgs		
BK01-13S	18-Feb-01	311897	5494454	13.4	-	3372.0	10.1	13.1	Gravel with some sand	Till
BK01-13D	17-Feb-01	311897	5494454	22.3	-	3372.0	18.6	21.6	-	Till/Glaciofluvial
MW04-01S (R)	16-Feb-22	312261	5494412	6.1	-	-	4.6	6.1	Well-graded gravel, with clay	Glaciofluvial
MW04-01D (R)	16-Feb-22	312261	5494412	12.0	-	-	10.0	11.6	Well-graded gravel, with clay	Glaciofluvial
MW04-02S (R)	15-Feb-22	312303	5494400	6.1	-	-	4.6	6.1	Well-graded gravel, with sand	Glaciofluvial
MW04-02D (R)	15-Feb-22	312303	5494400	12.0	-	-	10.0	11.6	Well-graded gravel, with sand	Glaciofluvial
MW-A	-	313168	5494310	15.8	-	3361.9	11.6	13.1	Gravel and Sand	Glaciofluvial
MW-B	-	313171	5494304	14.8	-	3358.4	11.6	13.1	Gravel and Sand	Glaciofluvial
MW-C	-	313173	5494297	14.8	-	3354.8	11.6	13.1	Gravel and Sand	Glaciofluvial
MW-D	-	313166	5494309	7.6	-	3361.9	6.1	7.6	Coarse Sand	Glaciofluvial
MW-E	-	313169	5494302	5.8	-	3358.2	4.3	5.8	Coarse Sand	Glaciofluvial
MW-F	-	313173	5494296	5.8	-	3354.8	4.3	5.8	Coarse Sand	Glaciofluvial
MW-G	-	312101	5494437	-	-	3362.7	-	-	-	Glaciofluvial
MW11-01	22-Jun-11	311700	5494580	30.5	0.8	3387.8	28.4	29.9	Gravel with 0.1 Sand, minor fine	Glaciofluvial
MW11-02	21-Jun-11	311652	5494377	9.1	0.8	3371.7	5.5	8.5	Sand and Gravel	Colluvial
MW11-04	21-Jun-11	312048	5494452	6.4	0.8	3364.5	4.9	6.4	Silt with Rock	Colluvial
MW11-05S	24-Jun-11	313071	5494570	10.1	0.4	3391.4	5.4	10.1	Tailings	Tailings
MW11-05D	23-Jun-11	313071	5494570	42.1	0.6	3391.6	40.2	42.1	Tailings	Glaciofluvial
MW13-01	14-Aug-13	310789	5494305	11.0	1.0	3390.7	8.2	11.2	Bedrock (Dacite) Bedrock	Bedrock
MW13-02S	30-Jul-13	311492	5494515	44.8	1.0	3385.1	20.4	23.5	Well-graded gravel, with sand	Colluvial/Landslide
MW13-02D	30-Jul-13	311492	5494515	29.4	1.0	3385.1	29.2	35.4	Well-graded sand, with gravel	Glaciofluvial
MW13-03	26-Jul-13	311637	5495005	38.8	1.0	3444.4	35.7	28.7	Well-graded gravel, with sand	Waste Rock
MW13-04	27-Jul-13	311943	5494999	17.0	1.1	3490.0	7.7	10.7	Well-graded gravel, with sand	Colluvial
MW13-05S	29-Jul-13	311952	5494522	57.0	0.8	3376.5	10.7	13.7	Well-graded gravel Colluvial	Colluvial
MW13-05D	29-Jul-13	311952	5494522	20.1	0.8	3376.5	20.2	26.2	Well-graded sand, with gravel	Glaciofluvial
MW13-06S	13-Aug-13	312053	5494573	68.9	1.0	3376.9	12.8	15.9	Well-graded gravel, with sand	Waste Rock
MW13-06D	13-Aug-13	312053	5494573	35.4	1.0	3376.8	35.4	41.5	Well-graded sand, with gravel	Glaciofluvial
MW13-07S	13-Aug-13	312246	5494683	59.7	1.0	3419.0	26.5	32.6	Well-graded gravel, with sand	Waste Rock and Colluvial
MW13-07D	13-Aug-13	312246	5494683	53.6	1.0	3419.0	53.6	59.7	Well-graded gravel, with sand	Dense Colluvial/Till
MW13-08S	12-Aug-13	312401	5494721	34.1	1.0	3419.6	17.1	20.1	Well-graded gravel, with sand	Waste Rock
MW13-08D	12-Aug-13	312401	5494721	31.1	1.0	3419.6	31.4	34.1	Bedrock (Dacite)	Bedrock
MW13-09S	8-Aug-13	312461	5494702	59.7	1.0	3423.1	29.3	35.4	Well-graded gravel, with sand	Waste Rock
MW13-09D	8-Aug-13	312461	5494702	50.3	0.9	3423.1	50.3	54.9	Bedrock (Dacite)	Bedrock
MW13-10S	7-Aug-13	312563	5494731	59.7	1.0	3431.6	35.4	41.4	Well-graded gravel, with sand	Waste Rock
MW13-10D	7-Aug-13	312563	5494731	55.5	1.0	3431.6	55.5	58.5	Bedrock (Dacite)	Bedrock
MW13-11S	27-Jul-13	312350	5494307	17.0	1.0	3363.8	4.3	7.3	Well-graded gravel and sand	Colluvial
MW13-11D	27-Jul-13	312350	5494307	11.5	1.0	3363.8	12.2	15.2	Well-graded gravel, with sand	Glaciofluvial
MW13-12	31-Jul-13	312463	5494012	20.1	0.9	3415.5	11.0	15.5	Well-graded gravel, with sand	Colluvial
MW13-13	27-Jul-13	312674	5494194	14.2	1.0	3362.5	9.2	12.2	Well-graded gravel, with sand	Glaciofluvial
MW13-14S	28-Jul-13	313298	5494393	17.7	0.9	3356.6	8.0	11.0	Well-graded gravel, with sand	Glaciofluvial
MW13-14D	28-Jul-13	313298	5494393	14.7	0.9	3356.6	14.7	17.7	Well-graded gravel, with sand	Glaciofluvial
MW13-15S	29-Jul-13	313333	5494446	19.2	-0.1	3355.8	9.5	12.5	Well-graded gravel and sand	Glaciofluvial
MW13-15D	29-Jul-13	313333	5494446	16.2	-0.1	3355.8	16.2	19.2	Well-graded gravel, with sand	Glaciofluvial
MW13-16S	28-Jul-13	313359	5494348	20.0	1.0	3361.2	11.0	14.0	Well-graded gravel, with sand	Colluvial/Glaciofluvial
MW13-16D	28-Jul-13	313359	5494348	17.0	1.0	3361.2	17.1	20.1	Well-graded gravel, with sand	Glaciofluvial
MW13-17	28-Jul-13	313395	5494503	8.6	1.0	3355.0	5.5	8.5	Well-graded gravel and sand	Glaciofluvial
MW13-18S	31-Jul-13	313436	5494438	23.1	1.1	3353.2	9.1	13.7	Well-graded gravel, with sand	Glaciofluvial
MW13-18D	31-Jul-13	313436	5494438	20.1	1.1	3353.2	20.1	23.2	Well-graded gravel, with sand	Glaciofluvial
MW13-19	14-Aug-13	312046	5494420	20.1	1.0	3364.3	17.1	20.1	Well-graded sand, with gravel	Glaciofluvial
TD13-01S	11-Aug-13	312645	5494522	47.6	1.0	3390.4	20.1	26.2	Tailings (with coarse seam)	Tailings
TD13-01D	11-Aug-13	312645	5494522	36.6	1.0	3390.5	36.6	44.2	Well-graded gravel with sand	Glaciofluvial
TD13-02S	9-Aug-13	312664	5494418	41.4	0.9	3383.5	19.6	25.6	Tailings (with coarse seam)	Tailings
TD13-02D	9-Aug-13	312664	5494418	35.1	0.9	3383.5	35.1	38.1	Well-graded sand; with gravel	Glaciofluvial
TD13-03S	10-Aug-13	312970	5494536	47.6	1.1	3390.9	20.4	26.4	Tailings (with coarse seam)	Tailings
TD13-03D	10-Aug-13	312970	5494536	44.5	1.1	3390.8	44.5	47.6	Well-graded gravel with sand	Glaciofluvial
TD13-04S	11-Aug-13	312756	5494656	49.7	0.8	3396.1	26.2	29.2	Well-graded gravel with sand	Waste Rock
TD13-04D	11-Aug-13	312756	5494656	41.4	0.8	3396.2	41.4	44.5	Well-graded gravel with sand	Glaciofluvial
TD13-05S	9-Aug-13	313085	5494445	41.4	1.1	3383.0	20.1	23.2	Tailings Tailings	Tailings
TD13-05D	9-Aug-13	313085	5494445	35.1	1.0	3383.0	35.1	38.1	Well-graded gravel with	Glaciofluvial
MW14-01S	3-Sep-14	311590	5494594	32.3	0.8	3391.0	23.9	26.9	Sand and Gravel	Colluvial
MW14-01D	3-Sep-14	311590	5494594	32.3	0.8	3391.0	29.4	32.4	Bedrock	Bedrock
MW14-02S	4-Sep-13	311645	5494692	22.9	0.7	3398.8	6.1	9.1	Gravel	Colluvial
MW14-02D	4-Sep-13	311645	5494692	22.9	0.7	3398.8	18.3	22.9	Gravel and Bedrock	Colluvial
MW14-03S	9-Jul-14	311828	5494528	22.0	0.9	3379.6	18.6	21.6	Sand and Gravel	Glaciofluvial
MW14-03D	8-Jul-14	311831	5494526	37.5	0.8	3379.4	32.3	35.4	Gravel	Glaciofluvial
MW14-04S	28-Aug-14	312127	5494544	7.9	0.8	3373.3	3.1	6.1	Gravel	Colluvial
MW14-04D	28-Aug-14	312130	5494543	41.1	0.8	3373.6	18.7	21.7	Sandy Gravel	Glaciofluvial
MW14-05S	13-Sep-14	311738	5494475	26.5	0.7	3374.2	7.3	8.8	Gravel	Colluvial
MW14-05M	13-Sep-14	311738	5494475	26.5	0.7	3374.2	11.0	14.0	Gravel	Colluvial
MW14-05D	13-Sep-14	311738	5494475	26.5	0.7	3374.2	23.2	26.2	Gravel	Glaciofluvial
PW14-01	23-Aug-14	311947	5494555	31.6	0.9	3377.5	26.4	29.5	Gravel	Glaciofluvial
PW14-03	6-Sep-14	311702	5494553	41.5	0.9	3386.1	29.0	32.0	Gravel	Glaciofluvial
PW14-04	9-Sep-14	312133	5494539	23.8	0.9	3373.8	19.5	21.9	Coarse Gravel	Glaciofluvial

Notes:
m bgs = m below ground surface

Table 4-2

Groundwater monitoring wells installed in 2015, 2016, 2017, 2018, 2019, and 2022

Well ID	Installation Date	UTM Location (NAD 1983 UTM Zone 10N)		Depth Drilled	Stickup	TOC Elevation	Screening Interval		Screened Material	Hydrostratigraphic Unit
		Easting	Northing	m bgs	m	m MD	Top m bgs	Bottom m bgs		
MW15-01S	5-Mar-15	313317	5494563	15.8	0.8	3368.4	4.3	7.3	Gravel with Silt and Sand (Medium Dense)	Fill
MW15-01D	5-Mar-15	313317	5494563	15.8	0.8	3368.4	10.7	12.8	Silty Gravel with Sand (Dense)	Lateral Till
MW15-02S	4-Mar-15	313258	5494598	16.5	0.8	3380.4	4.3	7.3	Gravel with Silt and Sand (Medium Dense)	Fill
MW15-02D	4-Mar-15	313258	5494598	16.5	0.8	3380.4	11.0	12.5	Gravel with Silt and Sand (Very Dense)	Lateral Till
MW15-03S	2-Mar-15	313172	5494613	4.3	0.6	3384.4	2.4	4.0	Gravel with Clay and Sand over Wood Debris (Medium Dense)	Fill
MW15-03M	2-Mar-15	313171	5494613	25.6	0.8	3384.7	11.0	14.0	Gravel with Clay and Sand (Medium Dense)	Fill
MW15-03D	2-Mar-15	313171	5494613	25.6	0.8	3384.6	18.9	21.9	Gravel with Sand and Silt (Very Dense)	Basal Till
MW15-04S	1-Mar-15	313148	5494638	18.0	0.9	3392.6	3.7	6.1	Silty Clayey Gravel (Medium Dense)	Fill
MW15-04D	1-Mar-15	313148	5494638	18.0	0.9	3392.6	8.2	10.7	Wood debris (2m) over Gravel with Sand (Medium Dense)	Colluvium
MW15-05S	25-Apr-15	313078	5494664	21.0	0.9	3395.6	8.8	11.9	Gravel (Medium Dense)	Colluvium
MW15-05D	25-Apr-15	313078	5494664	21.0	0.9	3395.6	14.0	17.1	Andesite Bedrock	Bedrock
MW15-06S	3-Mar-15	312992	5494684	24.1	0.8	3400.4	1.8	3.7	Silty Gravel with Sand (Medium Dense)	Fill
MW15-06D	3-Mar-15	312992	5494684	24.1	0.8	3400.5	16.8	19.8	Gravel, Silt and Sand (Dense)	Lateral Till
MW15-07S	16-Mar-15	312935	5494716	8.8	0.8	3405.9	5.8	7.3	Gravel with Sand (Medium Dense)	Colluvium
MW15-07M	16-Mar-15	312934	5494716	33.2	0.8	3405.9	18.3	21.3	Gravel with Sand and Silt (Very Dense)	Basal Till
MW15-07D	16-Mar-15	312934	5494716	33.2	0.8	3405.9	27.1	31.7	Gravel with Sand and Clay (Very Dense)	Basal Till
MW15-08S	22-Apr-15	312925	5494694	30.2	0.9	3399.7	13.7	18.3	Clay, Sand, Gravel and Cobbles (Dense)	Lateral Till
MW15-08D	22-Apr-15	312925	5494694	30.2	0.9	3399.7	22.9	27.4	Sandy Clay with Gravel (Hard)	Basal Till
MW15-09S	28-Feb-15	312866	5494740	30.2	0.7	3409.7	6.7	9.8	Clay, Sand, Gravel and Cobbles (Medium Dense)	Fill/Colluvium/Lateral Till
MW15-09D	28-Feb-15	312866	5494740	30.2	0.7	3409.7	17.7	20.7	Gravel with Sand and Clay (Very Dense)	Basal Till
MW15-10S	25-Feb-15	312787	5494756	19.5	0.8	3416.5	4.4	7.5	Gravel and Cobbles (Medium Dense)	Waste Rock
MW15-10D	25-Feb-15	312787	5494756	19.5	0.8	3416.5	10.4	13.4	Clay, Sand, Gravel and Cobbles (Dense)	Lateral Till
MW15-11S	26-Feb-15	312796	5494737	27.1	0.9	3414.4	8.8	11.9	Gravel and Cobbles over Wood Debris (1m) (Medium Dense)	Waste Rock/Fill
MW15-11D	26-Feb-15	312796	5494737	27.1	0.9	3414.4	21.0	22.6	Clay, Sand and Gravel (Dense)	Lateral Till
MW15-12S	21-Apr-15	312798	5494707	31.7	0.8	3400.7	13.4	16.5	Gravel with Clay and Sand (Dense)	Lateral Till
MW15-12D	21-Apr-15	312798	5494707	31.7	0.9	3400.7	23.5	28.0	Sandy Gravelly Clay (Very Dense)	Basal Till
MW15-13S	14-Mar-15	312688	5494717	34.4	0.9	3399.1	11.6	14.6	Gravel and Cobbles with Silt (Medium Dense)	Waste Rock
MW15-13D	14-Mar-15	312688	5494717	34.4	0.9	3399.1	22.7	25.8	Clay, Sand and Gravel (Dense)	Lateral Till
MW15-14	1-Mar-15	313163	5494643	7.3	-0.1	3391.0	1.5	4.6	Silt, Sand and Gravel (Medium Dense)	Fill
MW16-01	4-Oct-16	312113	5494445	4.5	0.8	3362.6	0.8	3.8	Sandy gravel matrix (waste rock)/alluvial sediments (sandy	Waste rock/Alluvial
MW16-02	4-Oct-16	312093	5494458	5.6	0.8	3363.7	2.2	5.2	Natural - Landslide Deposit (sandy gravel matrix)	Landslide
MW16-03	5-Oct-16	312069	5494447	4.5	1.1	3363.8	1.1	4.2	Natural - Landslide Deposit (sandy gravel matrix)	Landslide
MW16-04	5-Oct-16	312044	5494431	5.0	1.0	3364.3	1.7	4.6	Natural - Landslide Deposit (sandy gravel matrix)	Landslide
MW16-05	13-Oct-16	312015	5494424	5.0	1.0	3364.9	1.8	4.8	Natural - Landslide Deposit (sandy gravel matrix)/Alluvial Sediments	Landslide
MW17-1	20-Sep-17	312241	5494571	31.4	-0.1	3383.1	20.7	23.8	Well graded sand and gravel, 0.05 fines	Colluvium
MW17-2S	22-Sep-17	312186	5494491	42.7	-0.1	3381.7	32.6	34.1	Well graded sand (5-10% fines)	Colluvium
MW17-2D	22-Sep-17	312186	5494491	42.7	-0.1	3381.7	21.7	23.2	Well graded sand (0-10% fines)	Glaciofluvial
MW17-3	21-Sep-17	312382	5494472	43.0	-0.1	3383.7	39.3	40.8	Well graded sand with gravel & well graded sand	Glaciofluvial
MW17-4	28-Sep-17	312540	5494312	10.7	-0.1	3362.9	8.2	9.8	Well graded sand with gravel & well graded sand	Glaciofluvial
MW17-5	27-Sep-17	312697	5494244	12.2	-0.1	3360.9	7.0	8.5	Well graded sand with gravel & well graded gravel with silt and sand	Glaciofluvial
MW17-6	24-Sep-17	312673	5494303	30.5	0.8	3378.6	24.1	25.6	Well graded sand with gravel & well graded gravel with sand	Glaciofluvial
MW17-7	28-Sep-17	312888	5494258	10.7	-0.1	3359.7	7.6	9.1	Cobbles with sand and gravel	Colluvium
MW17-8	24-Sep-17	312543	5494248	9.1	0.8	3360.5	5.5	7.0	Well graded gravel with sand & well graded sand	Colluvium
MW17-9	25-Sep-17	313503	5494515	14.6	0.9	3359.4	10.7	12.2	Bedrock (Dacite)	Bedrock
MW17-10S	1-Oct-17	313462	5494351	22.0	0.9	3360.8	9.5	11.0	Well graded gravel with silt	Till
MW17-10D	1-Oct-17	313462	5494350	22.0	0.9	3360.9	18.3	21.3	Bedrock (Dacite)	Bedrock
MW17-11S	29-Sep-17	313623	5494257	19.2	0.9	3358.5	12.2	13.7	Well graded sand & well graded sand with clay and gravel	Glaciofluvial
MW17-11D	29-Sep-17	313623	5494257	19.2	0.9	3358.6	15.5	18.6	Bedrock (Dacite)	Till/bedrock
MW17-13S	3-Oct-17	313604	5494367	35.1	0.9	3356.5	15.9	17.4	Well graded sand	Glaciofluvial
MW17-13D	27-Sep-17	313604	5494366	18.3	0.9	3356.5	29.0	30.5	Well graded gravel with silt and sand & well graded sand with gravel	Glaciofluvial
MW17-14S	2-Oct-17	313845	5494249	30.5	0.9	3358.4	13.7	15.2	Well graded gravel with silt and sand	Glaciofluvial
MW17-14D	2-Oct-17	313845	5494249	30.5	0.9	3358.4	23.8	25.3	Well graded sand with gravel	Glaciofluvial
MW17-15S	30-Sep-17	313854	5494589	18.9	1.0	3359.4	9.1	10.7	Well graded gravel with sand	Glaciofluvial
MW17-15D	30-Sep-17	313854	5494589	18.9	1.0	3359.3	15.2	18.3	Bedrock (Dacite)	Bedrock
MW18-06S	11-May-18	311917	5494405	18.3	0.8	3367.3	6.7	9.8	gravel with silt and sand	Colluvium
MW18-06D	11-May-18	311917	5494405	18.3	0.7	3367.2	15.2	18.3	sand with silt and gravel	Glaciofluvial
MW18-07S	10-May-18	311966	5494382	17.1	1.0	3366.0	4.6	7.6	silty gravel with sand	Colluvium
MW18-07D	10-May-18	311966	5494382	17.1	1.0	3366.0	13.6	15.1	silty gravel with sand	Glaciofluvial
MW18-08S	10-May-18	312002	5494417	18.3	0.9	3366.0	3.1	6.1	clayey gravel with sand	Berm Fill
MW18-08D	10-May-18	312003	5494417	18.3	0.9	3366.0	7.3	10.4	gravel with sand	Glaciofluvial
PW18-01	12-May-18	312050	5494425	11.3	0.7	3364.3	1.5	10.7	clayey sand with gravel	Berm Fill/Colluvium
PW18-02	12-May-18	312041	5494422	11.3	1.0	3364.8	1.5	10.7	silty gravel with sand	Berm Fill/Colluvium
PW18-03	13-May-18	312033	5494418	11.3	0.4	3364.4	1.5	10.7	clayey gravel with sand	Berm Fill/Colluvium
PW18-04	13-May-18	312025	5494415	11.6	0.6	3364.8	1.5	10.7	sand with gravel	Fill/Colluvium
PW18-05	14-May-18	311947	5494395	11.3	0.6	3366.6	1.5	10.7	sand, gravel with sand	Berm Fill/Colluvium
MW19-01S	6-Dec-19	311437	5494842	24.4	-	-	6.1	7.6	Gravel	Glaciofluvial
MW19-01D	6-Dec-19	311437	5494842	24.4	-	-	16.5	19.5	Sand	Glaciofluvial
MW19-02S	4-Dec-19	311436	5494746	31.4	-	-	5.2	9.8	Gravel	Glaciofluvial
MW19-02D	4-Dec-19	311436	5494746	31.4	-	-	22.3	26.4	Silty sand	Glaciofluvial
MW19-03S	3-Dec-19	311433	5494554	18.8	-	-	7.2	5.2	Gravel	Glaciofluvial
MW19-03D	3-Dec-19	311433	5494554	18.8	-	-	14.9	18.0	Gravel	Glaciofluvial
MW21-05S	16-Jan-22	312163	5494398	15.5	-	3362.0	4.7	5.6	Sandy gravel	Colluvium
MW21-05D	16-Jan-22	312163	5494398	15.5	-	3362.0	14.0	15.5	Gravel and sand	Glaciofluvial
MW21-06S	16-Jan-22	312240	5494238	16.6	-	3364.8	6.0	7.6	Silty sand	Colluvium
MW21-06D	16-Jan-22	312240	5494238	16.6	-	3364.8	12.5	15.5	Gravel and sand	Glaciofluvial

Notes:
m bgs = m below ground surface

4.2 GROUNDWATER AND SURFACE WATER MONITORING PROGRAMS

Voluntary and required monitoring activities are detailed in the MFM's Surface Water and Groundwater Monitoring Plan. A summary of key monitoring programs that are pertinent to the current report is provided below.

4.2.1 *Voluntary Surface Water Monitoring*

Creek surveys are conducted routinely (when safe to do so) in support of baseline monitoring and SIS performance monitoring. Samples are analyzed for a full suite of water quality parameters that includes total metals in addition to dissolved metals. Surveys allow incremental changes in water quality in the Lynx Reach, Upper Old TDF Reach, and Lower Old TDF Reach to be detected. Creek surveys involve collecting samples every 50 m from Arnica Creek to chainage marker MC+1350 and in areas where seepage is known to express at surface and/or to Myra Creek. This sampling is typically conducted in the summer and fall because high creek levels in the winter and spring make it unsafe to access the creek.

4.2.2 *Voluntary Groundwater Monitoring*

Voluntary groundwater sampling and seepage sampling and water level monitoring are undertaken to support site-wide SIS performance monitoring. Seepage samples in key areas are collected monthly when seepage expressions are observed. Groundwater samples are collected annually, semi-annually, quarterly, or monthly, depending on their proximity to the Phase I Lynx SIS and Interim Phase II Lynx SIS. Thirteen data loggers have also been installed to continuously monitor groundwater level fluctuations in key wells in the Lynx Reach and downgradient in the Lower Old TDF Reach. Manual water level surveys are also conducted routinely to infer groundwater flow fields and capture zones near the Phase I Lynx SIS and Interim Phase II Lynx SIS. Water levels are collected manually from each well that is sampled for water quality using an electronic water level tape prior to any purging.

4.2.3 *Required Groundwater and Seepage Water Quality Monitoring for Permit M-26*

Permit M-26 requires routine seepage and groundwater monitoring to assess the performance of the Old TDF under-drains and monitor known seepage areas (see **Table 4-3**). In total, six seeps are sampled when flowing and five riser pipes and eight monitoring wells near Myra Creek are sampled quarterly. Each sample is analyzed for a full suite of physical parameters, including pH and EC, alkalinity, acidity, major ions, and dissolved metals. Further details are provided in MFM (2019).

Table 4-3

Required groundwater and seepage sampling for Permit M-26

Well ID	EMS	Type	Monitoring Status (Water Levels)	Monitoring Status (Water Quality)	Obligation	Rationale	Parameters
Car Bridge Seep	n/a	Seepage near Car Bridge	n/a	When flowing	Required (Permit M-26)	Baseline monitoring	Groundwater analytics[1]
Pipe Bridge Seep	n/a	Seepage near Pipe Bridge	n/a	When flowing	Required (Permit M-26)	Baseline monitoring	Groundwater analytics[1]
Warehouse Seep	n/a	Small seep in upper warehouse yard	n/a	When flowing	Required (Permit M-26)	Source terms	Groundwater analytics[1]
DDSD (Main Spring)	n/a	Conveys Main Spring	n/a	When flowing	Required (Permit M-26)	Source terms	Groundwater analytics[1]
TP4-A (or TP4-UPPER)	n/a	Upper Pumphouse Seep	n/a	When flowing	Required (Permit M-26)	Source terms	Groundwater analytics[1]
TP4-B (or TP4-LOWER)	n/a	Lower Pumphouse Seep	n/a	When flowing	Required (Permit M-26)	Source terms	Groundwater analytics[1]
Old Drain IN	n/a	Riser pipe	n/a	Quarterly	Required (Permit M-26)	Under-drain monitoring	Groundwater analytics[1]
Old Drain OUT	n/a	Riser pipe	n/a	Quarterly	Required (Permit M-26)	Under-drain monitoring	Groundwater analytics[1]
Drain LONG	n/a	Riser pipe	n/a	Quarterly	Required (Permit M-26)	Under-drain monitoring	Groundwater analytics[1]
Drain MED	n/a	Riser pipe	n/a	Quarterly	Required (Permit M-26)	Under-drain monitoring	Groundwater analytics[1]
Drain SHORT	n/a	Riser pipe	n/a	Quarterly	Required (Permit M-26)	Under-drain monitoring	Groundwater analytics[1]
MW13-14S	n/a	Monitoring well	Quarterly	Quarterly	Required (Permit M-26)	Under-drain monitoring	Groundwater analytics[1]
MW13-14D	n/a	Monitoring well	Quarterly	Quarterly	Required (Permit M-26)	Under-drain monitoring	Groundwater analytics[1]
MW13-15S	n/a	Monitoring well	Quarterly	Quarterly	Required (Permit M-26)	Under-drain monitoring	Groundwater analytics[1]
MW13-15D	n/a	Monitoring well	Quarterly	Quarterly	Required (Permit M-26)	Under-drain monitoring	Groundwater analytics[1]
MW-A	n/a	Monitoring well	Quarterly	Quarterly	Required (Permit M-26)	Under-drain monitoring	Groundwater analytics[1]
MW-B	n/a	Monitoring well	Not routinely monitored	Not routinely monitored	Not required	-	-
MW-C	n/a	Monitoring well	Quarterly	Quarterly	Required (Permit M-26)	Under-drain monitoring	Groundwater analytics[1]
MW-D	n/a	Monitoring well	Quarterly	Quarterly	Required (Permit M-26)	Under-drain monitoring	Groundwater analytics[1]
MW-E	n/a	Monitoring well	Not routinely monitored	Not routinely monitored	Not required	-	-
MW-F	n/a	Monitoring well	Quarterly	Quarterly	Required (Permit M-26)	Under-drain monitoring	Groundwater analytics[1]
MW-G	n/a	Monitoring well	Not routinely monitored	Not routinely monitored	Not required	-	-

Notes:

Annual samples collected in Q4 (e.g., November) and semiannual samples collected in Q1 (e.g., February) and Q3 (e.q., August)

[1]Field pH, Field EC, Lab pH, Lab EC, Alkalinity, Acidity, Major Cations and Anions, Dissolved Metals

4.3 PRECIPITATION

Precipitation data for Myra Falls are summarized in **Table 4-4**. These data are recorded at the climate station on site (MYR-CLIMATE) and were compiled by MFM staff. The annual precipitation amount in 2022 was 1,452 mm. This amount is approximately 58% of the long-term annual average (2,521 mm) and approximately 54% lower than the precipitation that occurred in 2021. Most monthly precipitation amounts were significantly lower than long-term monthly means except for April and May with average and elevated rainfall amounts, respectively.

Table 4-4

Precipitation data for station MYR-CLIMATE, 1979 to 2022

YEAR	Jan mm	Feb mm	Mar mm	Apr mm	May mm	Jun mm	Jul mm	Aug mm	Sept mm	Oct mm	Nov mm	Dec mm	TOTAL
*1979	370	249	243	161	103	71	125	47	384	343	187	620	2,902
1980	270	296	90	241	52	87	70	37	181	180	497	706	2,706
1981	346	428	118	278	114	125	78	63	310	450	466	412	3,189
1982	299	505	110	193	22	27	19	35	89	779	213	493	2,783
1983	530	624	375	84	42	130	95	60	60	218	619	193	3,028
*1984	399	520	243	263	193	32	8.8	40	95	576	340	220	2,929
*1985	64	175	148	114	85	21	32	21	77	319	446	360	1,863
*1986	370	249	418	88	239	89	41	4.0	54	590	446	390	2,979
*1987	370	337	425	263	223	184	59	18	98	84	592	437	3,091
1988	343	203	212	215	215	80	25	29	114	246	582	201	2,467
1989	329	102	224	198	63	72	42	42	18	339	250	253	1,931
1990	372	283	123	59	82	130	31	70	19	565	806	344	2,883
1991	353	543	86	126	80	28	33	207	8.0	60	596	610	2,730
1992	860	305	45	244	6.0	41	11	36	90	390	257	241	2,527
1993	57	55	289	207	148	64	77	92	1.3	180	141	393	1,705
1994	258	249	203	149	79	137	6.2	47	74	219	380	499	2,300
*1995	370	249	243	159	96	64	40	55	120	318	446	360	2,521
*1996	370	249	243	159	96	64	40	55	120	318	446	360	2,521
*1997	370	64	259	217	124	183	72	114	0.0	442	348	374	2,568
1998	571	419	159	21	37	14	67	2.6	3.0	130	473	279	2,175
1999	219	295	174	96	50	16	1.0	114	55	138	667	183	2,007
2000	50	218	99	76	132	50	124	52	62	325	168	125	1,479
*2001	333	123	144	107	132	38	38	163	67	200	519	367	2,233
2002	195	134	56	93	41	23	28	27	51	34	588	288	1,557
2003	471	61	412	177	50	51	44	30	45	558	94	348	2,341
2004	327	134	160	40	24	42	23	74	157	218	489	340	2,026
2005	433	70	223	396	306	58	100	54	98	515	268	522	3,043
2006	616	316	379	125	76	46	28	5.2	77	139	811	561	3,176
2007	538	288	438	208	75	129	71	69	167	410	491	416	3,300
2008	250	176	188	59	80	29	8.0	162	22	260	458	163	1,854
2009	140	139	291	91	171	44	35	17	165	321	882	258	2,553
2010	666	353	381	223	171	60	2.4	19	269	478	285	629	3,535
2011	284	327	528	166	80	12	82	42	340	295	478	200	2,834
2012	601	241	424	199	55	86	10.0	14	16	317	525	264	2,752
2013	96	273	168	112	125	66	3.0	125	277	57	227	100	1,628
2014	170	243	341	170	48	32	32	17	144	589	404	548	2,740
2015	263	338	460	105	35	15	20	149	217	262	259	635	2,759
2016	492	394	521	81	17	63	31	44	104	508	928	250	3,435
*2017	370	178	362	254	55	34	8.7	1.8	32	319	830	86	2,531
2018	602	111	75	256	8.1	131	9.7	13	299	137	407	733	2,782
2019	384	74	41	212	12	32	64	65	150	228	199	421	1,882
2020	762	178	142	85	75	54	9.4	88	192	226	398	322	2,532
2021	532	144	265	70	96	39	0.3	3.6	323	532	606	99	2,711
2022	225	39	172	171	196	34	12	15	22	196	122	249	1,452
# Years	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**	**44**
Mean	**370**	**249**	**243**	**159**	**96**	**64**	**40**	**55**	**120**	**318**	**446**	**360**	**2,521**
Median	**370**	**249**	**224**	**160**	**80**	**53**	**32**	**43**	**92**	**318**	**446**	**354**	**2,560**
St Dev	**181**	**140**	**134**	**78**	**68**	**44**	**33**	**48**	**102**	**172**	**208**	**168**	**537**
GeoMean	**317**	**207**	**203**	**138**	**71**	**51**	**24**	**35**	**40**	**266**	**394**	**319**	**2,460**
AVEDEV	**132**	**107**	**111**	**64**	**53**	**33**	**26**	**36**	**81**	**135**	**161**	**133**	**429**
Max	**860**	**624**	**528**	**396**	**306**	**184**	**125**	**207**	**384**	**779**	**928**	**733**	**3,535**
Min	**50**	**39**	**41**	**21**	**6.0**	**12**	**0.3**	**1.8**	**0.0**	**34**	**94**	**86**	**1,452**

*denotes that average month precipitation values were used in lieu of missing data (updated to reflect averages to 2022)

Note: Data compiled from daily observations recorded at MFO's Powerhouse - Environment Canada Meteorological Station - Code #4 (360m A.S.L)

4.4 SITE-WIDE SIS PERFORMANCE

4.4.1 *Phase I Lynx SIS Performance*

The Phase I Lynx SIS consists of pumping wells PW14-01, PW14-03, and PW14-04. Each of these pumping wells is screened in the upper portion of the MVA in the Lynx Reach, which includes the Mill area and the Lynx TDF near the Superpond (see **Figure 4-2**). The Phase I Lynx SIS has been operating since September 30th, 2017, as part of the site-wide SIS. This system captures ARD/ML-impacted groundwater that is inferred to originate primarily from: (i) buried mine waste materials in the Mill area, (ii) surface waste near the Superpond, and (iii) seepage from the Lynx TDF embankment berm (see RGC, 2020). Groundwater quality varies seasonally, with higher metal concentrations in groundwater in the Lynx Reach observed during high rainfall periods from November to April. The deterioration in groundwater quality during these high rainfall periods is attributed to the flushing of ARD/ML-related constituents from local mine waste materials to groundwater in the MVA.

Pumping wells PW14-01, PW14-03, and PW14-04 are each equipped with a Variable Frequency Drive (VFD) that adjusts the pumping rate for each pumping well to maintain a near-constant (pre-determined) groundwater level within the well. The groundwater level that is maintained in each well is intended to ensure the Phase I Lynx SIS operates as intended, assuming all three of the pumping wells were operating. In 2022, the Phase I pumping wells were operated as follows:

- *Pumping Well PW14-01.* This pumping well was not operated until August 11th, 2022, after it was serviced in early August by Precision Service & Pumps (PSP). Pumping records only exist for several days in September 2022 and various attempts by MFM staff in 2022 to download data were unsuccessful, possibly due to a failure of the data logger. Note that no nearby groundwater level data were available to infer the operation of pumping well PW14-01. Monthly water quality sampling, however, suggests that the pump was operating continuously from August to December 2022, as the missed sample in November 2022 was due to a frozen sampling port. Pumping well PW14-01 is estimated to have captured approximately 264,000 m^3 of groundwater in 2022, assuming a pumping rate of 20 L/s for periods when flow records are not available. This is a typical pumping rate for the lower flow conditions that likely occurred throughout 2022 due to lower-than-normal precipitation.
- *Pumping Well PW14-03.* The flow logger for this pumping well did not record correctly in early 2022 and was restarted in March 2022. However, the recorded data do not agree with pumping rates shown on the logger display. Hence it appears that the logger may not be reading the correct channels. No continuous groundwater level data were available to infer periods of pumping, however, routine monthly water quality samples collected throughout 2022 suggest that pumping well PW14-03 operated continuously in 2022. This is consistent with visual observations by MFM

personnel, as pumped groundwater flows from a pipe to a surface channel are visible from the road. The above indicates that pumping well PW14-03 performed as intended in 2022, and therefore captured an estimated volume of 378,000 m^3 of groundwater in 2022. Note, pumping rates recorded in 2019 (when there were no issues with loggers) were used to estimate volumes for 2022, as 2019 also had lower-than-normal precipitation.

- *Pumping Well PW14-04.* This pumping well operated in the first few months of 2022 with very low pumping rates of approximately 1.4 L/s. This pumping well was eventually turned off on April 20th, 2022, due to insufficient water levels and pumping rates. A water quality sample was collected in June 2022 (when the pump was running again) but the pump was shut off again in July for the remainder of 2022 due to low water levels. An inspection of the system by PSP suggested that scaling of the pressure transducer due to iron hydroxide precipitates prevents the pump from operating properly. The clogging of the well screen (also due to iron hydroxide precipitates) may also affect the performance of this pumping well. The total estimated groundwater volume captured by pumping well PW14-04 in 2022 is approximately 17,000 m^3. This assumes a pumping rate of 1.4 L/s for periods when records of pumping rates are missing. No continuous groundwater level records from nearby monitoring wells were available to confirm these periods of operation.

Figure 4-4, Figure 4-5, and **Figure 4-6** show pumping rates and Zn concentrations observed in groundwater captured by pumping wells PW14-01, PW14-03, and PW14-04, respectively. The estimated combined pumping rate for all three pumping wells is shown in **Figure 4-7**. Average pumping rates, pumped volumes, and captured contaminant loads for pumping wells PW14-01, PW14-03, PW14-04, and the PW14 pumping wells combined are summarized in **Tables 4-5** to **4-7**. Note that records of pumping rates were limited for 2022 (see above), so RGC estimated flow rates for 2022 based on comparison with previous years to estimate the annual volume of groundwater and the loads of Cd, Cu, and Zn captured by the system. Despite the uncertainty in groundwater flows and loads captured in 2022, it is evident that the Phase I Lynx SIS continued to capture substantial ARD-impacted groundwater from the MVA, albeit a combined volume of approximately 30% of the design capacity. The lower pumped volume in 2022 is mainly due to pumping wells PW14-01 and PW14-04 not operating over longer periods.

Figure 4-4, Figure 4-5, and **Figure 4-6** indicate that the Phase I Lynx SIS captured groundwater that is moderately to highly-impacted by ARD/ML from sources in the Lynx Reach. For instance, pumping well PW14-01 captured groundwater with Zn concentrations ranging from 9.4 mg/L Zn to 12.2 mg/L Zn when it was operating from August to December 2022. Zn concentrations in groundwater captured by pumping well PW14-03 ranged from 13.6 mg/L Zn in late October 2022 to 33.4 mg/L Zn in March 2022. Pumping well PW14-04 captured groundwater with similar Zn concentrations in 2022, with Zn concentrations ranging from 14.8 mg/L Zn to 33.0 mg/L Zn. Zn concentrations typically vary seasonally, with the highest concentrations observed during wet periods in the winter, i.e., from November to March. This seasonal trend supports the assertion that Zn and other metals are flushed from local ARD/ML sources in the Lynx

Reach to groundwater in the MVA during high rainfall periods (see RGC, 2020, for further details and discussion).

In 2022, the average Zn concentrations in groundwater pumped by pumping wells PW14-01, PW14-03, and PW14-04 are 10.6 mg/L Zn, 20.0 mg/L Zn, and 18.8 mg/L Zn, respectively. The total estimated Zn load captured by the Phase I Lynx SIS in 2022 is estimated to be approximately 11 t (see **Table 4-8**). This Zn load represents approximately 48% of the annual Zn load captured by the Old TDF under-drains in 2022 (see Section 4.4.3). Approximately two thirds of the estimated Zn load captured by the Phase I Lynx SIS was captured by pumping well PW14-03 (near the western abutment of the Lynx TDF berm). Zn loads captured by pumping well PW14-01 represent the other one third of the load captured by the Phase I Lynx SIS, as load captured by pumping well PW14-04 in 2022 was negligible due to the very low pumping rates achieved. The influence of operating the Phase I Lynx SIS on Myra Creek water quality is discussed in Section 4.6.

Figure 4-7 shows time trends of the combined daily average pumping rate and Zn concentrations observed downgradient of the Phase I Lynx SIS at monitoring wells MW17-02D and MW17-03. These wells were installed in 2017 to evaluate the performance of the Phase I Lynx SIS. Note, the first groundwater quality samples (since the Phase I Lynx has been operating) were collected from wells MW1702D and MW17-03 in early October 2017. At that time, groundwater from wells MW1702D and MW17-03 was characterized by Zn concentrations of 13.7 mg/L Zn and 18.5 mg/L Zn, respectively. These water quality samples were collected at the end of a dry summer period before any significant rainfall events in 2017. The Phase I Lynx SIS had started operating some days prior, but travel times for groundwater are in the range of weeks to months. Hence RGC considers these samples to be representative of summer low flow conditions before the Lynx SIS was operating. In November 2020, Zn concentrations in groundwater from well MW17-02D decreased to 1.1 mg/L Zn. This was the lowest Zn concentration that had been observed during the operation of the Phase I Lynx SIS (since October 2017) and suggested the system was effectively capturing ARD-impacted groundwater from the Lynx Reach and minimizing downstream migration to the Upper Old TDF Reach.

Observed Zn concentrations in groundwater at wells MW17-02D and MW17-03 vary in response to the seasonal flushing of ARD/ML from local sources in the Lynx Reach. Groundwater quality for these wells may also be affected by lateral flows from WRD1 to the north of these wells. The seasonal water quality trend is similar to the trend observed upgradient in samples collected from the PW14 pumping wells. That is, the highest concentrations are observed in winter following prolonged periods of high precipitation, whereas the lowest concentrations are observed at the end of summer and early fall of drier conditions. In 2022, peak Zn concentrations of up to 59.4 mg/L Zn were observed in January 2022 and February 2022, which is consistent with previous years. Zn concentrations decreased to 11 mg/L Zn at monitoring well MW17-02D at the end of October and 13.2 mg/L Zn at monitoring well MW17-03 in late November before increasing again with the onset of the wet winter season. RGC attributes this trend towards higher low-flow

concentrations (similar to those observed before the Phase I Lynx SIS was operating) to the intermittent operation and the recent reduced pumping rate for pumping well PW14-04. Pumping well PW14-01 was also not operated for extended periods in 2021 and 2022, which limited the effectiveness of the Phase I Lynx SIS, and may have contributed to the deterioration in groundwater quality downgradient of the system at wells MW17-02D and MW17-03. Note that no water quality samples were collected during winter high flow conditions prior to operation of the Phase I Lynx SIS. Hence the performance of the Phase I Lynx SIS during winter high flow conditions cannot be assessed.

Table 4-5

Performance summary for pumping well PW14-01

Year	Average Pumping Rate, L/s*	Days Operating, days	Pumped Volume, m^3	Average Observed Concentrations				Loads			
				SO_4	Cd-d	Cu-d	Zn-d	SO_4	Cd-d	Cu-d	Zn-d
				mg/L	mg/L	mg/L	mg/L	t/yr	kg/yr	kg/yr	t/yr
2017	30	58	150,335	306	0.02	0.2	15	48	3.0	30	2.3
2018	28	276	672,542	350	0.03	0.3	16	211	15	182	9.3
2019	21	334	595,762	287	0.02	0.4	13	157	12	187	7.0
2020	18	296	540,469	751	0.07	2.7	37	150	11	285	6.1
2021	0.0	0	0	-	-	-	-	-	-	-	-
2022	*20***	*153***	*264,384***	323	0.02	0.3	11	*84***	*4.7***	*65***	*2.7***
Total		**1,117 (58%)**	**2,223,492**	**-**	**-**	**-**	**-**	**650**	**45**	**750**	**27**

*When operating.

***Estimated.*

Table 4-6

Performance summary for pumping well PW14-03

Year	Average Pumping Rate*	Days Operating	Pumped Volume	Average Observed Concentrations				Loads			
				SO_4	Cd-d	Cu-d	Zn-d	SO_4	Cd-d	Cu-d	Zn-d
	L/s	Day	m^3	mg/L	mg/L	mg/L	mg/L	t/yr	kg/yr	kg/yr	t/yr
2017	14	70	84,055	402	0.04	1.2	33	27	3.0	110	2.3
2018	13	334	367,085	376	0.04	1.5	29	126	13	519	9.7
2019	12	365	378,317	256	0.02	1.0	15	114	11	452	6.8
2020	13	364	404,212	287	0.03	1.3	16	127	14	560	7.3
2021	*18.1***	*365***	*408,686***	471	0.05	1.8	24	*205***	*21***	*761***	*11***
2022	*12***	*365***	*378,317***	491	0.05	1.6	20	*190***	*21***	*623***	*7.7***
Total		**1,863 (97%)**	**2,020,673**	**-**	**-**	**-**	**-**	**789**	**83**	**3,025**	**44**

*When operating.

***Estimated.*

Table 4-7

Performance summary for pumping well PW14-04

Year	Average Pumping Rate*	Days Operating	Pumped Volume	Average Observed Concentrations				Loads			
				SO_4	Cd-d	Cu-d	Zn-d	SO_4	Cd-d	Cu-d	Zn-d
	L/s	Day	m^3	mg/L	mg/L	mg/L	mg/L	t/yr	kg/yr	kg/yr	t/yr
2017	15	70	90,187	825	0.08	2.6	29	76	8.0	240	2.7
2018	17	311	450,132	816	0.07	2.3	26	288	24	772	9.1
2019	16	362	494,143	572	0.04	1.3	17	276	20	679	9.0
2020	11	351	355,352	767	0.06	2.2	21	318	26	940	9.0
2021	*13***	*320***	*215,910***	1,052	0.06	1.8	22	*272***	*15***	*490***	*5.5***
2022	*1.4***	*140***	*16,934***	899	0.05	1.2	19	*15***	*0.9***	*21***	*0.3***
Total		**1,554 (81%)**	**1,622,658**	**-**	**-**	**-**	**-**	**1,245**	**94**	**3,142**	**36**

*When operating.

***Estimated.*

Table 4-8

Performance summary for Phase I Lynx SIS

Year	Average Pumping Rate*	Pumped Volume	Captured Contaminant Loads				Comments
			SO_4	Cd	Cu	Zn	
	L/s	m^3	t/yr	kg/yr	kg/yr	t/yr	
2017	59	324,577	151	14	380	7	Phase I Lynx SIS only operated for three months (Oct, Nov, and Dec) in 2017.
2018	58	1,489,760	625	52	1473	28	Phase I Lynx SIS operated as intended in 2018, 2019, and 2020, hence the higher flows and loads captured.
2019	48	1,468,222	547	43	1318	23	
2020	41	1,300,033	594	51	1785	22	
2021	*31***	*624,596***	*477***	*36***	*1251***	*16***	Phase I Lynx SIS performance deteriorated in 2021 and 2022 due to clogging (PW14-04) and pumping well PW14-01 not being operated continuously.
2022	*33***	*659,635***	*290***	*26***	*710***	*11***	

*When operating.

***Estimated.*

4.4.2 *Interim Phase II Lynx SIS Performance*

The Interim Phase II Lynx SIS consists of a fence of four shallow pumping wells (PW18 series) immediately downstream of the Car Bridge on the left (northern) creek bank (see **Figure 4-2**). The PW18 pumping wells were installed in 2018 to prevent the discharge of acidic (impacted) seepage to Myra Creek, which was first observed in early 2018 following high rainfall events. An unlined surface runoff storage pond (referred to as the "Duck Pond") and associated channels were identified to be the most likely source of these acidic seeps. Initial operation and testing of the Interim Phase II Lynx SIS were completed in May/June 2018 and the system started operating in March 2019. **Table 4-9** summarizes the volumes of water and contaminant loads captured by the Interim Phase II Lynx SIS since March 2019. Note, contaminant loads are expressed in kg/month, as they are much lower than the contaminant loads in groundwater captured by the Phase I Lynx SIS. In early 2021, the Interim Phase II Lynx SIS operated intermittently, and pumping ceased sometime in August 2021 when water levels decreased below the well screens and the system was subsequently disconnected. The Interim Phase II Lynx SIS was not operated in 2022 due to technical issues. All four submersible pumps were replaced, and the system was operating again as of February 1st, 2023.

Seep surveys were completed routinely after rainfall events by MFM personnel and no visible seepage along the creek bank was observed in 2022. This could be attributed to the low observed annual precipitation and overall lower groundwater levels in 2022 and/or the improved surface water management in this area, which aims to minimize the infiltration of impacted runoff to the shallow aquifer. Shallow groundwater in the vicinity of the Interim Phase II Lynx SIS, however, remains moderately impacted with seasonally varying metals concentrations. At well MW11-04, approximately 21 mg/L Zn was observed in March 2022 and April 2022 following a period of sustained precipitation. Zn concentrations then gradually declined over the summer to around 2 mg/L Zn. This suggests the continued seasonal presence of moderately to strongly impacted shallow groundwater in the vicinity of the Interim Phase II Lynx SIS. Wells MW16-04, MW16-05, and MW18-08S/D are adjacent to an unlined channel conveying runoff from the ETA/Duck Pond to the 25-Sump. Zn in groundwater samples from these wells varied seasonally between 1 mg/L Zn and 5 mg/L Zn, with an average of 2 mg/L Zn in 2022. Zn concentrations observed at wells MW11-04, MW16-04, MW16-05, and MW18-08S/D are shown in **Figure 4-8**. Water quality samples obtained from the inactive PW18 pumping wells in August and September 2022 showed similar Zn concentrations of around 1 mg/L Zn, however, no samples were collected during the wet season.

Table 4-9

Performance summary for Interim Phase II Lynx SIS

Month	Pumping Rate	Pumped Volume	Captured Loads							
			SO_4-d	Cd-d	Cu-d	Zn-d	Al-d	Ca-d	Fe-d	Mg-d
	L/s	m^3/month	kg/month	kg/month	kg/month	kg/month	kg/month	kg/month	kg/month	kg/month
Mar-19	16	42,051	1,522	0.05	0.8	25	0.7	830	0.4	108
Apr-19	16	40,851	1,368	0.05	1.0	24	0.9	695	0.4	99
May-19	16	42,854	1,274	0.04	0.9	21	0.9	713	0.5	89
Jun-19	13	34,642	885	0.03	0.5	13	0.4	539	0.3	69
Jul-19	14	36,357	785	0.02	0.3	11	0.2	563	0.4	58
Aug-19	14	36,426	766	0.02	0.4	11	0.2	535	0.4	60
Sep-19	14	35,251	721	0.02	0.4	11	0.2	489	0.4	61
Oct-19	7.9	21,159	455	0.01	0.2	7.0	0.1	319	0.2	35
Nov-19	7.9	20,477	505	0.02	0.4	9.5	0.3	315	0.2	38
Dec-19	7.0	18,749	453	0.02	0.4	8.2	0.2	290	0.2	35
2019	**12**	**328,818**	**8,732**	**0.3**	**5.3**	**141**	**4.1**	**5,288**	**3.4**	**650**
Jan-20	7.0	18,749	2,835	0.4	16	135	12	712	0.2	181
Feb-20	3.6	8,588	747	0.07	3.0	25	0.5	245	0.09	46
Mar-20	3.6	9,508	758	0.05	1.7	18	2.3	261	0.10	44
Apr-20	4.3	11,146	781	0.05	1.6	18	1.6	312	0.1	45
May-20	4.3	11,517	663	0.05	1.7	17	2.3	281	0.1	44
Jun-20	4.3	11,146	573	0.03	0.9	10	0.06	223	0.2	35
Jul-20	4.3	11,517	464	0.02	0.5	8.1	0.2	197	0.1	30
Aug-20	4.3	11,517	166	0.01	0.2	5.2	0.2	212	0.1	25
Sep-20	4.3	11,146	366	0.01	0.3	5.7	0.2	208	0.1	26
Oct-20	5.7	15,133	499	0.02	0.4	9.1	0.3	274	0.2	38
Nov-20	6.2	15,941	1,033	0.08	2.6	31	3.7	427	0.2	78
Dec-20	6.8	18,213	1,327	0.1	3.3	46	8.0	505	0.2	87
2020	**4.9**	**154,120**	**10,214**	**0.9**	**33**	**329**	**32**	**3,859**	**1.6**	**680**
Jan-21	5.5	14,731	1,089	0.09	1.0	45	4.0	453	0.1	82
Feb-21	5.0	12,096	797	0.06	0.6	30	2.3	351	0.1	59
Mar-21	4.0	10,714	572	0.03	0.4	18	1.1	271	0.1	41
Apr-21	3.3	8,450	373	0.01	0.1	8.3	0.1	190	0.08	25
May-21	3.3	8,839	610	0.05	1.6	20	3.4	240	0.09	47
Jun-21	3.3	8,450	499	0.04	1.1	15	1.2	217	0.08	33
Jul-21	3.3	8,732	334	0.01	0.08	5.9	0.1	176	0.09	23
Aug-21	3.3	8,732	279	0.007	0.05	4.4	0.05	172	0.02	20
Sep-21	0.0	0	0	0.00	0.00	0	0.0	0	0.00	0
Oct-21	0.0	0	0	0.00	0.00	0	0.0	0	0.00	0
Nov-21	0.0	0	0	0.00	0.00	0	0.0	0	0.00	0
Dec-21	0.0	0	0	0.00	0.00	0	0.0	0	0.00	0
2021	**2.6**	**80,743**	**4,553**	**0.3**	**5.0**	**146**	**12**	**2,070**	**0.7**	**330**
Jan-22	0.0	0	0	0.00	0.00	0	0.0	0	0.00	0
Feb-22	0.0	0	0	0.00	0.00	0	0.0	0	0.00	0
Mar-22	0.0	0	0	0.00	0.00	0	0.0	0	0.00	0
Apr-22	0.0	0	0	0.00	0.00	0	0.0	0	0.00	0
May-22	0.0	0	0	0.00	0.00	0	0.0	0	0.00	0
Jun-22	0.0	0	0	0.00	0.00	0	0.0	0	0.00	0
Jul-22	0.0	0	0	0.00	0.00	0	0.0	0	0.00	0
Aug-22	0.0	0	0	0.00	0.00	0	0.0	0	0.00	0
Sep-22	0.0	0	0	0.00	0.00	0	0.0	0	0.00	0
Oct-22	0.0	0	0	0.00	0.00	0	0.0	0	0.00	0
Nov-22	0.0	0	0	0.00	0.00	0	0.0	0	0.00	0
Dec-22	0.0	0	0	0.00	0.00	0	0.0	0	0.00	0
2022	**0.0**	**0**	**0**	**0.00**	**0.00**	**0**	**0.0**	**0**	**0.00**	**0**

4.4.3 *Old TDF Under-Drain Performance*

The Old TDF under-drain system is designed to capture ARD/ML-impacted groundwater downstream of the Old TDF, thereby preventing it from discharging to Myra Creek. Groundwater captured by the Old TDF under-drains (see **Figure 4-1**) flows by gravity to Pumphouse No. 4, from which it is pumped to the Superpond for treatment. Since a performance assessment by RGC (see RGC 2016) was completed, the NOD system has mostly been operated at a setting of "10-0-10", which represents a 10% opening for the Medium Drain, 0% opening for the Short Drain and 10% opening for the Long Drain. Note, the Short Drain at a 0% setting is equivalent to 0.5% opening. The long-term average pumping rate from the Old TDF under-drain system (at 10-0-10) is approximately 206 L/s (see **Table 4-10**)**.** In early 2021, a new sump level transmitter was commissioned for Pumphouse No. 4. This resulted in an increased sump level (reportedly rising above the outlets of the individual drainpipes) and reduced flows from the under-drains by approximately 30% as a result. The sump level was corrected on May 28th, 2022, to allow the drains to discharge freely into the sump, which increased flow rates to rates that are consistent with long-term averages.

In 2022, the average annual pumping rate (162 L/s) was approximately 20% lower than the long-term average from 2016 to 2020. The lower pumping rate in 2022 is likely due to operating Pumphouse No. 4 at an increased sump level until May 2022 (see above) and pumping at a constant (set) rate of 150 L/s throughout the summer while waiting for a replacement VFD. In addition, low annual precipitation and groundwater levels may have also resulted in overall lower flows to the under-drains. As of September 27th, 2022, the NOD was operated as intended for the remainder of the year with a set sump level and rates varying in response to changes in groundwater and creek levels. Before that, it appears that the higher sump level mainly resulted in reduced flows from the Inner Drain and Old Outer Drain to Pumphouse No. 4. The annual average Zn concentration in groundwater captured by all of the drains that report to Pumphouse No. 4 in 2022 was 5.0 mg/L Zn. Note that an unusually low concentration of 1.5 mg/L of Zn was observed in February 2022. Samples are only collected quarterly so the annual average Zn concentration may be skewed and is below the multi-year average observed at Pumphouse No.4. Further, the total estimated captured Zn load at Pumphouse No. 4 in 2022 (23 t Zn) is significantly less than in previous years due to the reduced pumping rate.

Table 4-10 summarizes estimated drain flows and Zn loads captured by the Old TDF under-drains. Note, flow rates are continuously recorded at Pumphouse No. 4 but contributions from the individual drains are not measured. Hence the contributions by individual drains are estimated by RGC from quarterly water quality samples collected from Pumphouse No. 4 and each of the individual drains via a load balance calculation. The fixed flow contribution is provided in **Table 4-10** and further details on this calculation are provided in RGC (2020). It should be noted that the individual flow contribution percentages had to be adjusted for 2021 and 2022 to reflect the changes in operation of Pumphouse No. 4 and how these changes

affect flow contributions from individual drains. Furthermore, operation of the Pumphouse No.4 changed several times in 2022 resulting in larger uncertainties in the load balance. Contaminant loads calculated for the individual drain segments for 2022 therefore carry more uncertainty than in previous years.

The average annual (n=4) Zn concentration in groundwater captured by the Inner Drain in 2022 is 29.7 mg/L Zn. This average Zn concentrations represents the seepage and shallow groundwater that reports to the Inner Drain near the buried toe of WRD1 beneath the Old TDF along the northern hillslope of Myra Valley. Flows from the Inner Drain were reduced in 2022 due to the elevated sump levels in Pumphouse No. 4. An estimated 4.6 t of Zn was captured by the Inner Drain in 2022, which accounts for approximately 17% of the combined Zn load captured by the Old TDF under-drain system and delivered to the Superpond for treatment. This represents only about half of the load captured by the Inner Drain in previous years when the under-drains were operating as intended.

In 2022, an average Zn concentration of 5.2 mg/L Zn was observed in groundwater captured by the Medium Drain, which is the segment of the NOD that is situated in the center of the main Zn plume in the Lower Old TDF Reach near Myra Creek. Estimated zinc loads captured by the Medium Drain in 2022 are lower than the historical average due to the reduced pumping rate from Pumphouse No. 4. An average Zn concentration of 3.4 mg/L Zn was observed at the Short Drain segment compared to the long-term average of 1.7 mg/L. The estimated Zn load captured by the Short Drain segment in 2022, however, was comparable to the historic average due to the overall lower pumping rates observed in 2021. Flows and loads to the Short Drain are generally small, however, representing only approximately 10% of the estimated total Zn load to the under-drain system. The average Zn concentration in groundwater captured by the Long Drain segment was 4.1 mg/L in 2021 which is similar to the long-term average. The estimated Zn load captured by the Long Drain (6.7 t Zn) in 2022 is comparable to previous years. The Old Outer Drain was estimated to capture around 5.1 t Zn in 2022, or approximately 19% of the total Zn load reporting to Pumphouse No. 4. The average annual Zn concentration at the Old Outer Drain was elevated compared to previous years at around 5 mg/L.

Table 4-10

Groundwater flows, Zn concentrations, and captured Zn loads by Old TDF under-drains, 2010 to 2022

Drain ID				2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Average Annual Observed Zn Concentration, mg/L																
Inner Drain				29	28	28	29	35	27	28	25	27	21	28	33	30
Old Outer Drain				6.3	6.4	6.3	5.4	6.1	7.6	5.9	5.6	3.1	2.3	3.3	6.1	5.3
Short Drain				1.7	2.7	1.4	1.2	1.7	1.8	1.4	1.0	2.9	0.6	0.7	3.5	4.3
Medium Drain				7.9	6.1	6.4	5.2	4.4	7.8	7.4	7.5	3.7	5.7	3.2	6.2	6.1
Long Drain				3.0	3.1	3.1	2.0	1.5	2.4	3.3	3.4	3.9	1.7	1.9	7.0	4.5
Pumphouse No. 4				6.7	8.6	7.5	6.2	6.6	6.7	6.7	6.9	5.8	5.4	5.3	6.1	5.0
			Average Flow Rates, L/s*													
Flow contribution, %	2012 to 2020	2021	2022													
Inner Drain	10%	5%	3%	11	11	12	11	10	10	11	10	10	11	11	7	5
Old Outer Drain	30%	20%	20%	42	42	46	42	40	41	43	42	40	44	43	29	32
Short Drain	10%	15%	15%	32	32	35	32	30	31	32	31	30	33	32	22	24
Medium Drain	20%	30%	30%	63	63	69	64	59	62	64	63	59	67	65	44	49
Long Drain	30%	30%	32%	63	63	69	64	59	62	64	63	59	67	65	44	52
Pumphouse No. 4*	**100%**	**100%**	**Total:**	**210**	**210**	**230**	**212**	**198**	**207**	**214**	**209**	**198**	**222**	**216**	**145**	**162**
			Calculated Zn Load, t													
Inner Drain				9.7	9.4	10.2	9.8	10.9	8.9	9.4	8.2	8.3	7.5	9.5	7.4	4.6
Old Outer Drain				8.4	8.5	9.1	7.3	7.6	9.8	7.9	7.4	3.9	3.2	4.5	5.5	5.1
Short Drain				1.7	2.6	1.5	1.2	1.6	1.7	1.4	1.0	2.7	0.6	0.7	2.3	2.6
Medium Drain				15.8	12.2	14.0	10.4	8.2	15.3	15.1	14.8	6.9	12.1	6.5	7.1	8.0
Long Drain				6.0	6.2	6.8	4.1	2.8	4.7	6.7	6.8	7.3	3.7	3.8	8.3	6.7
Pumphouse No. 4**			**Total:**	**44.4**	**57.0**	**52.7**	**41.2**	**41.5**	**43.6**	**45.3**	**45.4**	**36.2**	**38.0**	**36.2**	**27.5**	**22.7**

* Flowrates for individual drain segments are calculated from fixed percentages except for 2021 and 2022.

**Total Pumphouse No.4 loads are calculated with water quality data observed at Pumphouse No. 4 rather than summing up the individual drain components.

4.5 REQUIRED WATER QUALITY RESULTS (PERMIT M-26)

Water quality results for required wells and seeps are provided in **Appendix D**. Results are discussed in the sub-sections below.

4.5.1 *Seepage Water Quality Results*

Seeps that are required to be sampled (when flowing) are outlined in Section 4.2.3 and include the Car Bridge Seep and Pipe Bridge Seep, amongst others. Flows from the DDSD were observed once in 2022 on December 26th. No sample was collected at the time due to a lack of available safe access for staff to perform this task. Flows were estimated visually to be 10-15 L/s and the water was observed to be clear and colourless. None of the other seeps were sampled in 2022 due to lack of flows.

4.5.2 *Groundwater Reporting to Old TDF Under-Drains*

Water quality time trends for individual drain segments of the NOD and the Inner Drain (IN-DRAIN) and original Outer Drain (OUT-DRAIN) are shown in **Figure 4-9** and **Figure 4-10.** Complete water quality results for these components of the Old TDF under-drains in 2022 are provided in **Appendix D**. The various drains and their performance (and how the drain was operated in 2022) are described in Section 4.4.3. Historically, groundwater captured by the Inner Drain is characterized by the highest concentrations of Zn and other constituents, as this drain is located along the toe of the WRD1 beneath the Old TDF. The Inner Drain therefore captures seepage and groundwater that is strongly-impacted by the ARD/ML produced by the oxidation of sulphide-bearing waste rock in WRD1. The average Zn concentration in groundwater captured by the Inner Drain in 2022 was 30 mg/L Zn, which is consistent with long-term water quality observations.

The Medium NOD is situated in the centre of the main Zn plume in the Lower Old TDF Reach. This drain segment therefore captures more impacted groundwater than the Short Drain and Medium Drain and the original Outer Drain, Zn concentrations in groundwater captured by the Medium Drain are known to vary (to some degree) in response to the flushing of Zn and other constituents related to ARD/ML from sources upgradient of groundwater in the MVA. The highest Zn concentration observed in 2022 was 11.6 mg/L Zn, which was observed in late May. Zn concentrations in groundwater captured by the Short Drain segment of the NOD showed a similar pattern to the Medium Drain in 2022, with Zn concentrations ranging from 1.0 mg/l to 9.5 mg/L. The Long Drain segment of the NOD captured groundwater with Zn concentrations ranging between 2.2 mg/L and 7.0 mg/L.

In summary, concentrations of Zn and other constituents related to ARD/ML in groundwater captured by the Old TDF under-drain system were higher in 2022 (and 2021) than observed from 2018 to 2020. Higher concentrations could be due to inconsistent operation of the Phase I Lynx SIS, reduced flows from the under-drains and hence less dilution with creek water, and changes in groundwater quality upgradient of the drains. Further investigation into the water quality changes will be conducted after continued

observation of the water quality changes following the repairs and corrections to the various components of the groundwater interception systems.

4.5.3 *Groundwater Quality Near Old TDF Under-Drains*

Groundwater quality observations for 2022 are provided in **Appendix D**. Time trends for selected parameters are provided in **Figures 4-11** to **4-14**. Each of the wells shown in these figures is screened in the MVA near the Old TDF under-drain system near Myra Creek in the Lower Old TDF Reach. Monitoring well MW-D is screened in the Shallow MVA upgradient of the NOD. Monitoring well MW-A is screened in the Shallow MVA beneath well MW-D. Groundwater from these two wells is characterized by elevated SO_4 and metals, e.g., up to 29 mg/L Zn for well MW-D, which represent the impacted groundwater that reports to the NOD. Historically, concentrations in groundwater from these two wells have shown to be highly-variable due to changes in the characteristics of the main plume(s) reporting to groundwater in the Lower Old TDF reach from sources upgradient. This variation was also observed in 2022.

At well MW-F, Zn concentrations varied between 0.2 mg/L Zn and 5.2 mg/L Zn in 2022. This well is located immediately downgradient of well MW-D (and the NOD) and is screened in the Shallow MVA. Elevated concentrations in groundwater suggest some groundwater bypass but no major changes in water quality occurred in 2022. Well MW-C screens the Shallow MVA beneath well MW-D and is located downgradient of well MW-A between the NOD and Myra Creek. These wells monitor impacted groundwater bypassing the NOD. Zn concentrations in the deeper well MW-C are often higher than at well MW-F, suggesting greater bypass of the NOD at greater depths in the MVA at this location. An average concentration of 3.4 mg/L Zn was observed in MW-C in 2022 with no apparent trend. Zn concentrations at well MW-F (4.3 to 5.8 m bgs, “Shallow MVA”) varied between 1.1 mg/L and 4.8 mg/L in 2022, also suggesting some bypass.

Monitoring well MW13-14S (8.0 to 11.0 m bgs, “Shallow MVA”) is situated between the Medium Drain segment of the NOD and Myra Creek. In 2022, groundwater from this well was characterized by elevated Zn concentrations of up to 7.1 mg/L. This suggests some impacted groundwater was occasionally bypassing the Medium Drain. Groundwater from well MW13-14D (14.7 to 17.7 m bgs, “Shallow MVA”) was characterized by up to 6.1 mg/L Zn. This is comparable to concentrations in the shallower MVA at this location suggesting similar occasional increased bypass.

Monitoring well MW13-15S (9.5 to 12.5 m bgs, “Shallow MVA”) is located between the downstream end of the Medium Drain and Myra Creek. Zn concentrations were consistently below 1 mg/L, suggesting adequate performance of the Medium Drain at this location. Groundwater from well MW13-15D (16.2 to 19.2 m bgs, “Deep MVA”) was characterized by similar low Zn concentrations than in the shallower MVA.

In general, concentrations in groundwater near the Old TDF under-drains varied in 2022 with no clear trends apparent. Additional monitoring and operation of the under-drains at the recommended sump level and

settings are required to discern long-term trends. There was no evidence of bypass beneath Myra Creek to the downstream wells that were monitored voluntarily in 2022.

4.6 WATER QUALITY IMPACTS TO RECEIVING ENVIRONMENT

Contaminant loads and recent water quality trends for Myra Creek are discussed below, as they are directly affected by the operation of the site-wide SIS, including the Old TDF under-drains, Phase I Lynx SIS, and Interim Phase II Lynx SIS (when operated). Water quality in Buttle Lake and Thelwood Creek are discussed in the 2022 Monitoring Report for Effluent Permit PE-6858 and not repeated here.

4.6.1 *Myra Creek Quality – Inferences from Creek Surveys*

Creek surveys have been routinely conducted since April 2012 to support baseline investigations of Myra Creek water quality and estimate loads from groundwater to the creek from different reaches of the site. A comprehensive description of estimated Zn loads in groundwater to Myra Creek is provided in RGC (2016b), where loads in the creek are used to define the major site reaches, i.e. the Lynx Reach, Upper Old TDF Reach, and Lower Old TDF Reach. As of December 31st, 2022, a total of fifty surveys have been completed in Myra Creek for a range of streamflows. These surveys involve collecting water quality samples from the Car Bridge (station MC-S11 or MC-100) to station MC-TP4 (at MC+1350) (see **Figure 4-3** for chainage markers). More recently, samples are also collected upstream of the Car Bridge along the ETA when MFM staff have enough time for this additional (voluntary) sample collection. Samples are collected in 50 m intervals on the left-hand creek bank, i.e. on the north side of the creek towards the WRDs and TDFs. A total of ten (10) surveys that include samples from the right-hand creek bank have been completed since 2012. The most recent survey (October 2022) was completed in 100 m intervals from MC+0 to MC-TP4 collecting samples from the left-hand creek bank.

Figure 4-15 shows the average Zn concentrations in Myra Creek from all of the surveys completed since 2012 (n=50). Also provided are the average Zn concentrations in surveys completed before the Phase I Lynx SIS was operating (n=36) and during the operation of the Phase I Lynx SIS since September 30th, 2017 (n=14). Note that concentrations increase substantially immediately downstream of the Car Bridge, where impacted groundwater is known to discharge to Myra Creek. An increase in concentrations near stations MC+150 and MC+200 also suggests additional (discrete) seepage zones in these areas. Zn concentrations also increase between stations MC+600 and MC+800, which is another known groundwater discharge zone. An abrupt increase (spike) in concentrations in Myra Creek is usually observed at station MC+800, a known discrete seepage area. Concentrations remain relatively constant along the NOD, suggesting the under-drain system effectively captures the contaminant plume(s) migrating towards Myra Creek in the Lower Old TDF Reach.

Recent surveys completed since start of operation of Phase I Lynx SIS and Interim Phase II Lynx SIS show a less pronounced increase in concentrations in the Lynx Reach. This suggests that operation of the

Phase I and Interim Phase II Lynx SIS may have reduced contaminant loading to this reach of Myra Creek. However, it is noted that more recent surveys are biased towards dry summer low flow conditions when precipitation runoff and flows of shallow seepage and groundwater near the Car Bridge contribute less load to the creek. **Figure 4-16** shows Zn concentrations from creek surveys completed since April 2012 when the daily average streamflow in the creek (at the Car Bridge) is comparable to the streamflow during the latest survey on October 19th, 2022. These data are plotted here so concentrations in the creek under similar streamflow conditions in the creek can be directly compared. Also included for comparison is the survey completed in August 2021 when the under-drains operated at reduced capacity due to the increased sump level.

Estimated daily Zn loads in Myra Creek and from treated effluent during the low flow creek surveys are provided in **Table 4-11**. Streamflows ranged from 609 L/s in late September (just before Phase I Lynx SIS began operating) to 1,134 L/s in August 2021. These surveys should be evaluated together with daily composite creek samples collected at the downstream end of the site (analysis provided in Section 4.6.2 below). The latest survey completed on October 19th, 2022, showed distinct seepage at MC+200 and an increase in Zn concentrations between stations MC+600 and MC+800, both previously documented seepage zones. Note that an increase in Zn concentrations along the NOD was observed in 2021 when flows from the underdrains were reduced and bypass occurred. An increase along the NOD was not evident in the October 2022 survey when the NOD operated as intended. However, samples collected at stations MC+1250 to MC+1350 were slightly elevated suggesting some bypass along the Short NOD and/or a discrete seepage zone in that area.

Table 4-11

Estimated daily Zn loads in Myra Creek and treated effluent – low flow creek surveys

Sampling Location	Creek survey date:	9-Sep-14	29-Jul-15	27-Sep-17	28-Aug-19	11-Aug-20	18-Aug-21	19-Oct-22
	Streamflow (at carbridge), L/s:	637	692	609	760	827	1134	774
MC-S11		0.3	12	1.3	0.6	0.3	-	-
MC-50		0.6	12	0.3	0.5	-	-	-
MC+0		0.8	9.1	-	0.5	0.4	0.6	0.6
MC+50		0.7	7.6	1.7	0.4	-	-	0.4
MC+100		0.8	6.7	4.8	0.9	0.5	1.2	0.5
MC+150		6.4	21	8.3	1.0	1.3	-	0.6
MC+200		3.7	15	8.4	0.6	0.5	1.6	3.6
MC+250		2.5	10.0	7.8	4.0	0.4	-	1.0
MC+300		2.0	9.1	4.9	0.6	0.4	1.2	1.4
MC+350		2.0	8.6	4.3	0.7	0.4	-	1.0
MC+400		1.7	7.6	3.9	0.5	0.4	1.3	0.9
MC+450		2.0	8.3	3.8	0.7	0.5	-	1.0
MC+500		3.6	10	3.9	1.2	0.5	1.8	1.1
MC+550		5.1	11	4.3	2.3	1.2	-	1.4
MC+600		6.3	12	4.4	2.5	1.4	3.4	2.0
MC+650		8.1	21	7.2	3.4	2.3	-	4.6
MC+700		7.4	14	5.5	3.7	2.3	19	3.0
MC+750		10.0	15	7.0	0.5	2.6	-	6.6
MC+800		11	18	7.3	4.1	3.5	9.0	7.6
MC+850		8.7	16	7.3	4.6	3.2	-	4.4
MC+900		8.4	15	7.2	4.7	3.0	5.6	4.2
MC+950		8.3	15	7.4	4.6	3.3	-	4.0
MC+1000		8.2	15	7.2	4.3	3.0	5.2	4.1
MC+1050		8.2	15	6.8	4.3	2.7	-	4.1
MC+1100		8.3	14	6.5	4.2	2.5	5.2	4.1
MC+1150		7.9	13	6.7	4.2	2.7	-	4.1
MC+1200		8.0	14	6.7	4.3	2.7	11	4.2
MC+1250		8.1	14	6.7	4.5	2.9	-	4.9
MC+1300		8.1	15	9.5	4.2	2.7	87	4.8
MC-TP4		7.9	15	6.9	4.5	3.0	11	4.8
Treated effluent load, kg/day		7.8	1.4	1.5	2.4	2.2	2.7	1.0
Load contribution by treated effluent, %		1.0	9%	0.2	0.5	0.7	0.2	0.2
Loads calculated from auto-sampler data at MC-TP4								
Estimated load in Myra Creek at MC-TP4, kg/day		15	11	6.9	4.2	4.4	11	7.8
Treated effluent load, kg/day		7.8	1.4	1.5	2.4	2.2	2.7	1.0
Load contribution by treated effluent, %		53%	12%	22%	57%	50%	24%	13%

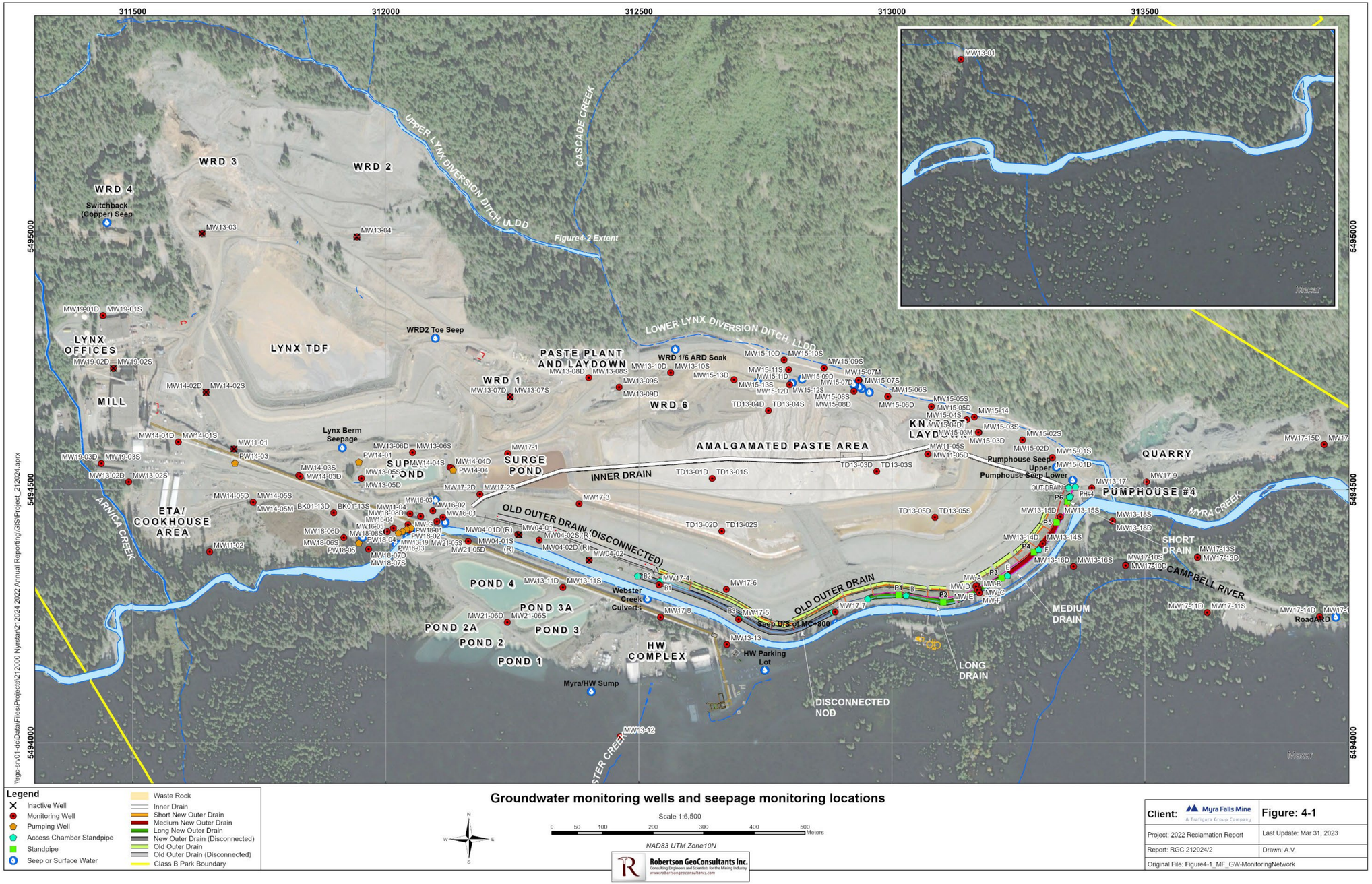
4.6.2 *Water Quality Trends in Myra Creek*

Figure 4-17 shows Cd-d, Cu-d, and Zn-t in Myra Creek at station MC-TP4 and in treated effluent (MP-EFF) discharged from the Myra Ponds for 2022. Cd-d, Cu-d, and Zn-t concentrations are plotted because concentrations of each consistently exceed acute BC WQGs for the creek (at all times of the year), hence these parameters are considered the key contaminants of concern in Myra Creek. Time trends for other

constituents are provided in the 2022 Monitoring Report for Effluent Permit PE-6858 and further discussion of WQG exceedances in 2022 is provided there. Time trends for Cd-d, Cu-d, and Zn-t in Myra Creek at stations MC-TP4 (2020 to 2022) and MC-M2 (2012 to 2022) are provided in **Figures 4-18** and **4-19**, respectively**.** These data are provided to illustrate recent trends in water quality while Phase I Lynx SIS has operated.

Figure 4-18 compares Zn concentrations at the downstream end of the site at MC-TP4 for 2020 to 2022. Myra Creek streamflow rates for 2020 to 2022 are also shown in **Figure 4-18** for reference. Concentrations are usually elevated in wet winter months, then decrease in the spring and early summer when loading from groundwater is reduced and streamflow rates are high. In late summer, concentrations increase when streamflows are lowest providing only little dilution. In early 2021, changes in operation of the Old TDF under-drains resulted in increased bypass and elevated Zn concentrations in Myra Creek at MC-TP4 throughout 2021. The drains were again operated at the usual settings (capacity) starting May 28th, 2022, which coincided with the beginning of the spring runoff and higher streamflow rates providing dilution. The VFD of the main pump had to be replaced at the end of July 2022 and a fixed rate of 150 L/s was set while awaiting delivery of the VFD. From October to December, the under-drains were operated as intended. Note, an abrupt decrease in Zn concentrations was observed on November 26th, 2022, after the collection sump at MC-TP4 was cleaned and the intermediate collection vessel was replaced for the auto-sampler by MFM staff. Concentrations of Zn and other constituents subsequently continued the increasing trend observed before cleaning upgrade, but concentrations were noticeably lower, i.e., offset to a lower concentration. This suggests some of the elevated metal concentrations in the creek are related to the poor condition of the intermediate collection vessel (prior to November 26th, 2022) and that concentrations in late 2022 are more representative of the creek.

The most notable trend in water quality in Myra Creek in recent years is the increase in mid-2021 due to the increased sump level in Pumphouse No. 4, which caused the Old TDF under-drains to work less effectively and thereby led to greater bypass to the creek. In 2022, operation of the Old TDF Under-drains was improved and peak concentrations in Myra Creek in the summer months were much lower by comparison, e.g., 148 µg/L Zn. Overall, concentrations in 2022 were much closer to concentrations observed in 2020 when the NOD was operated as recommended in RGC (2016) (see **Figure 4-18**). Low annual precipitation and hence generally lower groundwater flows may also have contributed to lower concentrations in Myra Creek. Nonetheless, this suggests higher concentrations in Myra Creek (observed in 2021) were temporary and that water quality conditions in Myra Creek have returned to those normal conditions that reflect the near-continuous operation of the Phase I Lynx SIS and the operation of the Old TDF under-drains as intended. This is consistent with water quality trends for Myra Creek downstream at station MC-M2 (see **Figure 4-19** for trends and **Figure 4-3** for location), where concentrations in Myra Creek were lower than in 2021. Trendlines and standard error (see shading) for Cd, Cu, and Zn concentrations are provided for reference.



Legend

- Inactive Well
- Monitoring Well
- Pumping Well
- Access Chamber Standpipe
- Standpipe
- Seep or Surface Water
- Waste Rock
- Inner Drain
- Short New Outer Drain
- Medium New Outer Drain
- Long New Outer Drain
- New Outer Drain (Disconnected)
- Old Outer Drain
- Old Outer Drain (Disconnected)
- Class B Park Boundary

Groundwater monitoring wells and seepage monitoring locations

Scale 1:6,500

0 50 100 200 300 400 500 Meters

NAD83 UTM Zone10N

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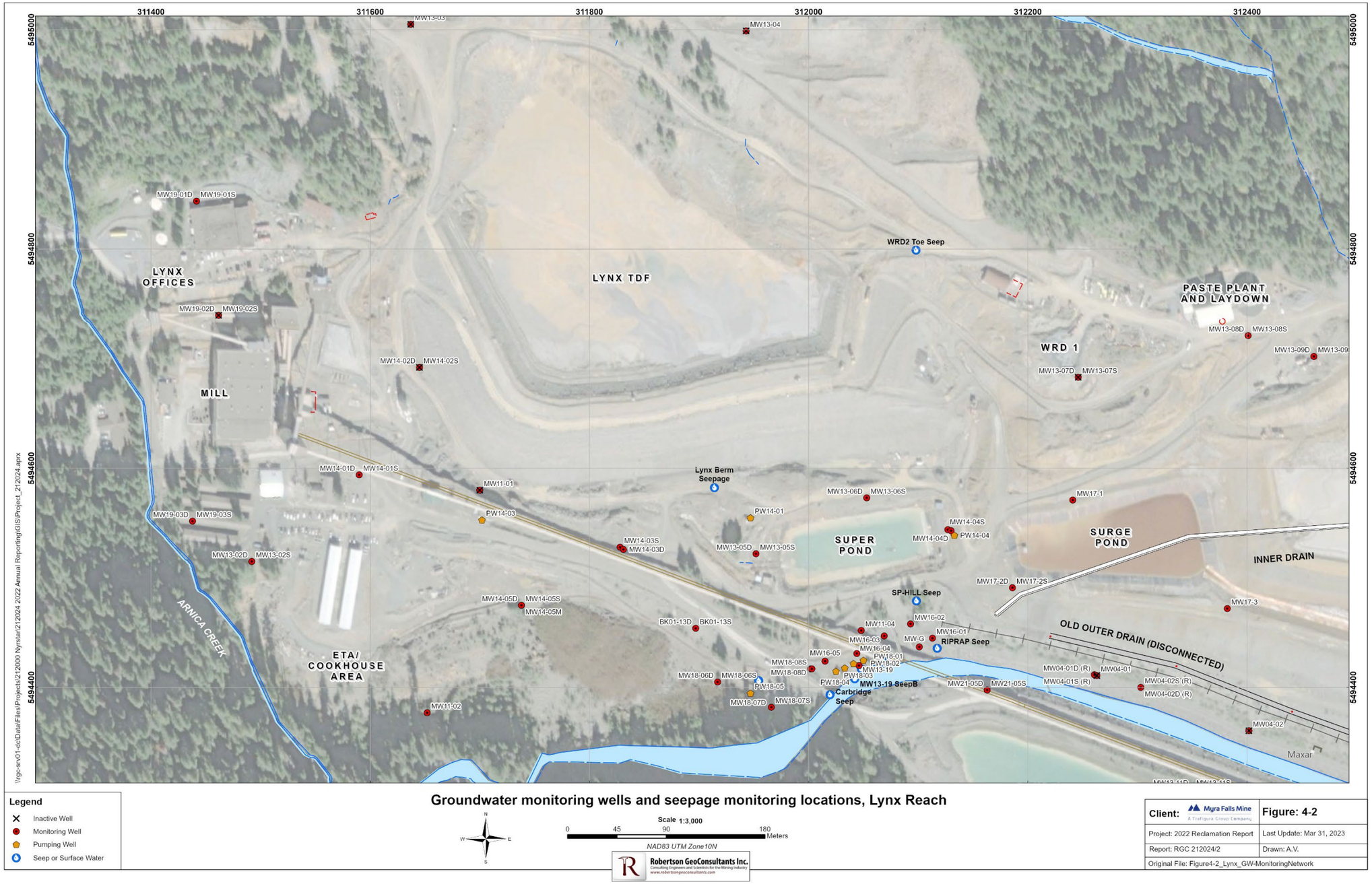
Client: Myra Falls Mine, A Trafigura Group Company	**Figure: 4-1**
Project: 2022 Reclamation Report	Last Update: Mar 31, 2023
Report: RGC 212024/2	Drawn: A.V.
Original File: Figure4-1_MF_GW-MonitoringNetwork	



Legend

- Inactive Well
- Monitoring Well
- Pumping Well
- Seep or Surface Water

Groundwater monitoring wells and seepage monitoring locations, Lynx Reach

Scale 1:3,000
0 45 90 180 Meters
NAD83 UTM Zone10N

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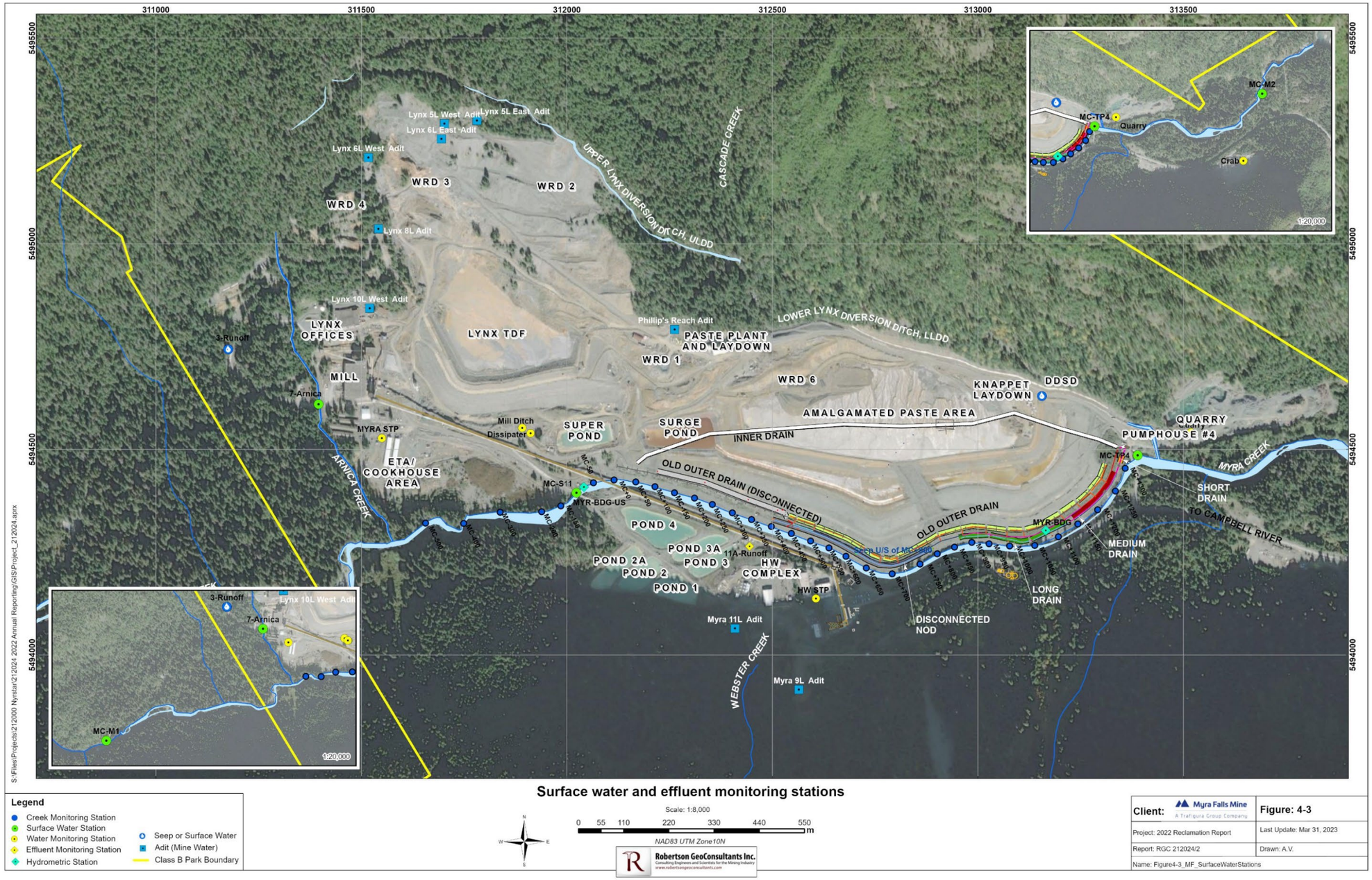
Client: Myra Falls Mine, A Trafigura Group Company	Figure: 4-2
Project: 2022 Reclamation Report	Last Update: Mar 31, 2023
Report: RGC 212024/2	Drawn: A.V.
Original File: Figure4-2_Lynx_GW-MonitoringNetwork	



Legend

- Creek Monitoring Station
- Surface Water Station
- Water Monitoring Station
- Effluent Monitoring Station
- Hydrometric Station
- Seep or Surface Water
- Adit (Mine Water)
- Class B Park Boundary

Surface water and effluent monitoring stations

Scale: 1:8,000

0 55 110 220 330 440 550 m

NAD83 UTM Zone10N

Robertson GeoConsultants Inc.

Client: Myra Falls Mine	Figure: 4-3
Project: 2022 Reclamation Report	Last Update: Mar 31, 2023
Report: RGC 212024/2	Drawn: A.V.
Name: Figure4-3_MF_SurfaceWaterStations	

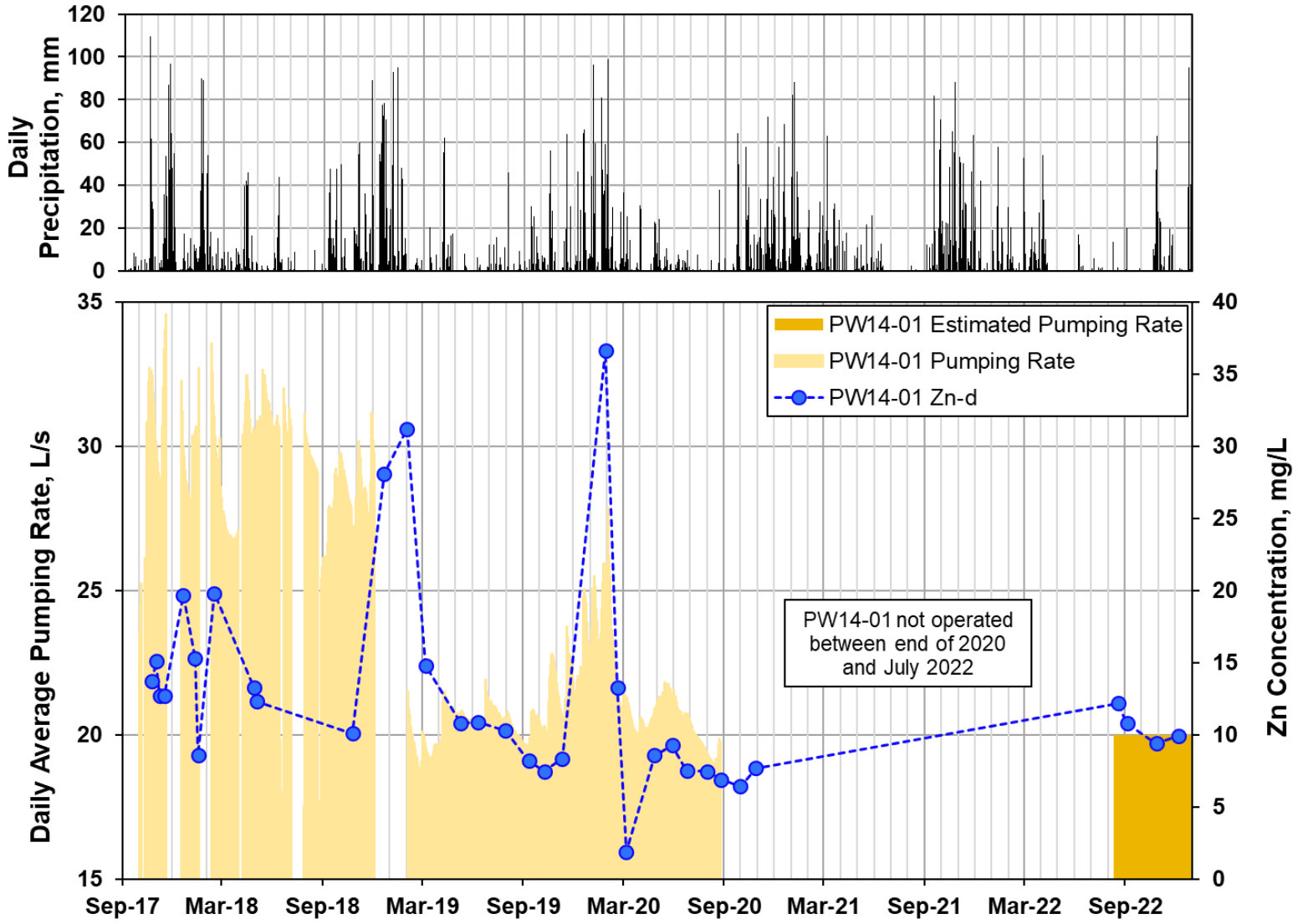


Figure 4-4. Observed and estimated pumping rates and Zn concentration at Pumping Well PW14-01

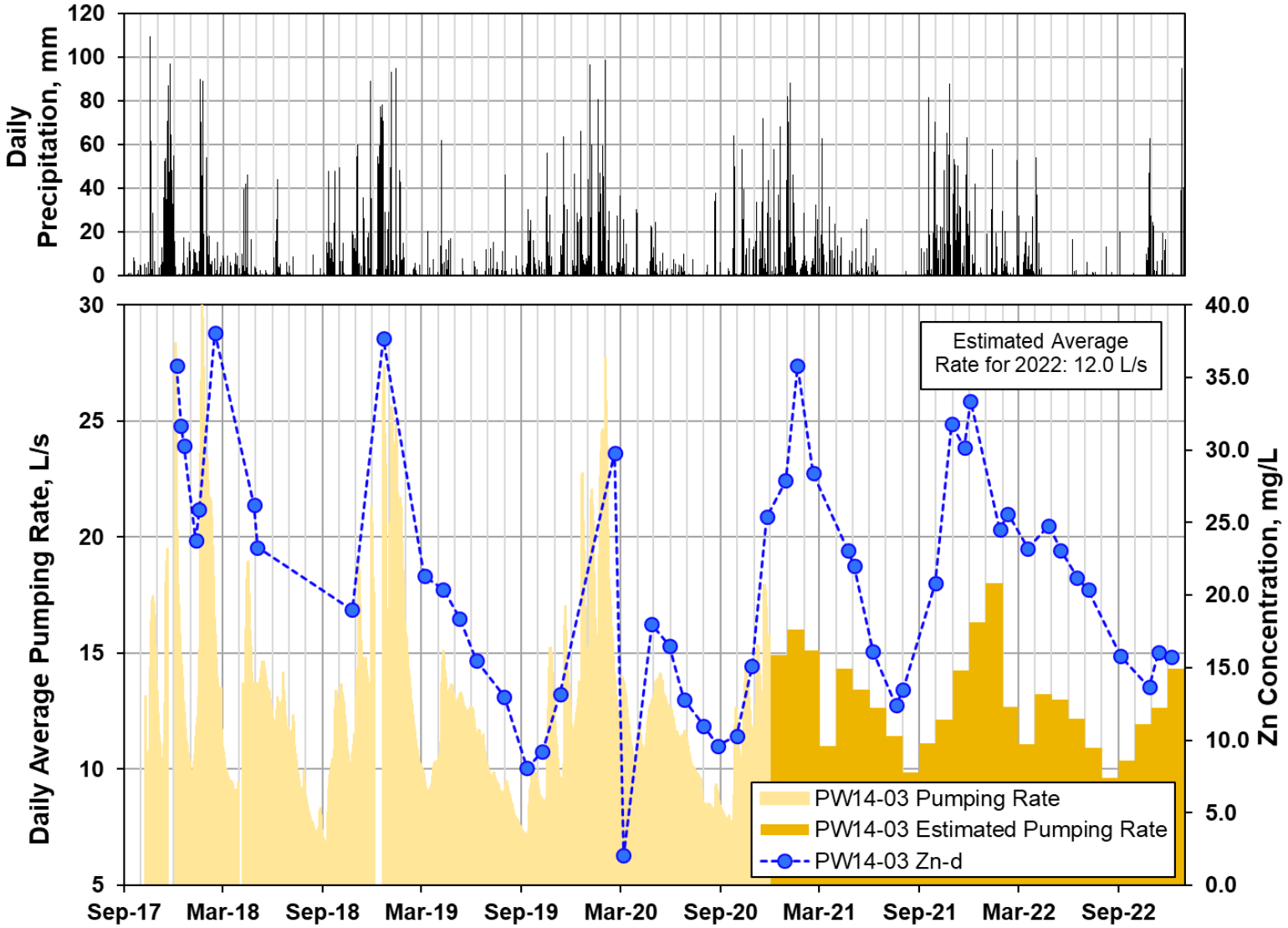


Figure 4-5. Observed and estimated pumping rates and Zn concentration at pumping well PW14-03

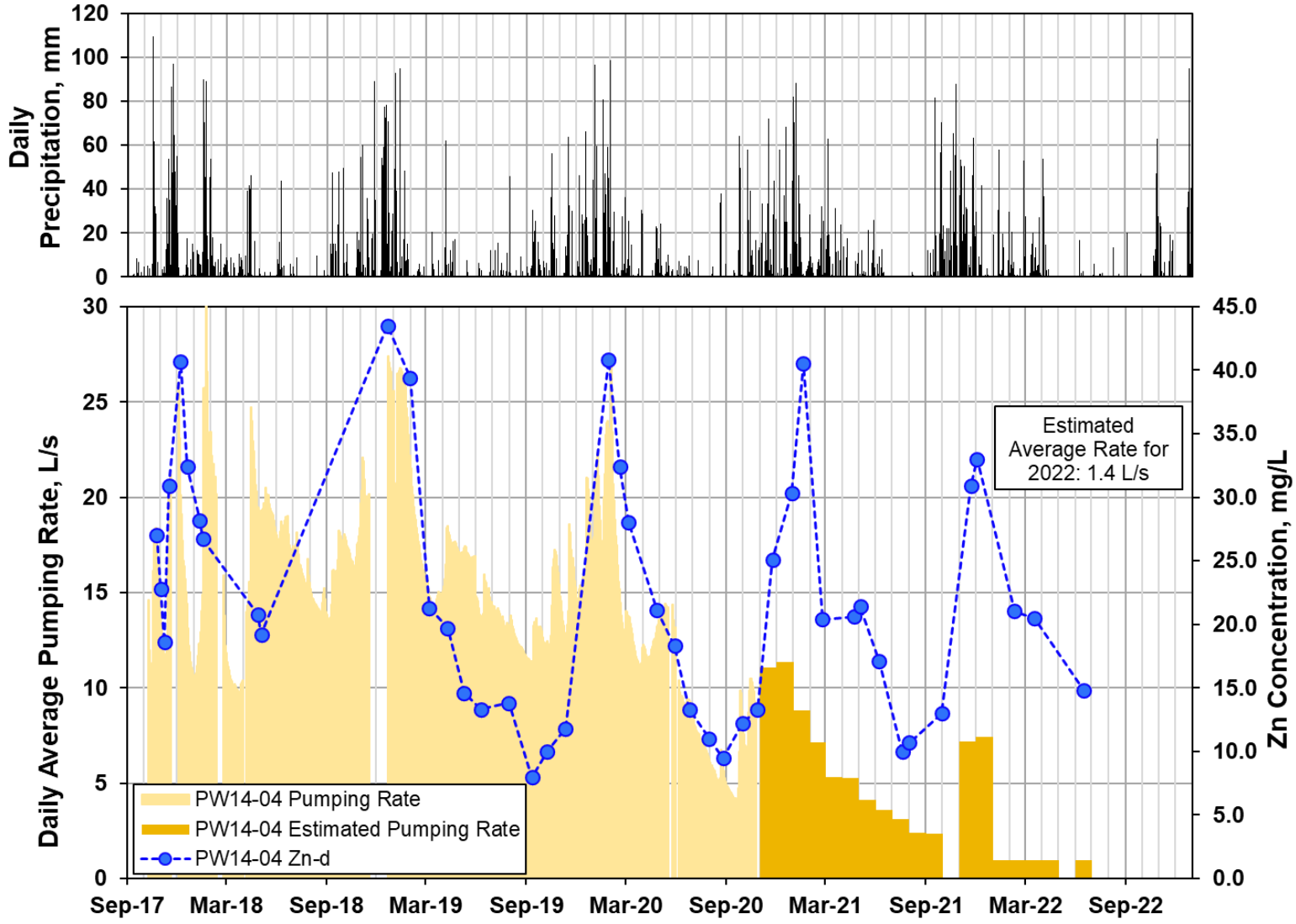


Figure 4-6. Observed and estimated pumping rates and Zn concentration at Pumping Well PW14-04

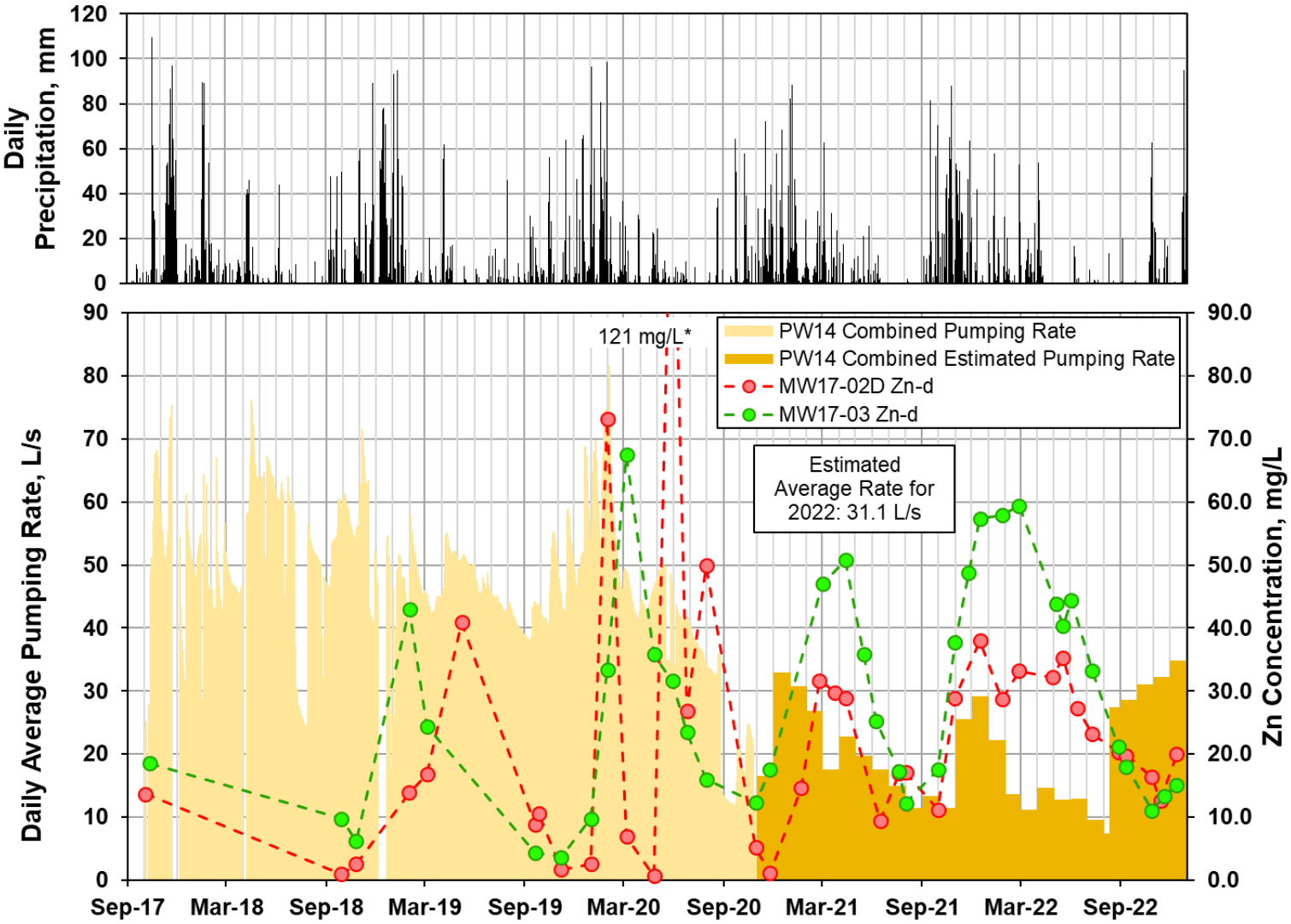


Figure 4-7. Combined Phase I Lynx SIS pumping rate (observed and estimated) and Zn concentration at monitoring wells MW17-02D and MW17-03

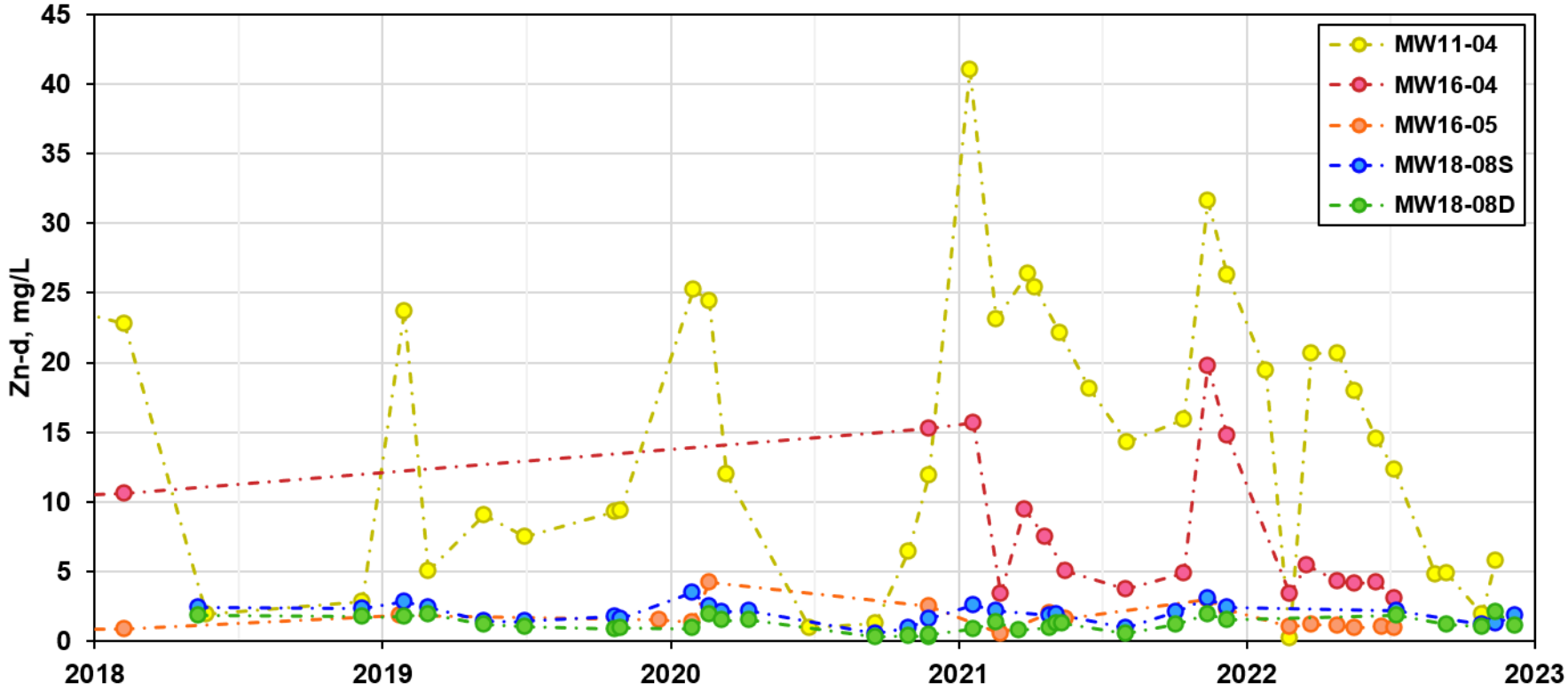


Figure 4-8. Zn Concentrations in groundwater at monitoring wells MW11-04, MW16-04 and MW18-08S/D, 2018 to 2022

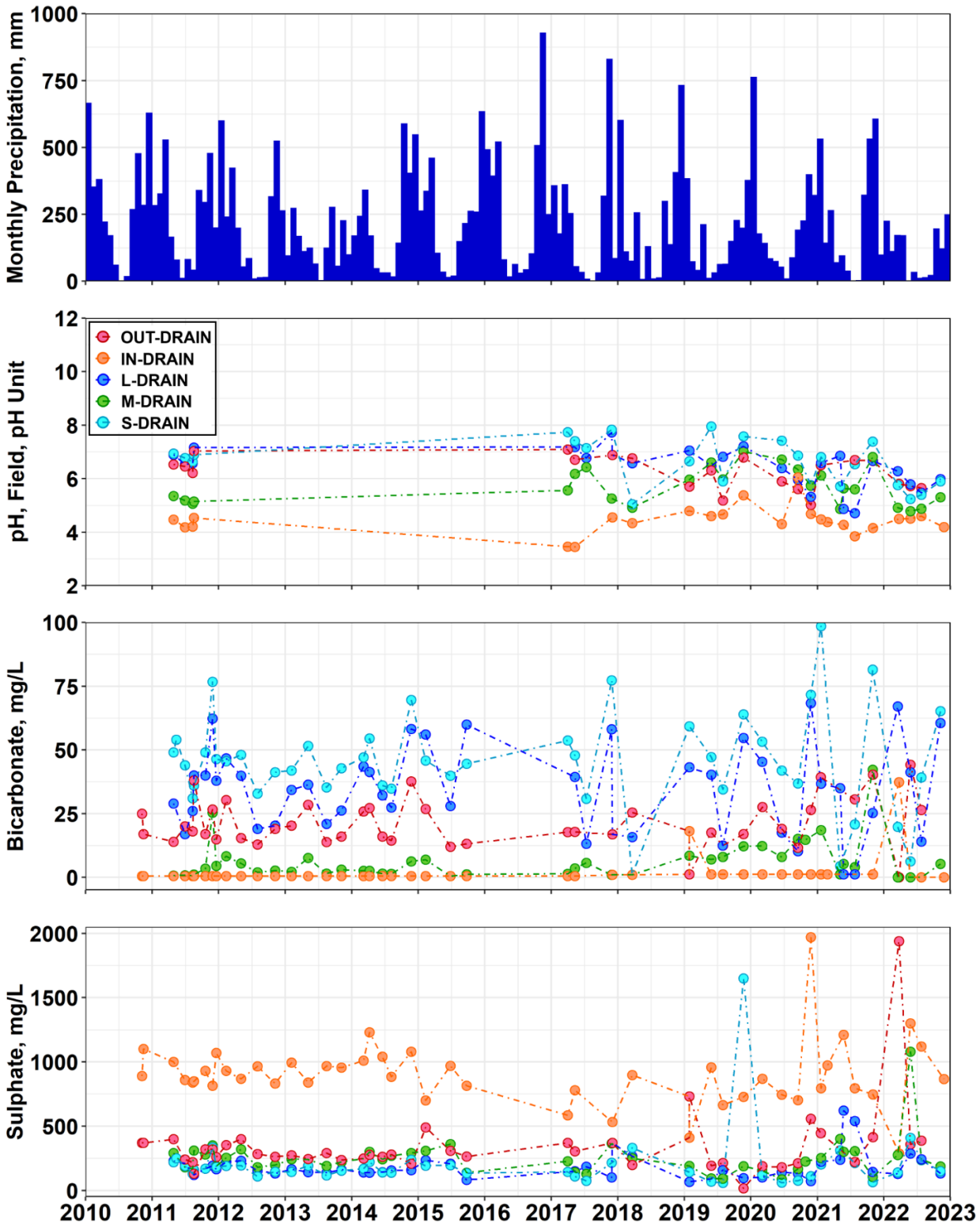


Figure 4-9. pH, bicarbonate, and sulphate concentrations in groundwater samples from Old TDF Under-Drains, 2010 to 2022

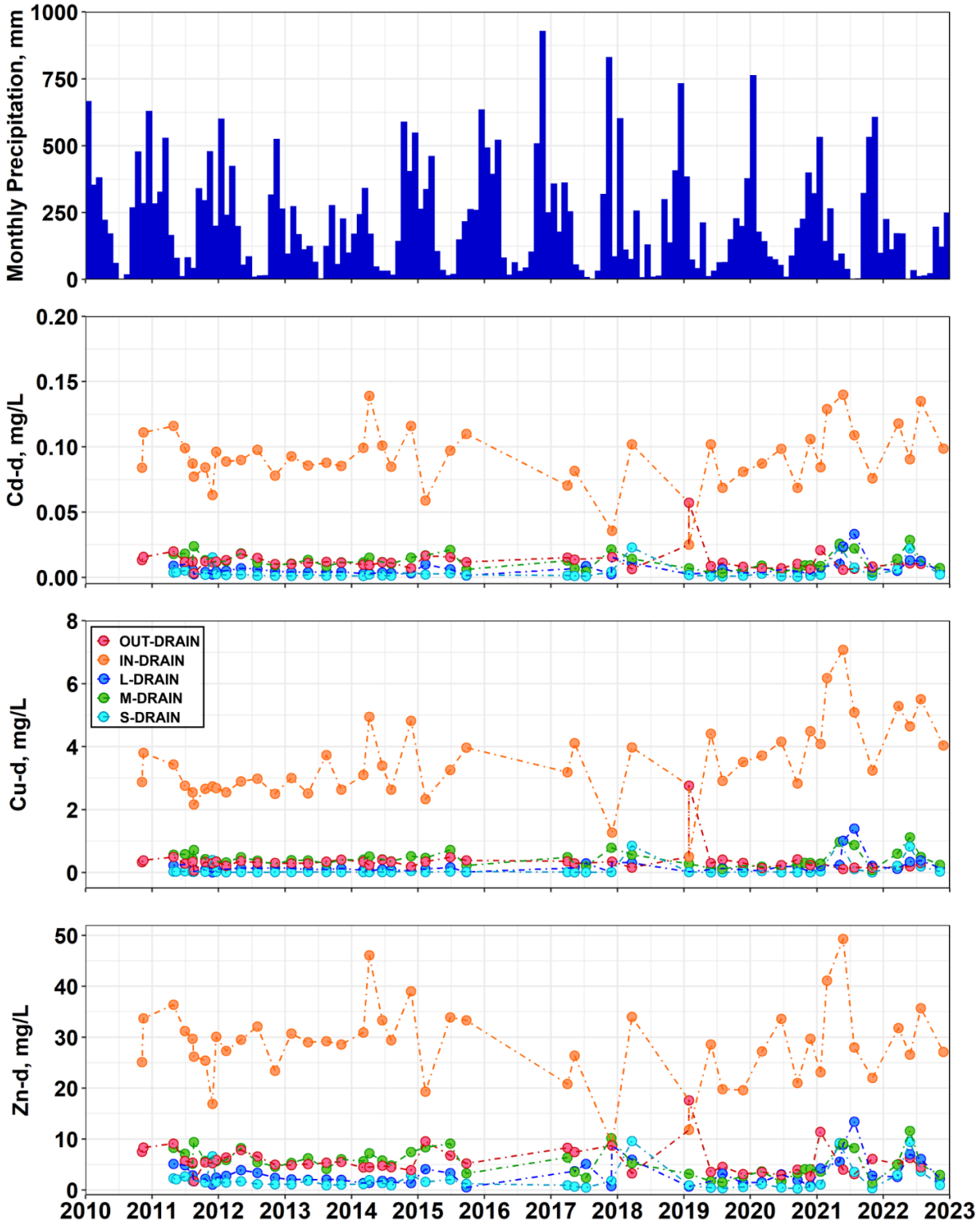


Figure 4-10. Cd, Cu, and Zn concentrations in groundwater samples from Old TDF Under-Drains, 2010 to 2022

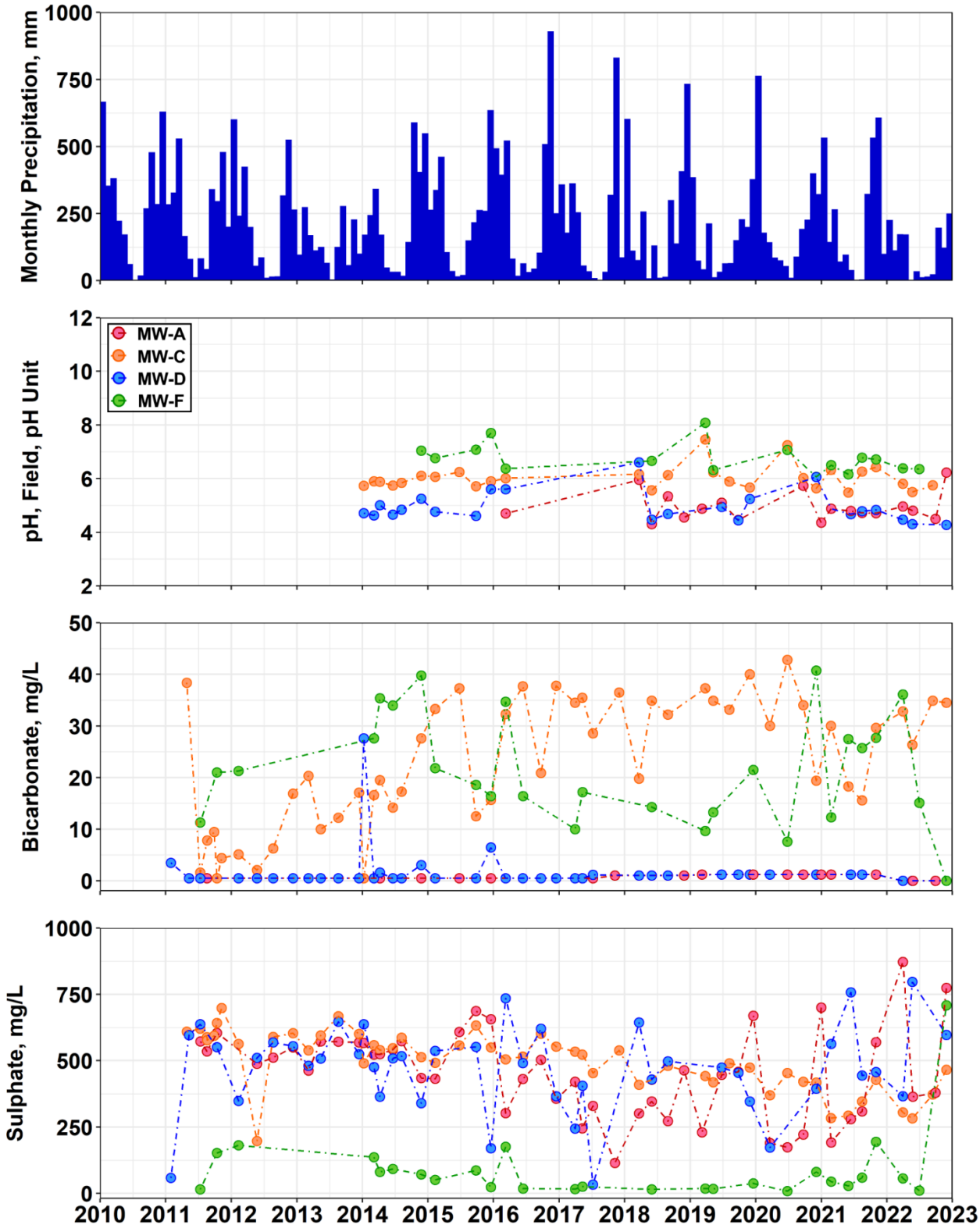


Figure 4-11. pH, bicarbonate, and sulphate concentrations in groundwater from wells MW-A, MW-C, MW-D, and MW-F, 2011 to 2022

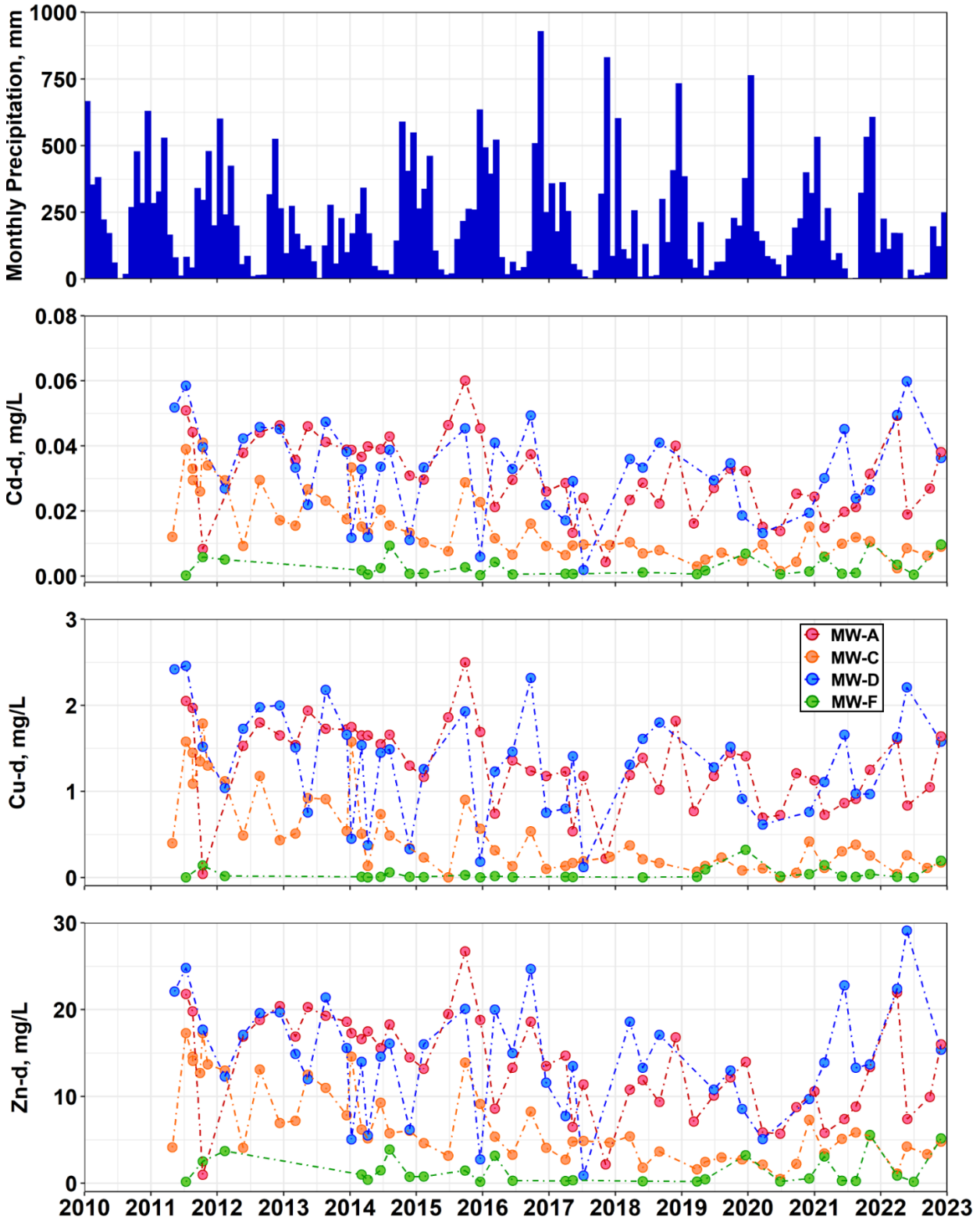


Figure 4-12. Cd, Cu, and Zn concentrations in groundwater from wells MW-A, MW-C, MW-D, and MW-F, 2011 to 2022

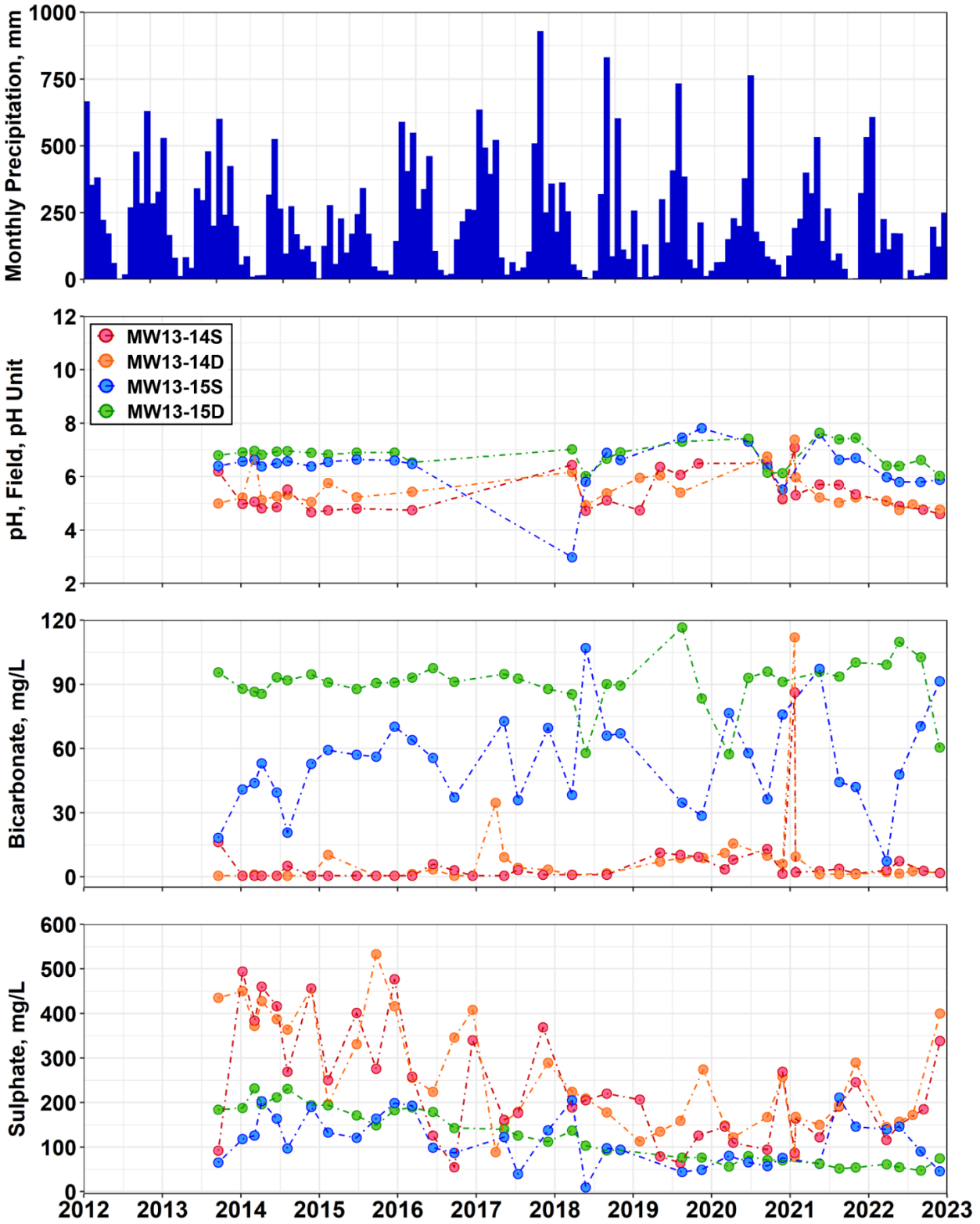


Figure 4-13. pH, bicarbonate, and sulphate concentrations in groundwater from wells MW13-14S/D and MW13-15S/D, 2013 to 2022

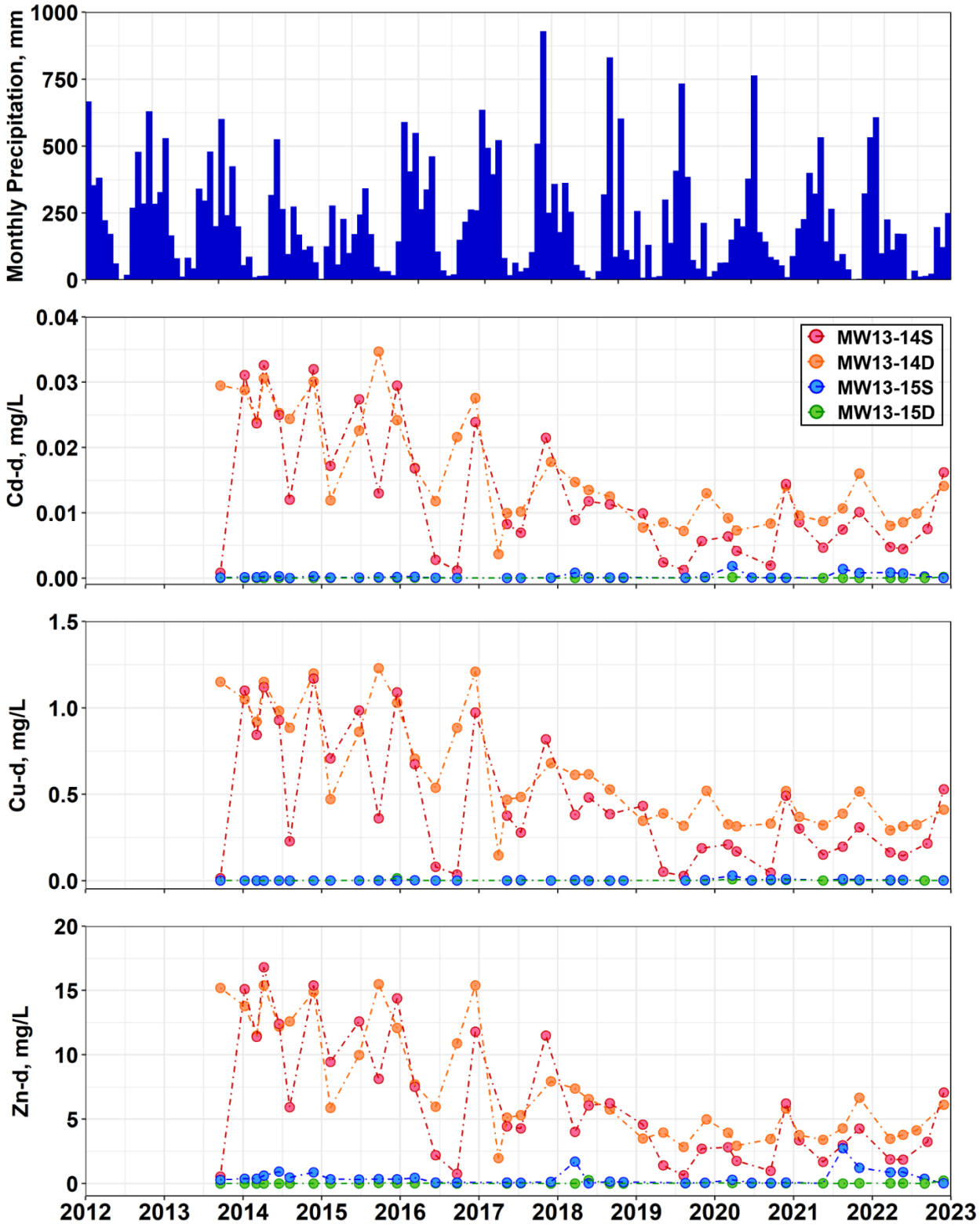


Figure 4-14. Cd, Cu, and Zn concentrations in groundwater from wells MW13-14S/D and MW13-15S/D, 2013 to 2022

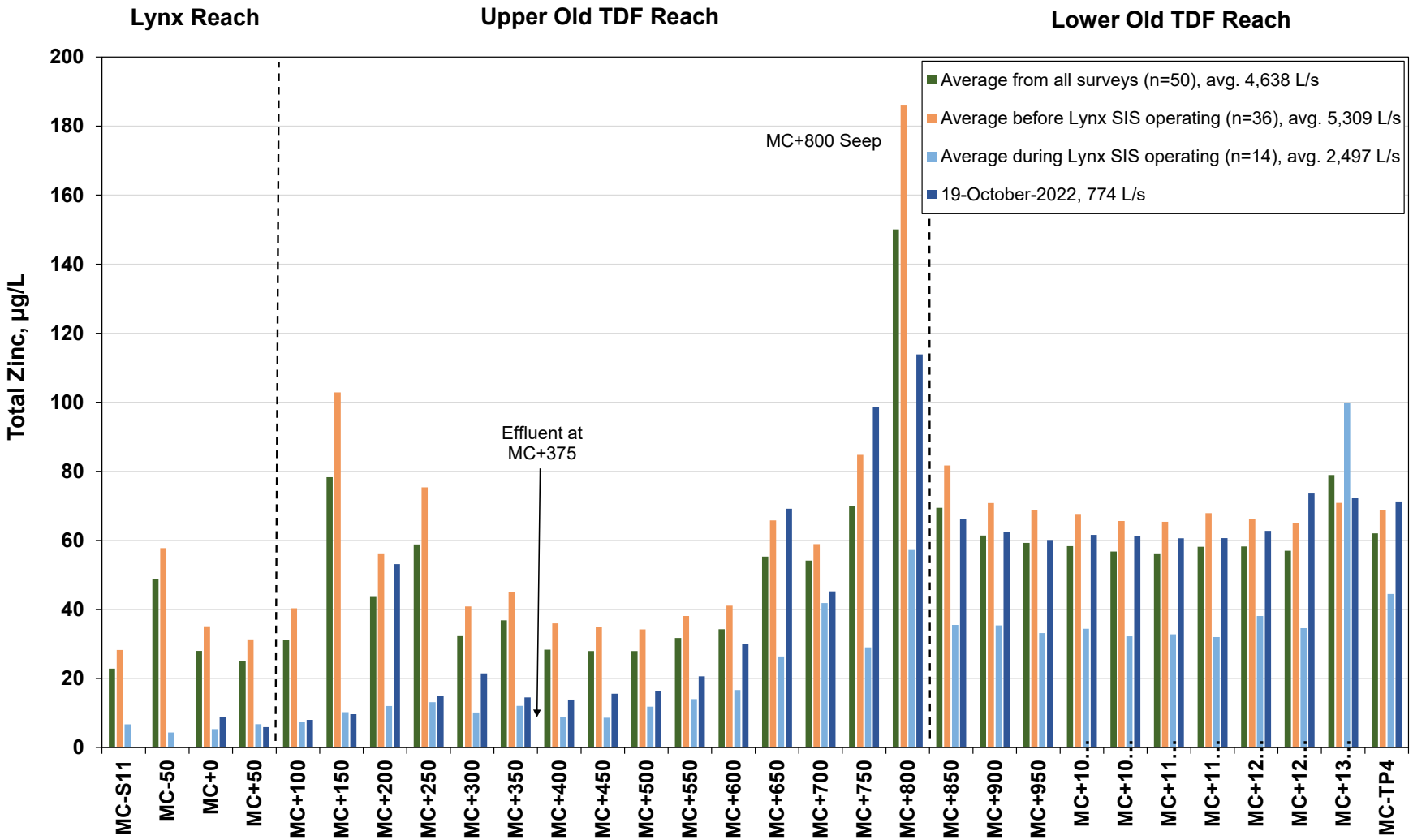


Figure 4-15. Average Zn-t concentrations in Myra Creek from creek surveys from Arnica Creek to MC-TP4, 2012 to 2022

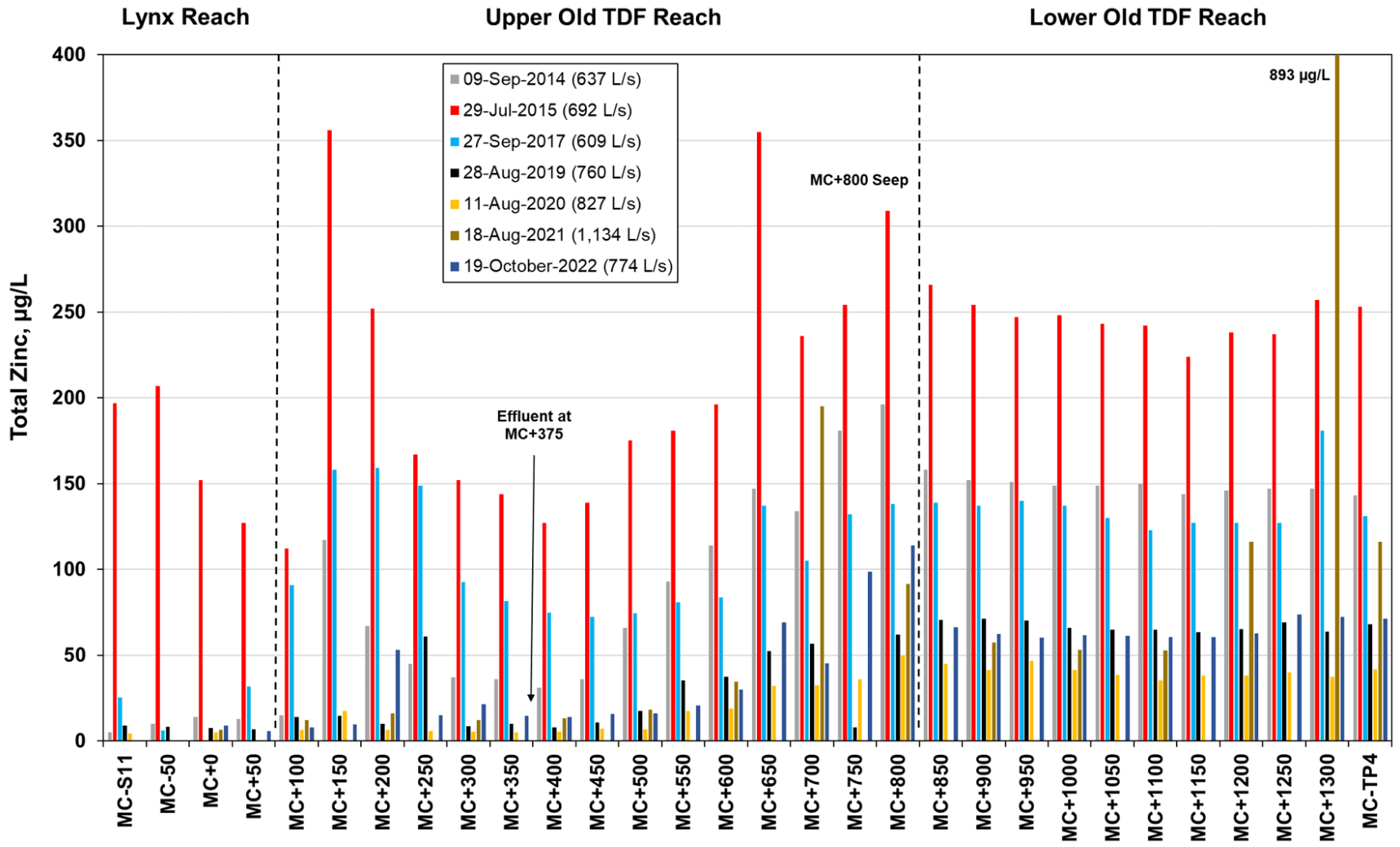


Figure 4-16. Average Zn concentrations in Myra Creek from creek surveys completed during low streamflow conditions – Left Bank (north side) of Myra Creek, 2012 to 2022

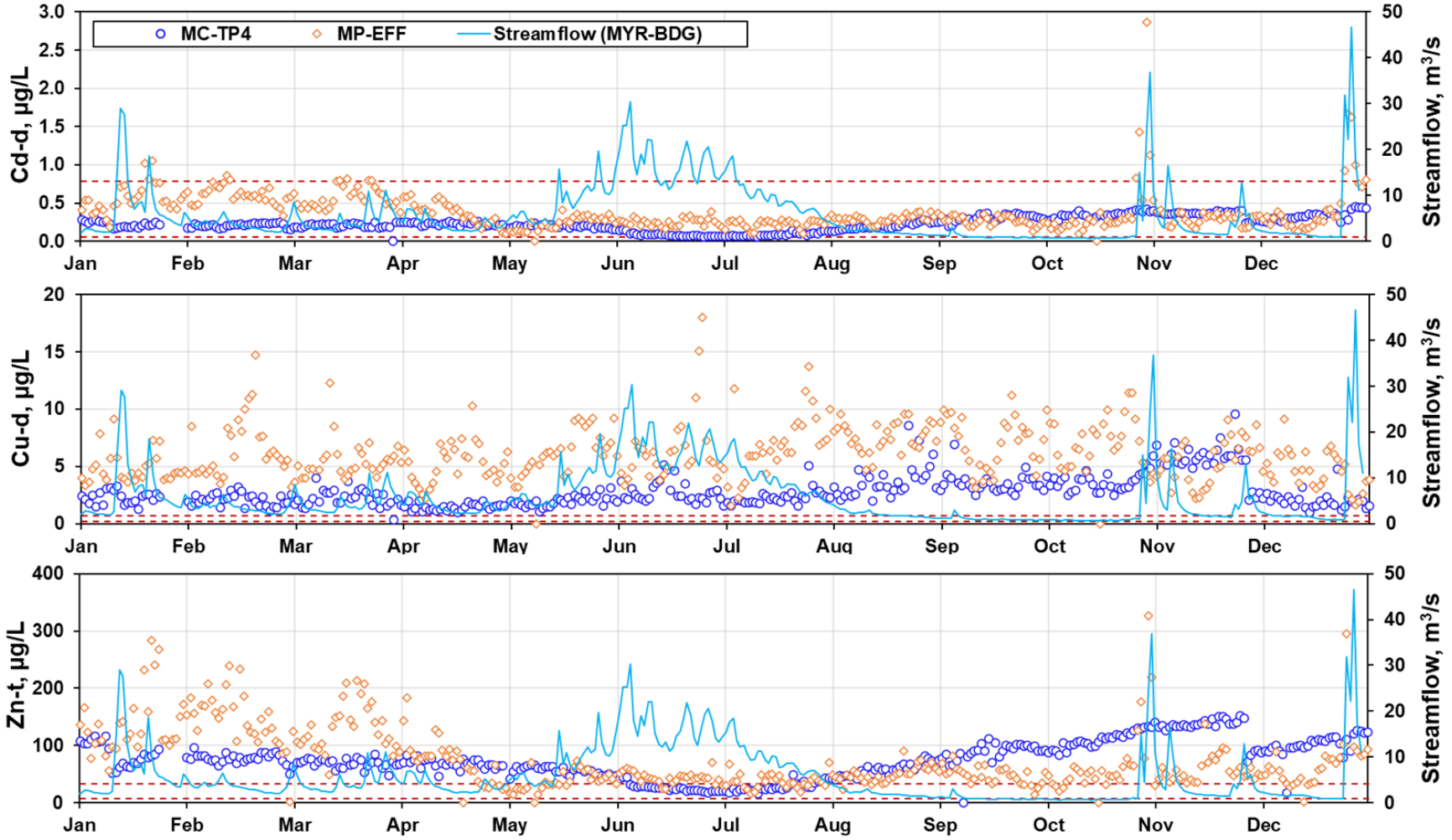


Figure 4-17. Cd-d, Cu-d, and Zn-t concentrations in Myra Creek at MC-TP4, treated mine effluent at MP-EFF, and streamflows at MYR-BDG station, 2022. Note, red dashed lines indicate BC WQGs. Acute WQG (upper line) and Chronic WQG (lower line)

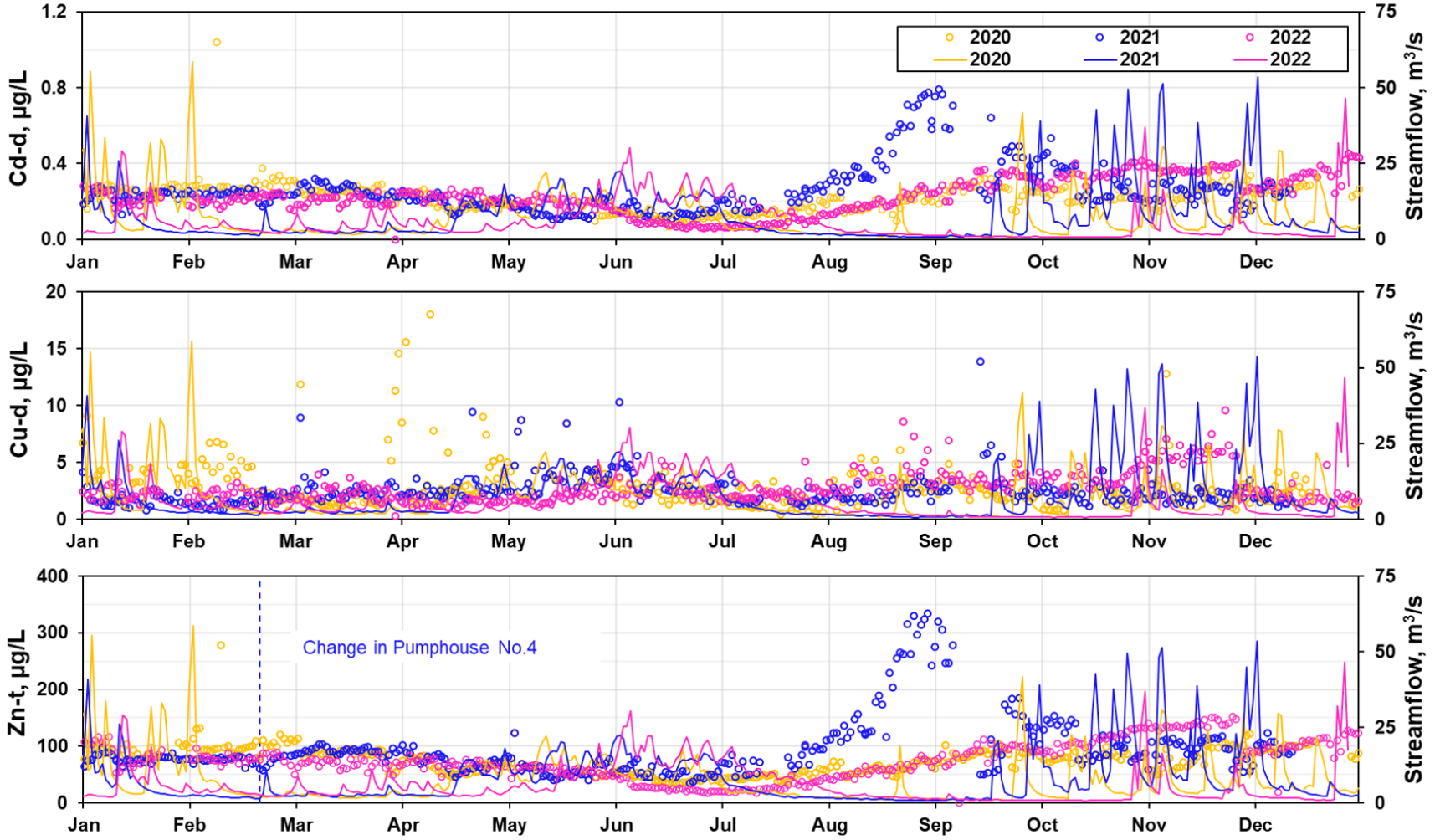


Figure 4-18. Cd-d, Cu-d, and Zn-t Concentrations in Myra Creek at MC-TP4 and Streamflow (lines) at MYR-BDG, 2020, 2021, and 2022

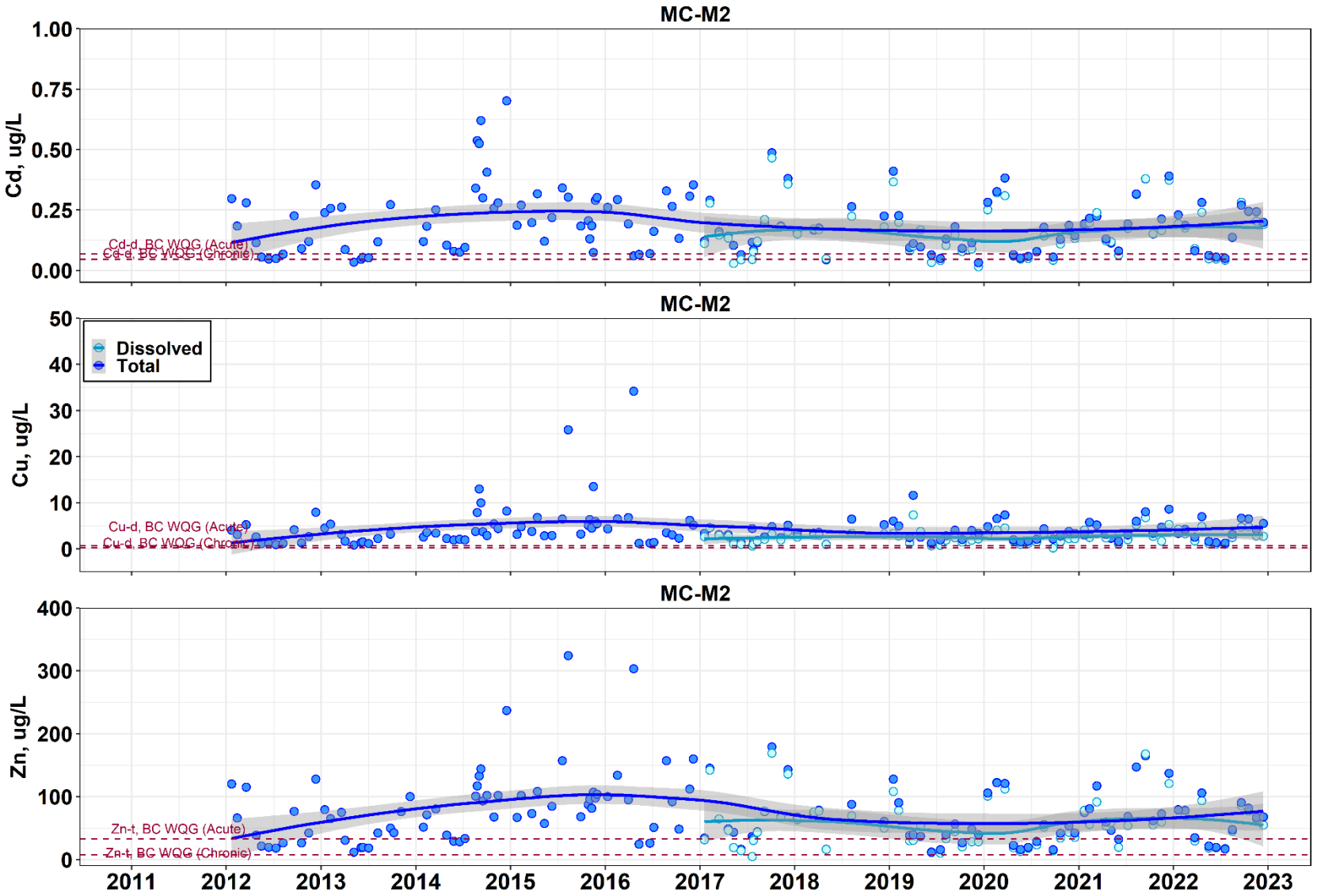


Figure 4-19. Cd, Cu, and Zn concentrations in Myra Creek at MC-M2, 2012 to 2022. Note: Trendlines and standard error intervals are provided for reference.

5 2022 RECLAMATION ACTIVITIES

This section was prepared by Nicole Pesonen, MFM's Environment & Community Engagement Manager.

5.1 PROGRESSIVE RECLAMATION

Progressive reclamation is targeted to complete the site-wide closure plan in small, manageable projects. Very little progressive reclamation has occurred since the removal of the tailings pipeline to Buttle Lake as the majority of the surface works were required for active mining and milling. More recently several facilities have reached the planned life and are slated for progressive reclamation works over the next five years. These include the Old TDF, WRDs 2, 3, and 6, and buildings such as the old backfill plant and the older camp buildings.

MFM has committed to develop new infrastructure with progressive and final reclamation in mind. To facilitate this effort, Myra Falls commissioned Wood Environment & Infrastructure Solutions (Wood) to develop a closure cover design for the Lynx TDF (Amec Foster Wheeler, December 2016 a) that can be constructed with each progressive lift of the facility developing the final revegetated landform during initial construction. This design was permitted in 2021, and a small section was placed as a cover trial during construction season 2021 (see Wood, 2022, for further details).

Infrastructure that is no longer used for active mining is assessed for closure potential biannually through a corporate driven Provision Review Process; areas that will not be disturbed again during operations are prioritized for final reclamation in the internal five-year closure plan and budget. Where these areas have approved closure designs these plans are implemented. In areas that required additional engineering work and permitting effort a permit level design is developed and issued for permitting consideration.

5.2 OPEN PIT RECLAMATION

Planning for reclamation to be conducted on the Upper Lynx Open Pit is underway. Waste Rock Dump 3 (WRD3) was largely located in the Lower Lynx Open Pit; it is expected that all material in WRD3 above the current paste elevation will be removed for construction in 2023, eliminating this facility and returning it to a pitwall where exposed above the Lynx TDF.

5.3 TAILINGS STORAGE FACILITIES / IMPOUNDMENT RECLAMATION

Phase One of the closure cover of the Old (Myra) TDF was completed in 2022. This included the installation of sections of the final cover drainage plans, grading of the clover materials to ensure drainage and decrease erosion, and hydroseeding of the area with native seeds as per the approved prescription for that area that were available for purchase in 2022 (see Wood, 2023, for further details). No active reclamation work was completed on the Lynx TDF in 2022.

5.4 Environmental Management System

The objective of the Myra Falls Environmental Management System (EMS) is to provide a manual for employees, contractors, and other stakeholders; establish a 'road-map' for the site's environmental documents; and to facilitate best management practices in environmental activities. As members of the Mining Association of Canada (MAC), MFM has focused on continued operational and environmental improvements that incorporate Towards Sustainable Mining (TSM) principles and initiatives. The EMS is also being guided by ISO 14001 requirements, and so structured to align environmental policy with planning, implementation, and operation, checking and corrective actions, and management reviews towards continued operational and environmental improvements.

5.5 Erosion and Sediment Control

Erosion prevention works completed in 2022 focussed on maintenance of operational sediment traps on the waste rock dumps and adjacent to construction areas and erosion prevention in the Old TDF. Areas of the Old TDF reclamation were hydroseeded with native species, steeper (2:1 slopes) were covered in burlap blankets prior to hydroseeding to further protect from erosion.

Ditches on the waste rock dumps and along construction access roads were maintained through periodic removal of debris and sediment build-up to restore the channels to intended functional capacity. Coarse rock check dams were maintained in the ditches on WRD1, and these were checked daily by the Surface Supervisor with sediment build-up dug out as required.

5.6 Soil and Salvage Stockpiling

Stockpile 1 was used in 2022 to augment the growth medium placed on the Old TDF, there is no remaining stockpile of topsoil at Myra Falls Mine.

5.7 Vegetation Management

Vegetation Management at Myra Falls consists of two major components; monitoring of regenerating vegetation (planted or natural ingress) following remediation works and management of invasive species (Integral Ecology Group, 2018). These programs are informed by recommendations provided by Integral Ecology Group (IEG), who perform periodic site visits to assess the success of the revegetation efforts to date. The last site visit by IEG was performed in 2022 and noted that many of the observations made during the 2022 site visit were similar to those made in the 2021 visit (see IEG, 2023; **Appendix E**). Monitoring results as reported were mixed, with the natural ingress of vegetation on the previously reclaimed Old TDF continuing to progress along the trajectory toward the final climax ecosystem. The area of WRD2 that was reclaimed in 2017 to natural till and left to naturally revegetate as prescribed by the Habitat Loss Mitigation Plan (Wood 2019) has continued to show natural ingress adjacent to the undisturbed forest, however, it

was recommended that upon completion of the WRD2 stabilization that the area be planted with pioneering species to increase the rate of revegetation in the area. Several locations were noted as having invasive species that will need to be addressed with more aggressive mitigation measures than have been implemented in the past (hand pulling & cutting)

5.8 WILDLIFE PROTECTION

Wildlife and habitat assessments, including breeding bird nesting surveys, are carried out before any new surface development occurs. Myra Falls employs an anecdotal wildlife sightings notification system, largely focused on sightings of bears and cougars, to warn employees of potential hazards and disseminate information regarding appropriate actions to take when encountering wildlife.

An introductory general Wildlife Habitat and specific Bat Habitat Survey was conducted by Stantec in 2018 as part of the work completed in support of the Wildlife Management Plan (Stantec, 2019).

5.9 ARCHAEOLOGICAL RESOURCES

A site-wide archaeological site potential assessment was performed in 2019 for all Myra Falls mining leases and Crown grants by Baseline Archaeological Services Ltd (Baseline). The recommendation of the assessment was that any developments in Mining Leases 201323 or 1069356 be reviewed by an archaeologist, while all other grants and leases are of low archaeological potential. No new archaeological resources were identified (Baseline Archaeological Services Ltd., 2019).

5.10 GROWTH MEDIUM

The full volume of the topsoil in Stockpile 1 was removed and used for reclamation works in 2022.

5.11WATERCOURSE RECLAMATION

No watercourse reclamation was conducted in 2022. Planning for reclamation along the Arnica and Myra creek banks has started and will continue to be developed to detailed design as areas become available for reclamation works.

5.12 ROAD RECLAMATION

No active reclamation of roadways was conducted in 2022.

5.13 STRUCTURES AND EQUIPMENT

No active removal of buildings or structures was implemented in 2022.

5.14 Securing Openings

Mine openings are secured with gates when not in active use. Areas on the mine-site are controlled with barricades and signage. Signs are placed at points on the public road indicating restricted access to prevent inadvertent access by park users. Access to the site is controlled through a security gate and electronic rostering system.

5.15 Disposal of Chemicals and Reagents

Chemical disposal is controlled by the onsite warehouse. Warehouse staff is Transportation of Dangerous Goods (TDG) and Workplace Hazardous Materials Information System (WHMIS) trained; all chemicals for disposal are sent to an accredited disposal site by a licenced transport company.

5.16 Reclamation Research

In 2019, Myra Falls submitted a reclamation research program including a knowledge gap analysis, post closure mapping, reclamation methodology evaluation, and monitoring program (Stantec + Integral Ecology Group, 2019). Preliminary studies in support of these programs were started in 2020, including plans for a 2021 Elk Collaring program in conjunction with Forests, Lands, Natural Resource Operations (FLNRO) and BC Parks. Construction of test plots for field trials was completed on the Lynx TDF and monitored as described in WSP (2023b).

5.175 Year Reclamation Plan

The 5-Year Mine and Reclamation Plan was submitted to EMLI in January 2021; a revised report was submitted in July 2021. This report has not yet been reviewed. The next update is due January 31 of 2026.

5.18 Reclamation Cost Assessment

The 2022 reclamation cost assessment estimates a closure liability of $115,958,237 based on the 2018 approved reclamation costing as the 2021 revision has not yet been reviewed with EMLI. This includes the work completed on the Old TDF Phase 1 closure cover valued at $1,220,445, or 6% of the total estimated cost of the Old TDF Closure as assessed in 2018. This file includes the reductions calculated each year since the original assessment was completed, and has been adapted to account for the increased disturbance from the clean rock quarry expansion in 2021.

6 SUMMARY

6.1 2022 Construction and Mining Operations Overview

MFM produced 879,180 tonnes of ore and waste rock in 2022, with an average of 73,265 tonnes per month. Approximately 83% of the ore produced in 2022 was produced from the HW Zone, which includes the Marshall, Ridge, and Battle Gap ore bodies. The other 17% was produced from the Price Zone, which was actively mined throughout 2022. No active mining took place in the Lynx or Myra Zones underground in 2022.

Approximately 236,483 tonnes of waste rock were produced in 2022, all of which was produced from the HW Zone. Approximately 611,315 tonnes were milled in 2022. The monthly milling rate ranged from 36,709 tonnes in December 2022 to 65,692 tonnes in April 2022, with an average monthly milling rate of 50,943 tonnes per month, or approximately 22% higher than the average monthly milling rate for 2021. In 2022, 542,119 tonnes of tailings were produced. Approximately 70% of these tailings were deposited in the Lynx TDF and the remainder was used underground as paste backfill.

6.2 Mine Disturbance Area

Construction efforts in 2022 focused on areas within the existing mine footprint, in particular the Old TDF reclamation Phase 1 and completion of the Lynx TDF dam raise started in 2021. The raise was completed using some waste rock from underground and waste rock stored in construction stockpiles located on the WRD6. Boulders from the waste rock dumps were crushed as required for use as fine materials as needed for bedding material and to blend with waste rock when it did not meet the material specifications for fine content. The total disturbed area, as of December 31st, 2022, is 184.6 ha, or approximately 0.3 ha smaller than in 2021.

6.3 Mine Waste Characterization Results

Approximately 50% of the waste rock produced in 2022 was dumped in Waste Rock Dump 6 (WRD6). The other 50% was used as construction material for the 373.5 m Lynx TDF raise. Six samples of ROM waste rock were collected in 2022. The number of collected samples are approximately 35% lower than the recommended numbers in the ARD/ML Management Plan (i.e., one sample per 20,000 tonnes). Each of the samples of ROM waste rock was classified as PAG material. Ten monthly tailings samples were collected in 2022, as required by Permit M-26. Monthly samples for November and December were collected in January 2023 due to limited safe access to the Lynx TDF in late 2022. Each tailings sample was classified as PAG material.

During drilling between Myra Pond 3 and Myra Pond 3A, six samples of material from the roadway between these two ponds were collected near the location of an orange stain that has been observed by MFM staff

at certain times of the year. Five out of six samples were identified as PAG material, with up to six wt. % sulphide. These PAG materials are therefore highly-acid generating and are the likely cause of the ARD that causes the stain observed by MFM staff. The distribution of PAG materials within the berms cannot be determine from the limited data that are available but additional investigation/sampling is warranted, as this waste rock could represent an additional contaminant source to groundwater that is not represented in the site-wide WLBM (see RGC, 2020).

6.4 Effluent Water Quality Monitoring

None of the grab samples of treated effluent (at 11A-Runoff) collected in 2022 exceeded MDMER limits.

6.5 Unauthorized Discharge Event

There was one unauthorized discharge event in 2022. This unauthorized discharge event happened when the HW Sump overtopped during a heavy rainfall event on December 26th. The event occurred when the discharge line for the back-up diesel pump failed to operate. An estimated 15 m^3 of water was released to Myra Creek during this event. TSS and total Zn concentrations in the flows to the creek exceeded MDMER limits. The toxicity sample taken on December 26th from the inflow to the HW Sump was deemed to be toxic at the 100% concentration by the third-party laboratory. There was not, however, enough water remaining in the sampling bucket when it arrived at the lab to run dilution tests on the sample. This unauthorized discharge event is the only permit non-compliance event for 2022.

6.6 Routine Water Quality Monitoring Results – Permit M-26

No seeps that are required to be sampled, i.e. the Main Spring, Car Bridge Seep, Pipe Bridge Seep, Warehouse Seep, Lower Pumphouse No. 4 Seep (or “PH4 Seep B), or Upper Pumphouse No. 4 Seep were collected in 2022, as no flows were observed at these seep locations by site staff. A small seep in the Lynx switchback area (3-Runoff), that is monitored voluntarily, was sampled with concentrations consistent with previous years. Zn concentrations in groundwater captured by the Old TDF under-drains did not show any clear trends in 2022 and concentrations observed at the individual under-drain segments were consistent with long-term observations. Groundwater quality immediately downgradient of the Old TDF under-drains in 2022 suggested occasional minimal bypass along the Medium segment of the NOD. Note that the system of under-drains was not operated consistently throughout 2022 and average captured groundwater flows were approximately 20% lower compared to the long-term average. Future monitoring with consistent operation of the SIS is needed to comment on water quality trends.

6.7 Site-Wide SIS Performance

In 2022, the Old TDF under-drains continued to operate at reduced capacity until end of May when the sump level was decreased to allow the individual drain segments to drain freely into the sump as intended.

In late July 2022, operation was switched to a set rate (150 L/s) rather than a set level resulting in reduced flows throughout the summer period compared to long-term averages. The under-drains were operated as intended for the remainder of 2022 (October to December). The average pumping rate for 2022 was 162 L/s which is 20% less than the long-term average of 206 L/s. The Phase I Lynx SIS was operated at reduced capacity in 2022, as pumping well PW14-01 was not operating for the first half of 2022. Moreover, PW14-04 only operated intermittently at very low rates possibly due to scaling of the pressure transducer and well screen.

The combined Zn load captured by the Phase I Lynx SIS in 2022 was estimated to be approximately 11 t in 2022, which represents approximately 48% of the total Zn load captured by the Old TDF under-drains and delivered to the Superpond via Pumphouse No.4. The Phase I Lynx SIS therefore captured a considerable load of Zn and other constituents from groundwater in the Lynx Reach (upgradient of the Old TDF under-drains) in 2022. The loads captured by the Phase I Lynx SIS in 2022 are, however, lower than in preceding years due to a decline in the performance of the system (mainly due to delays in maintenance due to long lead times and back ordered components). The environmental implications of this deteriorating performance in 2022 were minimal, however, given that it was a relatively dry year and the Phase I Lynx SIS operates upgradient of the Old TDF under-drains. In RGC's opinion, improving the performance of the existing Phase I Lynx SIS is warranted, as is an investigation of options to augment this system to improve water quality in Myra Creek.

The Interim Phase II Lynx SIS did not operate in 2022 due to technical issues but was operating again as of February 1st, 2023. Nearby monitoring wells continued to show the seasonal presence of moderately impacted shallow groundwater upgradient of the Interim Phase II Lynx SIS during wet winter months. Water quality samples collected from the PW18 pumping wells and nearby monitoring wells in summer 2022 showed low Zn concentrations of around 1 mg/L.

6.8 WATER QUALITY IMPACTS TO MYRA CREEK

Chronic BC WQGs for Al-d, Cd-d, Cu-d, and Zn-t are typically exceeded in Myra Creek downstream of the site at stations MC-TP4 and MC-M2. Acute BC WQGs for these metals are also often exceeded, mainly due to the discharge of ARD/ML-impacted groundwater to Myra Creek that is not captured/intercepted by the Phase I Lynx SIS in the Lynx Reach or by the Old TDF under-drains in the Lower Old TDF Reach. In 2022, the highest metal concentrations were observed in late summer to early fall (September to November), when streamflows in Myra Creek were lowest, which is consistent with historic trends. Peak concentrations in the summer months in 2022 were much lower than those observed in 2021. This suggests a return to normal conditions and that elevated concentrations were due to the temporary operation of the under-drains at an increased sump level and hence reduced flows.

An abrupt decrease in the concentrations of most metals and other constituents in Myra Creek at MC-TP4 occurred on November 26th, 2022, after the collection sump at MC-TP4 was cleaned and other maintenance

of the auto-sampler collection system was completed on that day. The intermediate collection vessel was replaced with a smaller size vessel than what was used before to minimize the risk of water stagnation and to allow easier maintenance. Also, hygiene and maintenance activities for the auto-sampler collection system by MFM staff were enhanced after this event, which explains lower concentrations that follow the same trend observed before the upgrade event.

6.9 2022 Reclamation Activities Completed

Key reclamation activities completed in 2022 are summarized below:

- *Old TDF Reclamation*
  - Phase 1 of the final closure plan for the Old TDF was implemented.
  - Sections of the final drainage channels were completed and the area regraded to final configuration.
  - The completed sections were hydroseeded with a native plant mixture.
- *Reclamation Research*
  - An Elk Collaring program in conjunction with FLNRO and B.C. Parks started in 2021.
  - A cover trial for the Lynx TDF closure cover was established in 2021 and monitored during 2022.
- *Vegetation Monitoring*
  - Ongoing monitoring of regenerating vegetation suggests the 2016 hydro-seed in the CRAB has been largely unsuccessful. This is consistent with monitoring results for 2021. The natural ingress of vegetation on the previously-reclaimed Old TDF continues to progress towards the final climax ecosystem for this area.
  - Several areas with invasive species were identified in 2022. Canada Thistle, Bull Thistle, and Himalayan Blackberry were noted in several areas; more aggressive measures beyond hand-pulling and mowing may need to be implemented.
- *Reclamation and Closure Plan Update*
  - The 5-Year Mine and Reclamation Plan was submitted in January 2021.

7 CLOSURE

Robertson GeoConsultants Inc. (RGC) is pleased to submit this report entitled '2022 Reclamation Report for Mines Act Permit M-26, Myra Falls Mine"'. Should you have any questions, please contact the undersigned or the MFM Environment Department.

Respectfully Submitted,

ROBERTSON GEOCONSULTANTS INC.

EGBC Permit Number: 1001164

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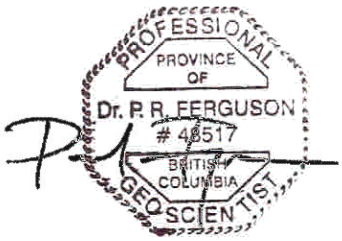

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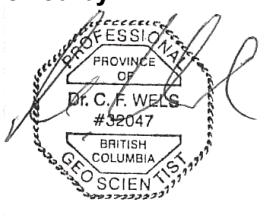

2023-03-31
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Principal Hydrogeologist

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Appendix A

2022 Mine Waste Characterization Results

Table A1
ABA results, 2022

Sample ID	Sampling Date	Paste pH	S_{total} wt%	S_{SO4} wt%	$S_{sulphide}$ wt%	AP kg $CaCO_3$ eq./t	NP kg $CaCO_3$ eq./t	NNP kg $CaCO_3$ eq./t	NPR	Class
Existing foundation material for roadway between Ponds 3 & 3a										
23232	12-Jan-2022	5.7	2.1	1.2	0.9	27	7.7	-19	0.3	PAG
23233	12-Jan-2022	6.8	13	0.2	13	403	20	-383	0.05	PAG
23234	12-Jan-2022	7.7	6.0	0.08	6.0	186	41	-145	0.2	PAG
23235	12-Jan-2022	7.7	1.5	0.06	1.5	46	24	-22	0.5	PAG
23236	12-Jan-2022	8.3	0.4	0.03	0.4	12	38	26	3.3	Non-PAG
23237	12-Jan-2022	8.1	1.6	0.08	1.5	48	93	45	1.9	PAG
Waste rock relocated from Raise 18-01 to the U/S Lift on Lynx TDF										
23238	10-Mar-2022	8.2	0.09	0.03	0.1	1.8	124	122	69	Non-PAG
Waste rock used for construction on spillway 3 for Old TDF reclamation										
23247	28-Jun-2022	7.4	1.6	0.2	1.4	43	21	-22	0.5	PAG
23248	28-Jun-2022	7.9	0.05	0.01	0.04	1.1	7.0	5.9	6.4	Non-PAG
23249	28-Jun-2022	8.3	0.04	0.01	0.03	0.8	10	9.5	13	Non-PAG
23250	28-Jun-2022	8.5	0.04	0.01	0.03	0.9	40	39	44	Non-PAG
ROM waste rock from HW & Price Mine										
55676	29-Jun-2022	8.2	2.4	0.03	2.4	74	28	-46	0.4	PAG
55677	28-Sep-2022	8.2	3.9	0.10	3.8	119	39	-80	0.3	PAG
55678	28-Sep-2022	8.1	3.0	0.08	2.9	90	46	-45	0.5	PAG
55679	28-Sep-2022	8.2	4.5	0.1	4.4	137	36	-101	0.3	PAG
55680	28-Sep-2022	8.2	3.2	0.1	3.1	97	43	-54	0.4	PAG
55681	28-Sep-2022	8.1	3.0	0.10	2.9	91	36	-54	0.4	PAG
Underground backfill samples from Paste Cylinder										
23239	25-Feb-2022	10.8	6.1	0.4	5.6	175	93	-83	0.5	PAG
23240	25-Feb-2022	12.0	6.0	0.5	5.5	171	156	-14	0.9	PAG
23241	25-Feb-2022	10.2	6.3	0.7	5.6	175	77	-98	0.4	PAG
Monthly tailings samples										
21275	27-Jan-2022	8.7	6.9	0.09	6.8	213	28	-185	0.1	PAG
23246	24-Feb-2022	7.6	5.6	0.1	5.5	173	26	-147	0.1	PAG
23245	11-Mar-2022	7.8	5.4	0.1	5.3	166	34	-132	0.2	PAG
23242	8-Apr-2022	8.4	5.0	0.1	4.9	152	36	-116	0.2	PAG
23243	25-May-2022	7.5	6.7	0.1	6.6	205	24	-181	0.1	PAG
23244	29-Jun-2022	7.4	8.0	0.2	7.8	244	28	-216	0.1	PAG
55682	28-Jul-2022	7.3	8.4	0.06	8.4	262	32	-230	0.1	PAG
55683	26-Aug-2022	7.8	5.9	0.06	5.9	184	24	-160	0.1	PAG
55684	28-Sep-2022	8.2	4.4	0.05	4.4	137	23	-113	0.2	PAG
55685	28-Oct-2022	7.6	4.0	0.08	4.0	124	29	-94	0.2	PAG
55686	18-Jan-2023[1]	7.9	4.2	0.05	4.2	130	28	-103	0.2	PAG
55867	18-Jan-2023[1]	8.1	5.9	0.09	5.8	183	29	-154	0.2	PAG
	Minimum	7.3	4.0	0.1	4.0	124	23	-230	0.1	-
	Maximum	8.7	8.4	0.2	8.4	262	36	-94	0.2	-
	Average	7.8	5.9	0.1	5.8	181	28	-153	0.2	-

[1] November and December 2022 sampling were postponed to January, 2023 due to safety issues with the dam impoundment.

*Red text denotes a concentration below the indicated detection limit

Table A2

Selected near-total metal results, 2022

Sample ID	Sampling Date	S	As	Cd	Co	Cu	Fe	Mn	Mo	Ni	Pb	U	Zn
		%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Development Rock													
23238	10-Mar-2022	0.1	8.0	1.6	25	53	5.4	1,389	0.3	23	39	0.7	409
Run-of-Mine Waste Rock													
55676	29-Jun-2022	2.4	48	18	11	567	3.7	1,669	7.2	15	957	0.3	3,985
55677	28-Sep-2022	3.7	213	72	17	1,080	4.6	1,216	5.3	17	882	0.3	10,000
55678	28-Sep-2022	3.1	53	17	16	634	4.5	1,425	6.8	14	419	0.3	3,784
55679	28-Sep-2022	4.2	204	65	11	1,549	4.7	662	12	17	546	0.9	10,000
55680	28-Sep-2022	3.2	62	25	15	1,085	4.8	1,037	6.3	17	501	0.4	5,520
55681	28-Sep-2022	3.0	59	23	15	734	4.8	949	5.8	15	440	0.3	5,208
Waste Rock near Myra Ponds													
23232	12-Jan-2022	2.3	31	11	15	309	5.2	552	4.3	20	944	0.2	2,873
23233	12-Jan-2022	5.0	67	12	24	999	12	537	14	19	239	0.2	3,265
23234	12-Jan-2022	5.0	27	21	29	575	7.4	750	6.3	19	463	0.2	5,052
23235	12-Jan-2022	1.7	15	1.9	15	213	3.7	781	1.3	9.0	38	0.1	591
23236	12-Jan-2022	0.5	9.0	4.8	14	251	4.1	754	2.5	12	214	0.3	1,549
23237	12-Jan-2022	1.6	52	32	22	1,349	4.8	879	6.1	37	1,018	0.4	7,562
Waste Rock - Old TDF Spillway 3 Construction													
23247	28-Jun-2022	1.6	27	11	17	416	5.5	812	5.0	15	154	0.3	2,216
23248	28-Jun-2022	0.05	4.0	0.7	30	162	6.7	1,124	0.5	29	19	0.2	192
23249	28-Jun-2022	0.03	3.0	0.4	25	90	5.8	1,058	0.4	18	5.3	0.3	134
23250	28-Jun-2022	0.04	2.0	0.3	21	44	5.6	1,078	0.9	7.0	5.1	0.2	106
Underground backfill samples from Paste Cylinder													
23239	25-Feb-2022	5.0	107	17	8.0	946	5.3	409	26	25	954	2.0	4,193
23240	25-Feb-2022	5.0	91	16	8.1	909	5.4	400	29	24	810	2.0	4,032
23241	25-Feb-2022	5.0	96	16	7.0	844	5.1	384	26	26	933	2.1	4,250
Monthly tailings samples													
21275	27-Jan-2022	5.0	158	36	7.5	2,131	5.7	417	18	22	1,469	2.1	10,000
23246	24-Feb-2022	5.0	95	20	8.2	828	7.3	589	21	28	872	1.4	4,799
23245	11-Mar-2022	5.0	237	21	7.9	1,183	5.9	362	14	27	1,033	1.9	4,620
23242	8-Apr-2022	5.0	120	16	9.0	995	5.3	706	16	24	1,045	1.3	3,714
23243	25-May-2022	5.0	105	16	8.2	1,106	5.4	678	20	26	1,005	1.2	3,614
23244	29-Jun-2022	5.0	73	11	8.3	694	5.1	586	15	24	704	1.0	2,629
55682	28-Jul-2022	5.0	109	25	8.6	884	6.5	477	21	34	1,243	2.2	6,627
55683	26-Aug-2022	4.7	327	105	7.6	1,858	4.1	398	24	29	1,982	2.0	10,000
55684	28-Sep-2022	3.7	110	9.7	6.3	704	3.7	361	12	21	792	1.2	2,749
55685	28-Oct-2022	4.0	164	19	9.1	868	4.2	631	19	41	1,061	2.1	4,308
55686	18-Jan-2023	4.1	130	19	9.8	752	4.4	711	22	39	1,040	1.9	4,466
55867	18-Jan-2023	5.0	99	18	11	772	6.1	993	17	30	968	1.1	4,303

*Red text denotes a concentration below the indicated detection limit

Appendix B.

2022 Toxicity Testing Results

Year 2022- Acute test results for Nyrstar Myra Falls

Sample Date	Sample ID	Trout LC50 % (v/v) [95% CL]	Trout single-concentration test Result (% Survival in undiluted conc.)	*Daphnia magna* LC50 % (v/v) [95% CL]
January 19, 2022	11A-RUNOFF	> 100	-	> 100
February 14, 2022	11A-RUNOFF	> 100	-	> 100
March 10, 2022	MP-EFF	-	100	-
March 23, 2022	MP-EFF-M	> 100	-	> 100
April 20, 2022	MP-EFF-M	> 100	-	> 100
May 16, 2022	MP-EFF-Q	> 100	-	> 100
June 9, 2022	11A-RUNOFF	> 100	-	100 [N/A-N/A]
July 18, 2022	MP-EFF-M	> 100	-	> 100
August 15, 2022	11A-RUNOFF	> 100	-	> 100
September 19, 2022	11A-RUNOFF	> 100	-	> 100
October 17, 2022	11A-RUNOFF	> 100	-	> 100
November 16, 2022	11A-RUNOFF	> 100	-	> 100
December 21, 2022	11A-RUNOFF	> 100	-	> 100
December 26, 2022	HW SUMP	-	0	-

LC = Lethal Concentration; CL = Confidence Limits; N/A = Not Available

Year 2022 – Sub-lethal test results for Nyrstar Myra Falls

Test Species	Sample Date	Sample ID	End point	Result % (v/v) [95% CL]
Ceriodaphnia dubia	14-Feb-22	11A-RUNOFF	Survival LC50	> 100
			Reproduction IC25	> 100
			Reproduction IC50	> 100
Oncorhynchus mykiss			Embryo viability IC25	> 100
			Embryo viability IC50	> 100
Lemna minor			Frond Count IC25	22.4 [11.0 – 37.5]
			Frond Count IC50	> 97 *
			Dry weight IC25	21.4 [7.3 – 61.9]
			Dry weight IC50	> 97.0 *
Pseudokircheneriella subcapitata			Growth IC25	> 95.2 *
			Growth IC50	> 95.2 *
Ceriodaphnia dubia	16-May-22	MPEFF-Q	Survival LC50	>100
			Reproduction IC25	>100
			Reproduction IC50	>100
Oncorhynchus mykiss			Embryo viability IC25	> 100
			Embryo viability IC50	> 100
Lemna minor			Frond Count IC25	10.1 [N/A – 21.7]
			Frond Count IC50	59.6 [33.6 – 90.2]
			Dry weight IC25	11.4 [4.3 – 32.4]
			Dry weight IC50	> 97.0 *
Pseudokircheneriella subcapitata			Growth IC25	78.7 [67.4 – 89.5]
			Growth IC50	> 95.2 *
Ceriodaphnia dubia	15-Aug-22	11A Runoff	Survival LC50	46.2 [19.6 – >100]
			Reproduction IC25	2.1 [1.8 – 2.5]
			Reproduction IC50	2.9 [2.6 – 28.9]
Oncorhynchus mykiss			Embryo viability IC25	> 100
			Embryo viability IC50	> 100
Lemna minor			Frond Count IC25	9.4 [6.9 – 12.4]
			Frond Count IC50	59.8 [47.2 – 75.3]
			Dry weight IC25	4.1 (2.6 – 6.4]
			Dry weight IC50	53.2 [35.4 -80.0]
Pseudokircheneriella subcapitata			Growth IC25	>95.2 *
			Growth IC50	>95.2 *
Ceriodaphnia dubia	19-Sep-22	11A Runoff	Survival LC50	>100
			Reproduction IC25	1.3 [N/A – 10.8]
			Reproduction IC50	60.4 [11.6 – N/A]
Ceriodaphnia dubia	22-Nov-22	11A Runoff	Survival LC50	>100
			Reproduction IC25	>100
			Reproduction IC50	>100
Oncorhynchus mykiss			Embryo viability IC25	> 100
			Embryo viability IC50	> 100
Lemna minor			Frond Count IC25	51.5 [21.3 – 65.0]
			Frond Count IC50	94.6 [78.8 – N/A]
			Dry weight IC25	31.2 [23.7 – 40.3]
			Dry weight IC50	>97.0 *
Pseudokircheneriella subcapitata			Growth IC25	>95.2 *
			Growth IC50	>95.2 *

LC = Lethal Concentration; IC = Inhibition Concentration; CL = Confidence Limits; * = Highest Concentration Tested; N/A = Not Availab

Appendix C.

2022 Unusual Events

BRITISH COLUMBIA
Ministry of Environment and Climate Change Strategy

Update to Minister/End-of-Spill Report Form

Environmental Emergency Program
SpillReports@gov.bc.ca

This report template can be completed to satisfy the requirements of either the End-of-Spill Report or the Update to Minister Report. Please specify which report you are completing in section I of this form. If any of the fields of this form are not applicable to the spill for which this form is being completed, indicate 'N/A' in the field; reports with incomplete fields will be sent back to the responsible person.

End-of-Spill Report: Section 6 of the Spill Reporting Regulation outlines the requirements for the End-of-Spill Report. Responsible persons must submit a written End-of-Spill Report to the Ministry of Environment and Climate Change Strategy within 30 days following the emergency response completion date of a spill as outlined in section 6 (1) of the Spill Reporting Regulation. Responsible persons must submit a written report to the Ministry of Environment and Climate Change Strategy as soon as practicable if either of the following two conditions are present:

1. The spill entered, or was likely to enter, a body of water as defined in the Spill Reporting Regulation
2. The quantity of the substance spilled was, or was likely to be, equal to or greater than the listed quantity for the listed substance as outlined in the Spill Reporting Regulation

Update to Minister Report: Section 5 of the Spill Reporting Regulation outlines the requirements for the Update to Minister Report. Responsible persons must submit a written report to the Ministry of Environment and Climate Change Strategy as soon as practicable if any of the following three conditions are present:

1. On request of the Minister
2. At least once every 30 days after the date that the spill began
3. At any time that the responsible person has reason to believe that information previously reported in the Initial Report has become inaccurate or incomplete

Complete this form and submit it by email to SpillReports@gov.bc.ca. For additional information, please visit the British Columbia Environmental Emergency Program Report a Spill webpage.

Dangerous Goods Incident Report (DGIR) number: 215257

Section I: Type of report
Sections 5 and 6 of Spill Reporting Regulation

This form is completed to satisfy the requirements of the:

☐ Update to Minister Report ☐ End-of-Spill Report

Section II: Contact information
Section 6 (2) (a) of the Spill Reporting Regulation

Details for person filling out the report	Name of company representative: Josh Fry
	Company name: Myra Falls Mine Ltd
	Email: joshua.fry@myrafallsmine.com
	Address: PO Box 8000 Campbell River BC, V9W 5E2
	Telephone number: 250-287-9271 x3871

Details for responsible person Same as above ☑	Name of company representative:
	Company name:
	Email:
	Address:
	Telephone number:
Details for owner of the substance spilled Same as above ☑	Name of company representative:
	Company name:
	Email:
	Address:
	Telephone number:

Section III: Timing of the spill
Section 6 (2) (b) of the Spill Reporting Regulation

Date of spill: 2022-03-25 Time of spill: 8:00 Duration of the spill (days): 0.002

Date reported: 2022-03-25 Emergency response completion date[1]: 2022-03-25

Section IV: Site description
Section 6 (2) (c) (d) of the Spill Reporting Regulation

Provide a description of the spill site and the sites affected by the spill. The description of the spill site may include a description of the receiving environment, the proximity to a nearby city/town/roadway, the type of vegetation in the area, how densely populated the area is, accessibility to spill site, nearby waterways, and any other defining characteristics of the area.

The spill occurred at the Myra Falls Mine (surface) with restricted access to the public and approximately 300 employees. The area affected was a pad constructed of rock crush situated above a tailings storage facility named the "Old TDF". This tailings storage facility does not currently receive any new tailings slurry as it was filled to capacity over 1 decade ago. It is currently utilized as a rock sorting area and an mobile equipment fueling station

Latitude: Degrees 49 Minutes 34 Seconds 31.20

Longitude: Degrees 125 Minutes 35 Seconds 5.64

or

Site civic address or location: Street

City Postal Code

or

DLS or BCNTS (if applicable): Site ID number (if applicable):

[1] For the definition of the *emergency response completion date*, please refer to B.C. Reg. 187/2017 Spill Reporting Regulation

Section V: Description of the source, type, and quantity of the spill
Section 6 (2) (e) (f) of the Spill Reporting Regulation

Description of the source of the spill (pipeline, rail, truck, facility, etc.):

Above ground diesel tank used for filling of underground mine vehicles.

Type of substance spilled (common name): Diesel

United Nations (UN) number of substance spilled (if applicable): 1202

Item number from the table in the Schedule in the Spill Reporting Regulation: 5

Quantity (in litres or kilograms) of the substance spilled – if the quantity is unknown, provide a reasonable estimate and explain why the quantity is unknown and cannot be determined: Estimated to be between 150L - 200L.

Section VI: Description of the circumstances, cause, and impacts of the spill
Section 6 (2) (g) (i) (ii) (iii) of the Spill Reporting Regulation

Provide a description of the activity during which the spill occurred (transportation, transfer of cargo, fuelling, cleaning, maintenance, etc.):

Occurred during fueling of a Normet Hiab Truck for use in underground mining.

Provide a description of the incident leading to the spill (tank rupture, overfill, collision, rollover, derailment, fire, explosion, etc.):

Operators set lock on fuel nozzle and left pump unattended. The locking mechanism failed to stop the pump and the fuel tank over-topped.

Provide a description of the underlying cause of the spill (human error, external conditions, organizational or management failure, etc.):

Human error, equipment malfunction, lack of training.

Section VII: Impacts to human health, the environment, and infrastructure
Section 6 (2) (g) (iv) (v) of the Spill Reporting Regulation

Describe any adverse effects of the spill on human health (please state 'N/A' if there were no adverse effects on human health): N/A

Number of people evacuated: 0

Number of fatalities: 0

Number of people injured: 0

Describe any adverse impacts on infrastructure[2] (please state 'N/A' if there were no adverse impacts to infrastructure):

N/A

Impacts to water

Was there an impact to a body of water? ◯ Yes ◯ No

[2] For the definition of *infrastructure,* refer to section 91.1 of the *Environmental Management Act 2003*

Description of impact:

Using visual estimation, approximately 150L-200L of diesel fuel was spilled on to bare ground. Area of spill sees on-going impact by mining operations. Run-off from the area is confined to the water treatment system for the mine, and no migration to water ways is expected.

Describe the body of water (stream, aquifer, fish habitat, naturally formed body of water, ditch, lake, etc.):

Name of body of water:

Impacts to the environment

Was there an impact on flora (vegetation)? ◯ YES ◯ NO	If yes, list the common and species names:

Provide a description of the impact on flora (oiled, removed, etc.):

Was there an impact on fauna (animals)? ◯ YES ◯ NO	If yes, list the common and species names:

Provide a description of impact on fauna (include injured, dead, etc.):

Was there an impact on aquatic and/or terrestrial habitats? ◯ YES ◯ NO	If yes, list the type of habitat (riparian, breeding ground, etc.):

Provide a description of impact on aquatic and terrestrial habitats, including response actions taken to restore any of the impacts listed:

Section VIII: Spill response actions **Section 6 (2) (h) of the Spill Reporting Regulation**		
Action taken to comply with section 91.2 of the *Environmental Management Act 2003*	Who took the action (company, person, contractor, etc.)	Date that the action was taken (click the arrow or enter the date using the format YYYY-MM-DD)
Report to the Environment Department	Mine Operators	2022-03-25
Containment of Spill using absorbent pads/floor dry.	Environmental Department	2022-03-25
Subsequent removal of contaminated soil and spill response items in 45 Gallon drums for disposal off-site.	Environmental Department, Mine Operators	2022-03-25

Section IX: Waste disposal (please state 'N/A' if no waste was produced) **Section 6 (2) (i) of the Spill Reporting Regulation**		
List the type of waste	Method of disposal	Location of disposal
Diesel contaminated soil.	Terrapure	Nanaimo

Section X: Attached reports, maps, and photographs **Section 6 (2) (j) (k) of the Spill Reporting Regulation**	
Report of results of sampling, testing, monitoring, and/or assessing carried out during spill response actions (including reports from Qualified Professionals), if applicable	Copy attached ☐
Map of the incident site and areas surrounding the incident site (required)	Copy attached ☑
Photographs of the spill (required)	Copy attached ☑

Section XI: Agencies on scene or notified **Section 6 (2) (l) (m) of the Spill Reporting Regulation**
List the names of all agencies that were at the incident site: BC Government was notified in the afternoon following the spill through the Environmental Emergency Reporting Line. No regulatory agencies were on site during this incident.

List the names of other persons or agencies that were advised about the spill:

Ken Russel (ECCC)
Douglas Gordon (VIHA)
Chris Crawford (MEMLI)

Section XII: Additional comments

This is a revised DGIR end of Spill Report from March 25, 2022, updated October 27, 2022

Section XIII: Verification of information provided

I confirm that the above information is true and complete.

Name of person completing form:	Date completed (YYYY-MM-DD)
Ethan Zarchikoff	2022-03-29

Name of responsible person (person or company):	Date completed (YYYY-MM-DD)
Myra Falls Mine Ltd	2022-03-29

Section XIV: Approval - For internal use only

Reviewed by:	Date completed (YYYY-MM-DD)

Save Reset Form

BRITISH COLUMBIA
Ministry of Environment and Climate Change Strategy

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Environmental Emergency Program
SpillReports@gov.bc.ca

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	Telephone number: 250-287-9271 x3871

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	Company name:
	Email:
	Address:
	Telephone number:
Details for owner of the substance spilled Same as above ☑	Name of company representative:
	Company name:
	Email:
	Address:
	Telephone number:

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Section 6 (2) (b) of the Spill Reporting Regulation

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Date reported: 2022-03-25 Emergency response completion date[1]: 2022-03-25

Section IV: Site description
Section 6 (2) (c) (d) of the Spill Reporting Regulation

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Longitude: Degrees 125 Minutes 35 Seconds 5.64

or

Site civic address or location: Street

City Postal Code

or

DLS or BCNTS (if applicable): Site ID number (if applicable):

[1] For the definition of the *emergency response completion date*, please refer to B.C. Reg. 187/2017 Spill Reporting Regulation

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United Nations (UN) number of substance spilled (if applicable): 1202

Item number from the table in the Schedule in the Spill Reporting Regulation: 5

Quantity (in litres or kilograms) of the substance spilled – if the quantity is unknown, provide a reasonable estimate and explain why the quantity is unknown and cannot be determined: Estimated to be between 150L - 200L.

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Section 6 (2) (g) (i) (ii) (iii) of the Spill Reporting Regulation

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Occurred during fueling of a Normet Hiab Truck for use in underground mining.

Provide a description of the incident leading to the spill (tank rupture, overfill, collision, rollover, derailment, fire, explosion, etc.):

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Provide a description of the underlying cause of the spill (human error, external conditions, organizational or management failure, etc.):

Human error, equipment malfunction, lack of training.

Section VII: Impacts to human health, the environment, and infrastructure
Section 6 (2) (g) (iv) (v) of the Spill Reporting Regulation

Describe any adverse effects of the spill on human health (please state 'N/A' if there were no adverse effects on human health): N/A

Number of people evacuated: 0

Number of fatalities: 0

Number of people injured: 0

Describe any adverse impacts on infrastructure[2] (please state 'N/A' if there were no adverse impacts to infrastructure):

N/A

Impacts to water

Was there an impact to a body of water? ◯ Yes ◯ No

[2] For the definition of *infrastructure,* refer to section 91.1 of the *Environmental Management Act 2003*

Description of impact:

Using visual estimation, approximately 150L-200L of diesel fuel was spilled on to bare ground. Area of spill sees on-going impact by mining operations. Run-off from the area is confined to the water treatment system for the mine, and no migration to water ways is expected.

Describe the body of water (stream, aquifer, fish habitat, naturally formed body of water, ditch, lake, etc.):

Name of body of water:

Impacts to the environment

Was there an impact on flora (vegetation)? ◯ YES ◯ NO	If yes, list the common and species names:

Provide a description of the impact on flora (oiled, removed, etc.):

Was there an impact on fauna (animals)? ◯ YES ◯ NO	If yes, list the common and species names:

Provide a description of impact on fauna (include injured, dead, etc.):

Was there an impact on aquatic and/or terrestrial habitats? ◯ YES ◯ NO	If yes, list the type of habitat (riparian, breeding ground, etc.):

Provide a description of impact on aquatic and terrestrial habitats, including response actions taken to restore any of the impacts listed:

Section VIII: Spill response actions **Section 6 (2) (h) of the Spill Reporting Regulation**		
Action taken to comply with section 91.2 of the *Environmental Management Act 2003*	Who took the action (company, person, contractor, etc.)	Date that the action was taken (click the arrow or enter the date using the format YYYY-MM-DD)
Report to the Environment Department	Mine Operators	2022-03-25
Containment of Spill using absorbent pads/floor dry.	Environmental Department	2022-03-25
Subsequent removal of contaminated soil and spill response items in 45 Gallon drums for disposal off-site.	Environmental Department, Mine Operators	2022-03-25

Section IX: Waste disposal (please state 'N/A' if no waste was produced) **Section 6 (2) (i) of the Spill Reporting Regulation**		
List the type of waste	Method of disposal	Location of disposal
Diesel contaminated soil.	Terrapure	Nanaimo

Section X: Attached reports, maps, and photographs **Section 6 (2) (j) (k) of the Spill Reporting Regulation**	
Report of results of sampling, testing, monitoring, and/or assessing carried out during spill response actions (including reports from Qualified Professionals), if applicable	Copy attached ☐
Map of the incident site and areas surrounding the incident site (required)	Copy attached ☑
Photographs of the spill (required)	Copy attached ☑

Section XI: Agencies on scene or notified **Section 6 (2) (l) (m) of the Spill Reporting Regulation**
List the names of all agencies that were at the incident site: BC Government was notified in the afternoon following the spill through the Environmental Emergency Reporting Line. No regulatory agencies were on site during this incident.

List the names of other persons or agencies that were advised about the spill:

Ken Russel (ECCC)
Douglas Gordon (VIHA)
Chris Crawford (MEMLI)

Section XII: Additional comments

This is a revised DGIR end of Spill Report from March 25, 2022, updated October 27, 2022

Section XIII: Verification of information provided

I confirm that the above information is true and complete.

Name of person completing form:	Date completed (YYYY-MM-DD)
Ethan Zarchikoff	2022-03-29

Name of responsible person (person or company):	Date completed (YYYY-MM-DD)
Myra Falls Mine Ltd	2022-03-29

Section XIV: Approval - For internal use only

Reviewed by:	Date completed (YYYY-MM-DD)

Save Reset Form

BRITISH COLUMBIA
Ministry of Environment and Climate Change Strategy

Update to Minister/End-of-Spill Report Form

Environmental Emergency Program
SpillReports@gov.bc.ca

This report template can be completed to satisfy the requirements of either the End-of-Spill Report or the Update to Minister Report. Please specify which report you are completing in section I of this form. If any of the fields of this form are not applicable to the spill for which this form is being completed, indicate 'N/A' in the field; reports with incomplete fields will be sent back to the responsible person.

End-of-Spill Report: Section 6 of the Spill Reporting Regulation outlines the requirements for the End-of-Spill Report. Responsible persons must submit a written End-of-Spill Report to the Ministry of Environment and Climate Change Strategy within 30 days following the emergency response completion date of a spill as outlined in section 6 (1) of the Spill Reporting Regulation. Responsible persons must submit a written report to the Ministry of Environment and Climate Change Strategy as soon as practicable if either of the following two conditions are present:

1. The spill entered, or was likely to enter, a body of water as defined in the Spill Reporting Regulation
2. The quantity of the substance spilled was, or was likely to be, equal to or greater than the listed quantity for the listed substance as outlined in the Spill Reporting Regulation

Update to Minister Report: Section 5 of the Spill Reporting Regulation outlines the requirements for the Update to Minister Report. Responsible persons must submit a written report to the Ministry of Environment and Climate Change Strategy as soon as practicable if any of the following three conditions are present:

1. On request of the Minister
2. At least once every 30 days after the date that the spill began
3. At any time that the responsible person has reason to believe that information previously reported in the Initial Report has become inaccurate or incomplete

Complete this form and submit it by email to SpillReports@gov.bc.ca. For additional information, please visit the British Columbia Environmental Emergency Program Report a Spill webpage.

Dangerous Goods Incident Report (DGIR) number: 215257

Section I: Type of report
Sections 5 and 6 of Spill Reporting Regulation

This form is completed to satisfy the requirements of the:

☐ Update to Minister Report ☐ End-of-Spill Report

Section II: Contact information
Section 6 (2) (a) of the Spill Reporting Regulation

Details for person filling out the report	Name of company representative: Josh Fry
	Company name: Myra Falls Mine Ltd
	Email: joshua.fry@myrafallsmine.com
	Address: PO Box 8000 Campbell River BC, V9W 5E2
	Telephone number: 250-287-9271 x3871

Details for responsible person Same as above ☑	Name of company representative:
	Company name:
	Email:
	Address:
	Telephone number:
Details for owner of the substance spilled Same as above ☑	Name of company representative:
	Company name:
	Email:
	Address:
	Telephone number:

Section III: Timing of the spill
Section 6 (2) (b) of the Spill Reporting Regulation

Date of spill: 2022-03-25 Time of spill: 8:00 Duration of the spill (days): 0.002

Date reported: 2022-03-25 Emergency response completion date[1]: 2022-03-25

Section IV: Site description
Section 6 (2) (c) (d) of the Spill Reporting Regulation

Provide a description of the spill site and the sites affected by the spill. The description of the spill site may include a description of the receiving environment, the proximity to a nearby city/town/roadway, the type of vegetation in the area, how densely populated the area is, accessibility to spill site, nearby waterways, and any other defining characteristics of the area.

The spill occurred at the Myra Falls Mine (surface) with restricted access to the public and approximately 300 employees. The area affected was a pad constructed of rock crush situated above a tailings storage facility named the "Old TDF". This tailings storage facility does not currently receive any new tailings slurry as it was filled to capacity over 1 decade ago. It is currently utilized as a rock sorting area and an mobile equipment fueling station

Latitude: Degrees 49 Minutes 34 Seconds 31.20

Longitude: Degrees 125 Minutes 35 Seconds 5.64

or

Site civic address or location: Street

City Postal Code

or

DLS or BCNTS (if applicable): Site ID number (if applicable):

[1] For the definition of the *emergency response completion date*, please refer to B.C. Reg. 187/2017 Spill Reporting Regulation

Section V: Description of the source, type, and quantity of the spill
Section 6 (2) (e) (f) of the Spill Reporting Regulation

Description of the source of the spill (pipeline, rail, truck, facility, etc.):

Above ground diesel tank used for filling of underground mine vehicles.

Type of substance spilled (common name): Diesel

United Nations (UN) number of substance spilled (if applicable): 1202

Item number from the table in the Schedule in the Spill Reporting Regulation: 5

Quantity (in litres or kilograms) of the substance spilled – if the quantity is unknown, provide a reasonable estimate and explain why the quantity is unknown and cannot be determined: Estimated to be between 150L - 200L.

Section VI: Description of the circumstances, cause, and impacts of the spill
Section 6 (2) (g) (i) (ii) (iii) of the Spill Reporting Regulation

Provide a description of the activity during which the spill occurred (transportation, transfer of cargo, fuelling, cleaning, maintenance, etc.):

Occurred during fueling of a Normet Hiab Truck for use in underground mining.

Provide a description of the incident leading to the spill (tank rupture, overfill, collision, rollover, derailment, fire, explosion, etc.):

Operators set lock on fuel nozzle and left pump unattended. The locking mechanism failed to stop the pump and the fuel tank over-topped.

Provide a description of the underlying cause of the spill (human error, external conditions, organizational or management failure, etc.):

Human error, equipment malfunction, lack of training.

Section VII: Impacts to human health, the environment, and infrastructure
Section 6 (2) (g) (iv) (v) of the Spill Reporting Regulation

Describe any adverse effects of the spill on human health (please state 'N/A' if there were no adverse effects on human health): N/A

Number of people evacuated: 0

Number of fatalities: 0

Number of people injured: 0

Describe any adverse impacts on infrastructure[2] (please state 'N/A' if there were no adverse impacts to infrastructure):

N/A

Impacts to water

Was there an impact to a body of water? ◯ Yes ◯ No

[2] For the definition of *infrastructure,* refer to section 91.1 of the *Environmental Management Act 2003*

Description of impact:

Using visual estimation, approximately 150L-200L of diesel fuel was spilled on to bare ground. Area of spill sees on-going impact by mining operations. Run-off from the area is confined to the water treatment system for the mine, and no migration to water ways is expected.

Describe the body of water (stream, aquifer, fish habitat, naturally formed body of water, ditch, lake, etc.):

Name of body of water:

Impacts to the environment

Was there an impact on flora (vegetation)? ◯ YES ◯ NO	If yes, list the common and species names:

Provide a description of the impact on flora (oiled, removed, etc.):

Was there an impact on fauna (animals)? ◯ YES ◯ NO	If yes, list the common and species names:

Provide a description of impact on fauna (include injured, dead, etc.):

Was there an impact on aquatic and/or terrestrial habitats? ◯ YES ◯ NO	If yes, list the type of habitat (riparian, breeding ground, etc.):

Provide a description of impact on aquatic and terrestrial habitats, including response actions taken to restore any of the impacts listed:

Section VIII: Spill response actions **Section 6 (2) (h) of the Spill Reporting Regulation**		
Action taken to comply with section 91.2 of the *Environmental Management Act 2003*	Who took the action (company, person, contractor, etc.)	Date that the action was taken (click the arrow or enter the date using the format YYYY-MM-DD)
Report to the Environment Department	Mine Operators	2022-03-25
Containment of Spill using absorbent pads/floor dry.	Environmental Department	2022-03-25
Subsequent removal of contaminated soil and spill response items in 45 Gallon drums for disposal off-site.	Environmental Department, Mine Operators	2022-03-25

Section IX: Waste disposal (please state 'N/A' if no waste was produced) **Section 6 (2) (i) of the Spill Reporting Regulation**		
List the type of waste	Method of disposal	Location of disposal
Diesel contaminated soil.	Terrapure	Nanaimo

Section X: Attached reports, maps, and photographs **Section 6 (2) (j) (k) of the Spill Reporting Regulation**	
Report of results of sampling, testing, monitoring, and/or assessing carried out during spill response actions (including reports from Qualified Professionals), if applicable	Copy attached ☐
Map of the incident site and areas surrounding the incident site (required)	Copy attached ☑
Photographs of the spill (required)	Copy attached ☑

Section XI: Agencies on scene or notified **Section 6 (2) (l) (m) of the Spill Reporting Regulation**
List the names of all agencies that were at the incident site: BC Government was notified in the afternoon following the spill through the Environmental Emergency Reporting Line. No regulatory agencies were on site during this incident.

List the names of other persons or agencies that were advised about the spill:

Ken Russel (ECCC)
Douglas Gordon (VIHA)
Chris Crawford (MEMLI)

Section XII: Additional comments

This is a revised DGIR end of Spill Report from March 25, 2022, updated October 27, 2022

Section XIII: Verification of information provided

I confirm that the above information is true and complete.

Name of person completing form:	Date completed (YYYY-MM-DD)
Ethan Zarchikoff	2022-03-29

Name of responsible person (person or company):	Date completed (YYYY-MM-DD)
Myra Falls Mine Ltd	2022-03-29

Section XIV: Approval - For internal use only

Reviewed by:	Date completed (YYYY-MM-DD)

Save Reset Form

BRITISH COLUMBIA
Ministry of Environment and Climate Change Strategy

Update to Minister/End-of-Spill Report Form

Environmental Emergency Program
SpillReports@gov.bc.ca

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2. The quantity of the substance spilled was, or was likely to be, equal to or greater than the listed quantity for the listed substance as outlined in the Spill Reporting Regulation

Update to Minister Report: Section 5 of the Spill Reporting Regulation outlines the requirements for the Update to Minister Report. Responsible persons must submit a written report to the Ministry of Environment and Climate Change Strategy as soon as practicable if any of the following three conditions are present:

1. On request of the Minister
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3. At any time that the responsible person has reason to believe that information previously reported in the Initial Report has become inaccurate or incomplete

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Dangerous Goods Incident Report (DGIR) number: 215257

Section I: Type of report
Sections 5 and 6 of Spill Reporting Regulation

This form is completed to satisfy the requirements of the:

☐ Update to Minister Report ☐ End-of-Spill Report

Section II: Contact information
Section 6 (2) (a) of the Spill Reporting Regulation

Details for person filling out the report	Name of company representative: Josh Fry
	Company name: Myra Falls Mine Ltd
	Email: joshua.fry@myrafallsmine.com
	Address: PO Box 8000 Campbell River BC, V9W 5E2
	Telephone number: 250-287-9271 x3871

Details for responsible person Same as above ☑	Name of company representative:
	Company name:
	Email:
	Address:
	Telephone number:
Details for owner of the substance spilled Same as above ☑	Name of company representative:
	Company name:
	Email:
	Address:
	Telephone number:

Section III: Timing of the spill
Section 6 (2) (b) of the Spill Reporting Regulation

Date of spill: 2022-03-25 Time of spill: 8:00 Duration of the spill (days): 0.002

Date reported: 2022-03-25 Emergency response completion date[1]: 2022-03-25

Section IV: Site description
Section 6 (2) (c) (d) of the Spill Reporting Regulation

Provide a description of the spill site and the sites affected by the spill. The description of the spill site may include a description of the receiving environment, the proximity to a nearby city/town/roadway, the type of vegetation in the area, how densely populated the area is, accessibility to spill site, nearby waterways, and any other defining characteristics of the area.

The spill occurred at the Myra Falls Mine (surface) with restricted access to the public and approximately 300 employees. The area affected was a pad constructed of rock crush situated above a tailings storage facility named the "Old TDF". This tailings storage facility does not currently receive any new tailings slurry as it was filled to capacity over 1 decade ago. It is currently utilized as a rock sorting area and an mobile equipment fueling station

Latitude: Degrees 49 Minutes 34 Seconds 31.20

Longitude: Degrees 125 Minutes 35 Seconds 5.64

or

Site civic address or location: Street

City Postal Code

or

DLS or BCNTS (if applicable): Site ID number (if applicable):

[1] For the definition of the *emergency response completion date*, please refer to B.C. Reg. 187/2017 Spill Reporting Regulation

Section V: Description of the source, type, and quantity of the spill
Section 6 (2) (e) (f) of the Spill Reporting Regulation

Description of the source of the spill (pipeline, rail, truck, facility, etc.):

Above ground diesel tank used for filling of underground mine vehicles.

Type of substance spilled (common name): Diesel

United Nations (UN) number of substance spilled (if applicable): 1202

Item number from the table in the Schedule in the Spill Reporting Regulation: 5

Quantity (in litres or kilograms) of the substance spilled – if the quantity is unknown, provide a reasonable estimate and explain why the quantity is unknown and cannot be determined: Estimated to be between 150L - 200L.

Section VI: Description of the circumstances, cause, and impacts of the spill
Section 6 (2) (g) (i) (ii) (iii) of the Spill Reporting Regulation

Provide a description of the activity during which the spill occurred (transportation, transfer of cargo, fuelling, cleaning, maintenance, etc.):

Occurred during fueling of a Normet Hiab Truck for use in underground mining.

Provide a description of the incident leading to the spill (tank rupture, overfill, collision, rollover, derailment, fire, explosion, etc.):

Operators set lock on fuel nozzle and left pump unattended. The locking mechanism failed to stop the pump and the fuel tank over-topped.

Provide a description of the underlying cause of the spill (human error, external conditions, organizational or management failure, etc.):

Human error, equipment malfunction, lack of training.

Section VII: Impacts to human health, the environment, and infrastructure
Section 6 (2) (g) (iv) (v) of the Spill Reporting Regulation

Describe any adverse effects of the spill on human health (please state 'N/A' if there were no adverse effects on human health): N/A

Number of people evacuated: 0

Number of fatalities: 0

Number of people injured: 0

Describe any adverse impacts on infrastructure[2] (please state 'N/A' if there were no adverse impacts to infrastructure):

N/A

Impacts to water

Was there an impact to a body of water? ◯ Yes ◯ No

[2] For the definition of *infrastructure,* refer to section 91.1 of the *Environmental Management Act 2003*

Description of impact:

Using visual estimation, approximately 150L-200L of diesel fuel was spilled on to bare ground. Area of spill sees on-going impact by mining operations. Run-off from the area is confined to the water treatment system for the mine, and no migration to water ways is expected.

Describe the body of water (stream, aquifer, fish habitat, naturally formed body of water, ditch, lake, etc.):

Name of body of water:

Impacts to the environment

Was there an impact on flora (vegetation)? ◯ YES ◯ NO	If yes, list the common and species names:

Provide a description of the impact on flora (oiled, removed, etc.):

Was there an impact on fauna (animals)? ◯ YES ◯ NO	If yes, list the common and species names:

Provide a description of impact on fauna (include injured, dead, etc.):

Was there an impact on aquatic and/or terrestrial habitats? ◯ YES ◯ NO	If yes, list the type of habitat (riparian, breeding ground, etc.):

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Section VIII: Spill response actions **Section 6 (2) (h) of the Spill Reporting Regulation**		
Action taken to comply with section 91.2 of the *Environmental Management Act 2003*	Who took the action (company, person, contractor, etc.)	Date that the action was taken (click the arrow or enter the date using the format YYYY-MM-DD)
Report to the Environment Department	Mine Operators	2022-03-25
Containment of Spill using absorbent pads/floor dry.	Environmental Department	2022-03-25
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Section IX: Waste disposal (please state 'N/A' if no waste was produced) **Section 6 (2) (i) of the Spill Reporting Regulation**		
List the type of waste	Method of disposal	Location of disposal
Diesel contaminated soil.	Terrapure	Nanaimo

Section X: Attached reports, maps, and photographs **Section 6 (2) (j) (k) of the Spill Reporting Regulation**	
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Douglas Gordon (VIHA)
Chris Crawford (MEMLI)

Section XII: Additional comments

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Name of person completing form:	Date completed (YYYY-MM-DD)
Ethan Zarchikoff	2022-03-29

Name of responsible person (person or company):	Date completed (YYYY-MM-DD)
Myra Falls Mine Ltd	2022-03-29

Section XIV: Approval - For internal use only

Reviewed by:	Date completed (YYYY-MM-DD)

Save Reset Form

BRITISH COLUMBIA
Ministry of Environment and Climate Change Strategy

Update to Minister/End-of-Spill Report Form

Environmental Emergency Program
SpillReports@gov.bc.ca

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Dangerous Goods Incident Report (DGIR) number: 215257

Section I: Type of report
Sections 5 and 6 of Spill Reporting Regulation

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	Company name: Myra Falls Mine Ltd
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	Company name:
	Email:
	Address:
	Telephone number:
Details for owner of the substance spilled Same as above ☑	Name of company representative:
	Company name:
	Email:
	Address:
	Telephone number:

Section III: Timing of the spill
Section 6 (2) (b) of the Spill Reporting Regulation

Date of spill: 2022-03-25 Time of spill: 8:00 Duration of the spill (days): 0.002

Date reported: 2022-03-25 Emergency response completion date[1]: 2022-03-25

Section IV: Site description
Section 6 (2) (c) (d) of the Spill Reporting Regulation

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Type of substance spilled (common name): Diesel

United Nations (UN) number of substance spilled (if applicable): 1202

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Section 6 (2) (g) (iv) (v) of the Spill Reporting Regulation

Describe any adverse effects of the spill on human health (please state 'N/A' if there were no adverse effects on human health): N/A

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Impacts to the environment

Was there an impact on flora (vegetation)? ◯ YES ◯ NO	If yes, list the common and species names:

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List the type of waste	Method of disposal	Location of disposal
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Photographs of the spill (required)	Copy attached ☑

Section XI: Agencies on scene or notified **Section 6 (2) (l) (m) of the Spill Reporting Regulation**
List the names of all agencies that were at the incident site: BC Government was notified in the afternoon following the spill through the Environmental Emergency Reporting Line. No regulatory agencies were on site during this incident.

List the names of other persons or agencies that were advised about the spill:

Ken Russel (ECCC)
Douglas Gordon (VIHA)
Chris Crawford (MEMLI)

Section XII: Additional comments

This is a revised DGIR end of Spill Report from March 25, 2022, updated October 27, 2022

Section XIII: Verification of information provided

I confirm that the above information is true and complete.

Name of person completing form:	Date completed (YYYY-MM-DD)
Ethan Zarchikoff	2022-03-29

Name of responsible person (person or company):	Date completed (YYYY-MM-DD)
Myra Falls Mine Ltd	2022-03-29

Section XIV: Approval - For internal use only

Reviewed by:	Date completed (YYYY-MM-DD)

Save Reset Form

Appendix D

2022 Groundwater and Seepage Water Quality Results

Work Order	Lab ID	Re-anaysis	Field QAQC	Station (Lab Report)	Station (Monitoring Plan)	Date	pH	Conductivity	Hardness, Total (as $CaCO_3$)	Hardness, Dissolved (as $CaCO_3$)	Turbidity	Total Suspended Solids	Acidity, pH 8.3 (as $CaCO_3$)	Alkalinity, Total pH 4.5 (as $CaCO_3$)	Alkalinity, Total pH 8.3 (as $CaCO_3$)	Alkalinity, Bicarbonate (as $CaCO_3$)
							pH Unit	uS/cm	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L	mg/L
22D0297	16	No	Regular	MWA-Q	MW-A	31-Mar-2022	4.1	1340	566	-	-	-	-	-	<0.6	-
22E3862	12	No	Regular	MW-A	MW-A	26-May-2022	4.7	523	226	-	-	-	-	-	<0.6	-
22J0166	1	No	Regular	MWA-Q	MW-A	28-Sep-2022	4.7	716	337	-	-	-	-	-	<0.6	-
22L0252	6	No	Regular	MWA-Q	MW-A	28-Nov-2022	4.9	975	492	-	-	-	-	-	<0.6	-
22D0297	17	No	Regular	MWC-Q	MW-C	31-Mar-2022	6.1	626	263	-	-	-	-	-	27	27
22E3862	1	No	Regular	MW-C	MW-C	23-May-2022	6.1	587	268	-	-	-	-	-	22	22
22I2071	12	No	Regular	MWC-Q	MW-C	13-Sep-2022	6.3	714	358	-	-	-	-	-	29	29
22L0252	9	No	Regular	MWC-Q	MW-C	28-Nov-2022	6.2	853	472	-	-	-	-	-	28	28
22D0297	18	No	Regular	MWD-Q	MW-D	31-Mar-2022	4.3	676	569	-	-	-	-	-	<0.6	-
22E3862	2	No	Regular	MW-D	MW-D	23-May-2022	4.5	1460	719	-	-	-	-	-	<0.6	-
22L0252	5	No	Regular	MWD-Q	MW-D	28-Nov-2022	4.9	931	476	-	-	-	-	-	<0.6	-
22D0297	19	No	Regular	MWF-Q	MW-F	31-Mar-2022	6.3	185	78	-	-	-	-	-	30	30
22G0079	1	No	Regular	MW-F	MW-F	30-Jun-2022	7.1	51	20	-	-	-	-	-	12	12
22L0252	10	No	Regular	MWF-Q	MW-F	28-Nov-2022	4.7	961	488	-	-	-	-	-	<0.6	-
22D0297	5	No	Regular	MW1314D-Q	MW13-14D	24-Mar-2022	5.2	311	130	-	-	-	-	-	1.8	1.8
22E3862	4	No	Regular	MW13-14D-Q	MW13-14D	23-May-2022	5.1	318	132	-	-	-	-	-	1.3	1.3
22G3979	3	No	Regular	MW1314D-Q	MW13-14D	25-Jul-2022	5.5	368	159	-	-	-	-	-	2.2	2.2
22L0252	7	No	Regular	MW1314D-Q	MW13-14D	28-Nov-2022	5.3	623	304	-	-	-	-	-	1.6	1.6
22D0297	6	No	Regular	MW1314S-Q	MW13-14S	24-Mar-2022	5.4	257	102	-	-	-	-	-	2.5	2.5
22E3862	3	No	Regular	MW13-14S-Q	MW13-14S	23-May-2022	5.6	258	109	-	-	-	-	-	6.0	6.0
22I2071	11	No	Regular	MW1314S-Q	MW13-14S	13-Sep-2022	5.5	378	168	-	-	-	-	-	2.3	2.3
22L0252	8	No	Regular	MW1314S-Q	MW13-14S	28-Nov-2022	5.3	607	317	-	-	-	-	-	1.5	1.5
22D0297	12	No	Regular	MW1315D-Q	MW13-15D	25-Mar-2022	7.0	262	117	-	-	-	-	-	81	81
22E3862	5	No	Regular	MW13-15D-Q	MW13-15D	23-May-2022	6.7	235	116	-	-	-	-	-	90	90
22I1308	1	No	Regular	MW1315D-Q	MW13-15D	1-Sep-2022	7.2	231	114	-	-	-	-	-	84	84
22L0252	3	No	Regular	MW1315D-Q	MW13-15D	27-Nov-2022	6.5	240	110	-	-	-	-	-	50	50
22D0297	13	No	Regular	MW1315S-Q	MW13-15S	25-Mar-2022	6.4	364	150	-	-	-	-	-	6.0	6.0
22E3862	6	No	Regular	MW13-15S-Q	MW13-15S	23-May-2022	6.3	341	154	-	-	-	-	-	39	39
22I0407	11	No	Regular	MW1315S-Q	MW13-15S	30-Aug-2022	6.2	269	126	-	-	-	-	-	58	58
22L0252	4	No	Regular	MW1315S-Q	MW13-15S	27-Nov-2022	6.9	220	107	-	-	-	-	-	75	75
22E3862	14	No	Regular	In Drain	IN-DRAIN	26-May-2022	3.8	1270	502	-	-	-	-	-	<0.6	-
22D0297	7	No	Regular	DRAININ-Q	IN-DRAIN	24-Mar-2022	4.0	1410	275	-	-	-	-	-	<0.6	-
22L0252	1	No	Regular	OLDDRAININ-Q	IN-DRAIN	27-Nov-2022	4.4	1280	636	-	-	-	-	-	<0.6	-
22G3979	8	No	Regular	Drain Large IN	IN-DRAIN	25-Jul-2022	4.0	1510	693	-	-	-	-	-	<0.6	-
22D0297	8	No	Regular	DRAINOUT-Q	OUT-DRAIN	24-Mar-2022	6.1	617	547	-	-	-	-	-	31	31
22E3862	13	No	Regular	Out Drain	OUT-DRAIN	26-May-2022	6.0	690	338	-	-	-	-	-	36	36
22G3979	9	No	Regular	Drain Large OUT	OUT-DRAIN	25-Jul-2022	6.4	516	239	-	-	-	-	-	22	22
22E3862	17	No	Regular	Large Drain	L-DRAIN	26-May-2022	6.0	577	266	-	-	-	-	-	34	34
22K1477	1	No	Regular	DrainLONG-Q	L-DRAIN	7-Nov-2022	6.4	344	173	-	-	-	-	-	50	50
22K1477	2	No	Replicate	DrainLong-QR	L-DRAIN DUP	7-Nov-2022	6.4	347	174	-	-	-	-	-	50	50
22C3616	7	No	Regular	DRAINLONG	L-DRAIN	18-Mar-2022	6.8	304	154	-	-	-	-	-	55	55
22G3979	10	No	Regular	Drain Large	L-DRAIN	25-Jul-2022	6.3	501	234	-	-	-	-	-	12	12
22C3616	8	No	Regular	DRAINMED	M-DRAIN	18-Mar-2022	5.0	571	235	-	-	-	-	-	<0.6	-
22G3979	7	No	Regular	Drain Med	M-DRAIN	25-Jul-2022	5.1	484	218	-	-	-	-	-	<0.6	-
22K1477	3	No	Regular	DrainMED-Q	M-DRAIN	7-Nov-2022	5.7	378	174	-	-	-	-	-	4.3	4.3
22E3862	15	No	Regular	Med Drain	M-DRAIN	26-May-2022	4.7	846	389	-	-	-	-	-	<0.6	-
22C3616	9	No	Regular	DRAINSHORT	S-DRAIN	18-Mar-2022	6.5	319	140	-	-	-	-	-	16	16
22E3862	16	No	Regular	Short Drain	S-DRAIN	26-May-2022	5.4	674	319	-	-	-	-	-	5.1	5.1
22G3979	6	No	Regular	Drain Short	S-DRAIN	25-Jul-2022	6.5	529	261	-	-	-	-	-	32	32
22K1477	4	No	Regular	DrainSHORT-Q	S-DRAIN	7-Nov-2022	6.4	396	206	-	-	-	-	-	54	54
22B1849	2	No	Regular	3-RUNOFF	3-RUNOFF	9-Feb-2022	-	200	84	-	-	8.0	6.4	-	23	23
22K2921	2	No	Regular	3RUNOFF-Q	3RUNOFF-Q	5-Nov-2022	-	258	121	-	-	3.4	7.9	-	54	54
22E1819	2	No	Regular	3-RUNOFF-Q	3-RUNOFF-Q	11-May-2022	-	204	89	-	-	4.0	17	-	52	52

Station (Monitoring Plan)	Date	Alkalinity, Carbonate (as $CaCO_3$)	Alkalinity, Hydroxide (as $CaCO_3$)	Chloride	Fluoride	Sulphate	Total Nitrogen	Nitrate+ Nitrite	Nitrate (as N)	Nitrite (as N)	Ammonia (as N)	Total Phosphorus	Total Dissolved Phosphorus	TOC	DOC	Al-t	S-t	As-t	B-t	Ba-t
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-A	31-Mar-2022	-	-	-	-	872	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-A	26-May-2022	-	-	-	-	364	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-A	28-Sep-2022	-	-	-	-	379	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-A	28-Nov-2022	-	-	-	-	774	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-C	31-Mar-2022	-	-	-	-	305	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-C	23-May-2022	-	-	-	-	283	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-C	13-Sep-2022	-	-	-	-	373	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-C	28-Nov-2022	-	-	-	-	466	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-D	31-Mar-2022	-	-	-	-	366	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-D	23-May-2022	-	-	-	-	797	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-D	28-Nov-2022	-	-	-	-	597	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-F	31-Mar-2022	-	-	-	-	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-F	30-Jun-2022	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-F	28-Nov-2022	-	-	-	-	709	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-14D	24-Mar-2022	-	-	-	-	145	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-14D	23-May-2022	-	-	-	-	157	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-14D	25-Jul-2022	-	-	-	-	172	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-14D	28-Nov-2022	-	-	-	-	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-14S	24-Mar-2022	-	-	-	-	116	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-14S	23-May-2022	-	-	-	-	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-14S	13-Sep-2022	-	-	-	-	185	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-14S	28-Nov-2022	-	-	-	-	338	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-15D	25-Mar-2022	-	-	-	-	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-15D	23-May-2022	-	-	-	-	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-15D	1-Sep-2022	-	-	-	-	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-15D	27-Nov-2022	-	-	-	-	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-15S	25-Mar-2022	-	-	-	-	140	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-15S	23-May-2022	-	-	-	-	146	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-15S	30-Aug-2022	-	-	-	-	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-15S	27-Nov-2022	-	-	-	-	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IN-DRAIN	26-May-2022	-	-	-	-	1300	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IN-DRAIN	24-Mar-2022	-	-	-	-	1940	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IN-DRAIN	27-Nov-2022	-	-	-	-	867	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IN-DRAIN	25-Jul-2022	-	-	-	-	1120	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OUT-DRAIN	24-Mar-2022	-	-	-	-	287	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OUT-DRAIN	26-May-2022	-	-	-	-	359	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OUT-DRAIN	25-Jul-2022	-	-	-	-	388	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L-DRAIN	26-May-2022	-	-	-	-	287	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L-DRAIN	7-Nov-2022	-	-	-	-	133	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L-DRAIN DUP	7-Nov-2022	-	-	-	-	133	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L-DRAIN	18-Mar-2022	-	-	-	-	129	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L-DRAIN	25-Jul-2022	-	-	-	-	242	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M-DRAIN	18-Mar-2022	-	-	-	-	275	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M-DRAIN	25-Jul-2022	-	-	-	-	240	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M-DRAIN	7-Nov-2022	-	-	-	-	187	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M-DRAIN	26-May-2022	-	-	-	-	1080	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S-DRAIN	18-Mar-2022	-	-	-	-	140	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S-DRAIN	26-May-2022	-	-	-	-	409	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S-DRAIN	25-Jul-2022	-	-	-	-	234	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S-DRAIN	7-Nov-2022	-	-	-	-	149	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-RUNOFF	9-Feb-2022	-	-	-	-	64	-	<0.003	0.01	<0.001	-	0.03	0.008	-	-	1.7	23	0.0008	<0.0042	0.006
3RUNOFF-Q	5-Nov-2022	-	-	-	-	71	-	0.03	0.03	<0.001	-	0.01	<0.0005	-	-	1.1	24	<0.00004	<0.0008	0.007
3-RUNOFF-Q	11-May-2022	-	-	-	-	58	-	<0.003	0.01	<0.001	-	0.03	0.006	-	-	1.1	17	0.0006	<0.0008	0.005

Station (Monitoring Plan)	Date	Be-t	Bi-t	Cd-t	Ca-t	Cr-t	Co-t	Cu-t	Fe-t	P-t	Li-t	Mg-t	Mn-t	Mo-t	Ni-t	Pb-t	K-t	Se-t	Sn-t	Si-t	Ag-t	Na-t	Sr-t
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-A	31-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-A	26-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-A	28-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-A	28-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-C	31-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-C	23-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-C	13-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-C	28-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-D	31-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-D	23-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-D	28-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-F	31-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-F	30-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-F	28-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-14D	24-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-14D	23-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-14D	25-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-14D	28-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-14S	24-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-14S	23-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-14S	13-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-14S	28-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-15D	25-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-15D	23-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-15D	1-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-15D	27-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-15S	25-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-15S	23-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-15S	30-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-15S	27-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IN-DRAIN	26-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IN-DRAIN	24-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IN-DRAIN	27-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IN-DRAIN	25-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OUT-DRAIN	24-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OUT-DRAIN	26-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OUT-DRAIN	25-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L-DRAIN	26-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L-DRAIN	7-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L-DRAIN DUP	7-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L-DRAIN	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L-DRAIN	25-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M-DRAIN	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M-DRAIN	25-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M-DRAIN	7-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M-DRAIN	26-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S-DRAIN	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S-DRAIN	26-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S-DRAIN	25-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S-DRAIN	7-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-RUNOFF	9-Feb-2022	<0.00001	<0.00001	0.01	25	<0.00025	0.005	0.5	1.8	<0.027	0.002	5.4	0.3	<0.00005	0.004	0.002	<0.06	<0.00019	<0.00009	3.7	<0.00004	2.9	0.04
3RUNOFF-Q	5-Nov-2022	<0.000002	<0.000002	0.01	38	<0.00005	0.004	0.4	0.8	<0.005	0.002	6.6	0.4	0.0001	0.004	0.002	0.1	<0.00004	<0.00002	3.6	<0.000008	3.3	0.05
3-RUNOFF-Q	11-May-2022	<0.000002	<0.000002	0.009	26	<0.00005	0.003	0.4	1.4	<0.005	0.001	4.5	0.3	0.0001	0.003	0.0006	<0.01	<0.00004	<0.00002	3.0	<0.000008	1.8	0.04

Station (Monitoring Plan)	Date	Te-t	Tl-t	Th-t	Ti-t	W-t	U-t	V-t	Zn-t	Zr-t	Hg-t	Al-d	S-d	As-d	B-d	Be-d	Bi-d	Ba-d	Cd-d	Ca-d	Cr-d	Co-d	Cu-d	Fe-d
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-A	31-Mar-2022	-	-	-	-	-	-	-	-	-	-	8.2	257	0.0003	0.01	0.0008	<0.000001	0.02	0.05	144	0.0003	0.04	1.6	0.01
MW-A	26-May-2022	-	-	-	-	-	-	-	-	-	-	2.6	87	0.0001	0.007	0.0004	<0.000001	0.01	0.02	64	0.0002	0.02	0.8	0.02
MW-A	28-Sep-2022	-	-	-	-	-	-	-	-	-	-	4.0	136	<0.000056	0.007	0.0005	<0.000001	0.01	0.03	94	0.0002	0.02	1.1	0.007
MW-A	28-Nov-2022	-	-	-	-	-	-	-	-	-	-	6.7	174	<0.00007	0.01	0.0007	<0.000001	0.01	0.04	131	0.0003	0.04	1.6	<0.0007
MW-C	31-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.08	101	0.00010	0.01	0.00004	<0.000001	0.02	0.002	76	0.0001	0.003	0.04	4.0
MW-C	23-May-2022	-	-	-	-	-	-	-	-	-	-	0.5	90	0.0001	0.009	0.0001	<0.000001	0.02	0.009	76	0.0001	0.010	0.3	2.6
MW-C	13-Sep-2022	-	-	-	-	-	-	-	-	-	-	0.2	119	0.00009	0.010	0.00007	<0.000001	0.02	0.006	101	0.0002	0.01	0.1	3.8
MW-C	28-Nov-2022	-	-	-	-	-	-	-	-	-	-	0.4	148	0.0001	0.01	0.00008	<0.000001	0.02	0.009	131	0.0002	0.01	0.2	4.3
MW-D	31-Mar-2022	-	-	-	-	-	-	-	-	-	-	8.2	258	0.0002	0.01	0.0008	<0.000001	0.02	0.05	144	0.0003	0.04	1.6	0.01
MW-D	23-May-2022	-	-	-	-	-	-	-	-	-	-	11	293	0.0003	0.01	0.0009	<0.000001	0.02	0.06	184	0.0005	0.06	2.2	0.01
MW-D	28-Nov-2022	-	-	-	-	-	-	-	-	-	-	6.3	170	<0.00007	0.01	0.0006	<0.000001	0.01	0.04	127	0.0003	0.03	1.6	0.003
MW-F	31-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.005	22	<0.000014	0.006	<0.000002	<0.000001	0.03	0.003	25	0.0002	0.00004	0.007	0.004
MW-F	30-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.001	3.8	<0.000014	0.003	<0.000002	<0.000001	0.007	0.0004	6.8	0.0001	0.000005	0.002	<0.0007
MW-F	28-Nov-2022	-	-	-	-	-	-	-	-	-	-	0.4	145	<0.000042	0.01	0.00009	<0.000001	0.02	0.010	137	0.0002	0.01	0.2	4.1
MW13-14D	24-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.7	47	0.00007	0.006	0.0002	<0.000001	0.02	0.008	39	0.0001	0.009	0.3	0.003
MW13-14D	23-May-2022	-	-	-	-	-	-	-	-	-	-	0.7	49	<0.000014	0.005	0.0002	<0.000001	0.02	0.009	39	0.0001	0.009	0.3	0.004
MW13-14D	25-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.8	58	<0.00003	<0.0008	0.0003	<0.000002	0.02	0.010	48	<0.00004	0.01	0.3	<0.0008
MW13-14D	28-Nov-2022	-	-	-	-	-	-	-	-	-	-	1.0	99	<0.000028	0.006	0.0002	<0.000001	0.02	0.01	89	0.0002	0.02	0.4	0.02
MW13-14S	24-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.4	40	0.00005	0.005	0.0001	<0.000001	0.02	0.005	32	<0.00002	0.005	0.2	0.06
MW13-14S	23-May-2022	-	-	-	-	-	-	-	-	-	-	0.3	39	<0.000014	0.004	0.00009	<0.000001	0.02	0.004	34	0.0001	0.005	0.1	0.03
MW13-14S	13-Sep-2022	-	-	-	-	-	-	-	-	-	-	0.4	60	<0.000014	0.005	0.0001	<0.000001	0.02	0.008	50	0.0002	0.010	0.2	0.03
MW13-14S	28-Nov-2022	-	-	-	-	-	-	-	-	-	-	1.8	103	<0.000028	0.007	0.0003	<0.000001	0.02	0.02	92	0.0003	0.02	0.5	<0.0007
MW13-15D	25-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.002	21	0.00007	0.007	<0.000002	<0.000001	0.009	0.00002	38	0.0005	0.000009	0.0005	<0.0007
MW13-15D	23-May-2022	-	-	-	-	-	-	-	-	-	-	0.02	17	0.00007	0.006	<0.000002	<0.000001	0.009	0.00003	38	0.0006	0.00002	0.002	<0.0007
MW13-15D	1-Sep-2022	-	-	-	-	-	-	-	-	-	-	0.004	14	<0.000014	0.006	<0.000002	<0.000001	0.008	0.00001	38	0.0006	<0.0000031	0.0003	<0.0007
MW13-15D	27-Nov-2022	-	-	-	-	-	-	-	-	-	-	0.007	24	<0.000014	0.004	<0.000002	<0.000001	0.02	0.0002	37	0.0004	0.00004	0.002	0.004
MW13-15S	25-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.02	50	<0.000014	0.005	<0.000002	<0.000001	0.02	0.0008	51	0.0002	0.00002	0.004	0.003
MW13-15S	23-May-2022	-	-	-	-	-	-	-	-	-	-	0.004	47	<0.000014	0.004	<0.000002	<0.000001	0.02	0.0007	52	0.0002	0.000006	0.003	<0.0007
MW13-15S	30-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.006	32	<0.000014	0.004	<0.000002	<0.000001	0.02	0.0002	42	0.0003	0.000006	0.0010	<0.0007
MW13-15S	27-Nov-2022	-	-	-	-	-	-	-	-	-	-	0.003	14	0.00006	0.006	<0.000002	<0.000001	0.009	0.00002	35	0.0005	0.00002	0.001	0.002
IN-DRAIN	26-May-2022	-	-	-	-	-	-	-	-	-	-	21	247	0.0004	0.009	0.0008	<0.000001	0.01	0.09	117	0.0004	0.07	4.7	28
IN-DRAIN	24-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.4	100	0.00005	0.008	0.00010	<0.000001	0.02	0.01	82	0.0005	0.002	0.2	0.3
IN-DRAIN	27-Nov-2022	-	-	-	-	-	-	-	-	-	-	18	265	<0.000112	0.01	0.0008	<0.000001	0.01	0.10	162	0.0004	0.06	4.0	6.7
IN-DRAIN	25-Jul-2022	-	-	-	-	-	-	-	-	-	-	29	331	<0.00006	<0.0008	0.001	<0.000002	0.01	0.1	161	<0.00004	0.09	5.5	17
OUT-DRAIN	24-Mar-2022	-	-	-	-	-	-	-	-	-	-	28	304	0.0005	0.01	0.001	<0.000001	0.01	0.1	119	0.0005	0.08	5.3	25
OUT-DRAIN	26-May-2022	-	-	-	-	-	-	-	-	-	-	0.5	111	<0.000014	0.007	0.00009	<0.000001	0.02	0.01	100	0.0003	0.003	0.2	0.4
OUT-DRAIN	25-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.6	81	<0.00003	<0.0008	0.0001	<0.000002	0.01	0.01	72	<0.00004	0.010	0.3	0.7
L-DRAIN	26-May-2022	-	-	-	-	-	-	-	-	-	-	0.4	88	<0.000014	0.007	0.0001	<0.000001	0.02	0.01	76	0.0002	0.008	0.3	0.007
L-DRAIN	7-Nov-2022	-	-	-	-	-	-	-	-	-	-	0.2	43	<0.000014	0.005	0.00006	<0.000001	0.02	0.005	57	0.0002	0.002	0.1	<0.0007
L-DRAIN DUP	7-Nov-2022	-	-	-	-	-	-	-	-	-	-	0.2	44	<0.000014	0.005	0.00007	<0.000001	0.02	0.005	57	0.0003	0.002	0.1	<0.0007
L-DRAIN	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.2	39	<0.000014	0.004	0.00005	<0.000001	0.03	0.005	47	0.0002	0.003	0.1	0.008
L-DRAIN	25-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.9	80	<0.00003	<0.0008	0.0002	<0.000002	0.01	0.01	67	<0.00004	0.008	0.4	<0.0008
M-DRAIN	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	2.1	87	0.00009	0.006	0.0002	<0.000001	0.01	0.01	67	0.0002	0.01	0.6	0.4
M-DRAIN	25-Jul-2022	-	-	-	-	-	-	-	-	-	-	1.9	81	<0.00003	<0.0008	0.0002	<0.000002	0.01	0.01	65	<0.00004	0.01	0.5	0.06
M-DRAIN	7-Nov-2022	-	-	-	-	-	-	-	-	-	-	0.8	60	<0.000014	0.007	0.0001	<0.000001	0.01	0.007	53	0.0002	0.006	0.2	0.03
M-DRAIN	26-May-2022	-	-	-	-	-	-	-	-	-	-	4.0	149	0.0001	0.008	0.0004	<0.000001	0.02	0.03	109	0.0002	0.03	1.1	0.9
S-DRAIN	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.2	44	<0.000014	0.005	0.00004	<0.000001	0.02	0.006	44	0.0001	0.0004	0.2	0.03
S-DRAIN	26-May-2022	-	-	-	-	-	-	-	-	-	-	0.6	113	0.00008	0.007	0.0002	<0.000001	0.02	0.02	88	0.0001	0.01	0.8	0.6
S-DRAIN	25-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.3	82	<0.00003	<0.0008	<0.000002	<0.000002	0.02	0.01	84	<0.00004	0.0010	0.2	0.01
S-DRAIN	7-Nov-2022	-	-	-	-	-	-	-	-	-	-	0.02	51	<0.000014	0.004	0.00001	<0.000001	0.02	0.002	70	0.0002	0.00006	0.03	<0.0007
3-RUNOFF	9-Feb-2022	<0.00027	<0.000018	<0.00001	<0.0009	<0.0007	0.00003	<0.0002	3.0	<0.00009	<0.000002	0.02	23	<0.00014	<0.0042	<0.00001	<0.00001	0.006	0.01	25	<0.00022	0.005	0.2	0.02
3RUNOFF-Q	5-Nov-2022	<0.00005	<0.000004	<0.000002	<0.0002	<0.0001	0.00003	<0.00005	2.5	<0.00002	<0.000002	0.07	24	<0.00003	<0.0008	<0.000002	<0.000002	0.006	0.010	37	<0.00004	0.004	0.09	<0.0008
3-RUNOFF-Q	11-May-2022	<0.00005	<0.000004	<0.000002	<0.0002	<0.0001	0.00003	<0.00005	2.0	<0.00002	<0.000002	0.04	17	<0.00003	<0.0008	<0.000002	<0.000002	0.006	0.009	27	<0.00004	0.004	0.09	<0.0008

Station (Monitoring Plan)	Date	P-d	Li-d	Mg-d	Mn-d	Mo-d	Ni-d	Pb-d	K-d	Sb-t	Se-d	Si-d	Sr-d	Sn-d	Ag-d	Na-d	Sb-d	Te-d	Tl-d	Th-d	Ti-d	W-d	U-d
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-A	31-Mar-2022	<0.007	0.0007	50	6.2	<0.000007	0.05	0.0003	2.0	-	0.0001	14	0.3	<0.000014	0.00002	6.4	<0.000019	<0.000034	0.000009	<0.000002	<0.00009	<0.00001	0.0002
MW-A	26-May-2022	<0.007	0.0006	16	2.3	<0.000007	0.02	0.002	1.1	-	0.0002	11	0.2	<0.000014	<0.000004	3.0	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.0001
MW-A	28-Sep-2022	<0.007	0.0007	25	3.6	<0.000007	0.03	0.0006	1.3	-	0.0003	13	0.2	<0.000014	0.00002	3.8	0.00006	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.0001
MW-A	28-Nov-2022	<0.007	0.0009	40	5.0	<0.000007	0.04	0.00005	1.4	-	0.0003	14	0.2	<0.000014	<0.000004	5.1	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.0002
MW-C	31-Mar-2022	<0.007	0.0002	18	3.1	0.00001	0.003	0.002	0.5	-	<0.00002	16	0.2	<0.000014	<0.000004	3.5	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
MW-C	23-May-2022	<0.007	0.0002	19	3.1	0.00001	0.01	0.0001	0.8	-	<0.00002	13	0.2	<0.000014	<0.000004	3.5	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00002
MW-C	13-Sep-2022	<0.007	0.0001	26	4.0	0.00001	0.010	0.00009	0.7	-	<0.00002	16	0.2	<0.000014	<0.000004	4.3	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
MW-C	28-Nov-2022	<0.007	0.0002	35	5.5	0.00001	0.01	0.00007	0.8	-	<0.00002	17	0.3	<0.000014	<0.000004	5.1	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00002
MW-D	31-Mar-2022	<0.007	0.0007	51	6.2	<0.000007	0.05	0.0005	2.0	-	0.0001	14	0.3	<0.000014	0.00002	6.3	<0.000019	<0.000034	0.000010	<0.000002	<0.00009	<0.00001	0.0003
MW-D	23-May-2022	<0.007	0.0006	63	8.8	0.00003	0.07	0.0004	2.2	-	0.0002	15	0.4	<0.000014	0.00001	7.9	<0.000019	<0.000034	0.000010	<0.000002	<0.00009	<0.00001	0.0003
MW-D	28-Nov-2022	<0.007	0.0009	39	4.8	<0.000007	0.03	0.00009	1.4	-	0.0003	14	0.2	<0.000014	<0.000004	5.1	<0.000019	<0.000034	0.000005	<0.000002	<0.00009	<0.00001	0.0002
MW-F	31-Mar-2022	<0.007	0.0002	3.9	0.009	0.00008	0.002	0.0006	0.6	-	0.0002	3.1	0.06	<0.000014	<0.000004	1.7	0.0003	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000005
MW-F	30-Jun-2022	<0.007	0.00006	0.7	0.0002	0.0001	0.0003	<0.000024	0.3	-	0.0001	1.1	0.02	<0.000014	<0.000004	0.8	0.0002	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000003
MW-F	28-Nov-2022	<0.007	0.0002	35	5.5	0.00002	0.01	0.0001	0.8	-	<0.00002	16	0.3	<0.000014	<0.000004	5.0	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003
MW13-14D	24-Mar-2022	<0.007	0.0002	7.8	1.1	<0.000007	0.008	0.0001	1.0	-	0.0002	8.0	0.09	<0.000014	<0.000004	2.6	<0.000019	<0.000034	0.000004	<0.000002	<0.00009	<0.00001	0.00002
MW13-14D	23-May-2022	<0.007	0.0001	8.3	1.2	<0.000007	0.009	0.0001	1.0	-	0.0003	7.7	0.09	<0.000014	<0.000004	2.5	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00002
MW13-14D	25-Jul-2022	<0.008	0.0002	9.4	1.3	<0.00001	0.01	0.0003	1.1	-	<0.00003	8.5	0.10	<0.00002	<0.000007	2.8	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	0.00002
MW13-14D	28-Nov-2022	<0.007	0.0002	20	2.4	<0.000007	0.02	0.00009	1.3	-	0.0005	9.2	0.2	<0.000014	<0.000004	4.4	<0.000019	<0.000034	0.000005	<0.000002	<0.00009	<0.00001	0.00004
MW13-14S	24-Mar-2022	<0.007	0.0002	5.4	0.6	0.00003	0.005	0.0001	0.9	-	0.0002	5.7	0.07	<0.000014	<0.000004	2.4	<0.000019	<0.000034	0.000006	<0.000002	<0.00009	<0.00001	0.00002
MW13-14S	23-May-2022	<0.007	0.00009	5.6	0.7	<0.000007	0.005	0.0001	0.8	-	0.0002	5.3	0.07	<0.000014	<0.000004	2.5	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
MW13-14S	13-Sep-2022	<0.007	0.0001	10	1.3	<0.000007	0.010	0.0002	1.0	-	0.0003	7.7	0.10	<0.000014	<0.000004	3.2	<0.000019	<0.000034	0.000005	<0.000002	<0.00009	<0.00001	0.00002
MW13-14S	28-Nov-2022	<0.007	0.0002	21	2.6	<0.000007	0.02	<0.000024	1.3	-	0.0005	10	0.2	<0.000014	<0.000004	4.3	<0.000019	<0.000034	0.000006	<0.000002	<0.00009	<0.00001	0.00004
MW13-15D	25-Mar-2022	<0.007	<0.000007	5.3	0.0004	0.00005	<0.000024	0.0002	0.5	-	0.001	5.5	0.08	<0.000014	<0.000004	1.6	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
MW13-15D	23-May-2022	<0.007	<0.000007	5.1	0.001	0.00004	<0.000024	<0.000024	0.5	-	0.001	5.1	0.09	<0.000014	<0.000004	1.6	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
MW13-15D	1-Sep-2022	<0.007	<0.000007	4.8	0.0002	0.00005	<0.000024	<0.000024	0.4	-	0.001	5.3	0.07	<0.000014	<0.000004	1.6	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000002
MW13-15D	27-Nov-2022	<0.007	0.00006	4.6	0.005	0.00002	0.0004	<0.000024	0.8	-	0.001	4.7	0.06	<0.000014	<0.000004	1.6	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000004
MW13-15S	25-Mar-2022	<0.007	0.0001	5.6	0.02	<0.000007	0.002	0.00008	1.0	-	<0.00002	4.7	0.08	<0.000014	<0.000004	2.8	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000004
MW13-15S	23-May-2022	<0.007	0.00006	6.1	0.03	<0.000007	0.002	<0.000024	1.0	-	0.0001	4.5	0.09	<0.000014	<0.000004	2.7	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000005
MW13-15S	30-Aug-2022	<0.007	0.00005	5.0	0.0003	0.00002	0.0007	<0.000024	0.8	-	0.0005	4.8	0.07	<0.000014	<0.000004	2.1	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	<0.0000007
MW13-15S	27-Nov-2022	<0.007	<0.000007	4.7	0.002	0.00005	<0.000024	<0.000024	0.5	-	0.001	5.3	0.07	<0.000014	<0.000004	1.5	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
IN-DRAIN	26-May-2022	<0.007	0.006	51	7.2	0.00008	0.07	0.005	1.4	-	0.0002	14	0.2	<0.000014	<0.000004	3.8	<0.000019	<0.000034	0.00001	<0.000002	<0.00009	<0.00001	0.0004
IN-DRAIN	24-Mar-2022	<0.007	0.0003	17	0.8	0.00009	0.01	0.0001	0.9	-	0.0002	5.6	0.2	<0.000014	<0.000004	3.4	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003
IN-DRAIN	27-Nov-2022	<0.007	0.005	56	8.2	0.00004	0.06	0.002	1.5	-	<0.00006	17	0.3	<0.000014	<0.000004	6.6	<0.000019	<0.000034	0.00001	0.00008	<0.00009	<0.00001	0.0003
IN-DRAIN	25-Jul-2022	<0.008	0.006	70	11	<0.00001	0.09	0.002	1.7	-	<0.00003	18	0.3	<0.00002	<0.000007	5.6	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	0.0005
OUT-DRAIN	24-Mar-2022	<0.007	0.007	61	8.4	0.00008	0.08	0.003	1.4	-	0.0002	17	0.3	<0.000014	<0.000004	3.4	<0.000019	<0.000034	0.00001	0.00002	<0.00009	<0.00001	0.0005
OUT-DRAIN	26-May-2022	<0.007	0.0002	22	1.0	0.00009	0.01	0.0004	1.1	-	0.0002	5.7	0.2	<0.000014	<0.000004	4.0	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00004
OUT-DRAIN	25-Jul-2022	<0.008	0.0003	15	1.4	0.0001	0.01	<0.00001	1.0	-	<0.00003	5.1	0.1	<0.00002	<0.000007	3.7	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	0.00003
L-DRAIN	26-May-2022	<0.007	0.0002	19	1.4	0.0002	0.01	0.0006	0.8	-	0.0002	5.6	0.2	<0.000014	<0.000004	3.0	0.0001	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00002
L-DRAIN	7-Nov-2022	<0.007	0.0002	7.8	0.4	0.0002	0.005	0.0003	0.7	-	0.0002	4.0	0.09	<0.000014	<0.000004	2.2	0.0003	<0.000034	0.000005	<0.000002	<0.00009	<0.00001	0.000006
L-DRAIN DUP	7-Nov-2022	<0.007	0.0002	7.8	0.4	0.0003	0.005	0.0003	0.7	-	0.0002	4.0	0.09	<0.000014	<0.000004	2.2	0.0004	<0.000034	0.000005	<0.000002	<0.00009	<0.00001	0.000007
L-DRAIN	18-Mar-2022	<0.007	0.0002	8.6	0.4	0.0003	0.006	0.0003	0.4	-	0.0001	3.8	0.08	<0.000014	<0.000004	1.6	0.0003	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000009
L-DRAIN	25-Jul-2022	<0.008	0.0003	16	1.3	0.0001	0.01	<0.00001	0.8	-	<0.00003	5.8	0.1	<0.00002	<0.000007	3.0	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	0.00005
M-DRAIN	18-Mar-2022	<0.007	0.0008	16	2.1	0.00001	0.01	0.0003	1.5	-	<0.00002	6.6	0.1	<0.000014	0.00002	4.8	<0.000019	<0.000034	0.00001	<0.000002	<0.00009	<0.00001	0.00008
M-DRAIN	25-Jul-2022	<0.008	0.0007	14	1.7	<0.00001	0.01	0.0002	1.1	-	<0.00003	5.9	0.1	<0.00002	<0.000007	3.2	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	0.00008
M-DRAIN	7-Nov-2022	<0.007	0.0003	9.8	1.0	0.00004	0.007	0.0002	1.2	-	0.0003	4.6	0.10	<0.000014	<0.000004	3.5	0.00009	<0.000034	0.000005	<0.000002	<0.00009	<0.00001	0.00004
M-DRAIN	26-May-2022	<0.007	0.0010	29	4.6	0.00001	0.03	0.003	1.9	-	<0.00002	8.1	0.2	<0.000014	<0.000004	6.3	<0.000019	<0.000034	0.00001	<0.000002	<0.00009	<0.00001	0.0002
S-DRAIN	18-Mar-2022	<0.007	0.0005	7.4	0.1	0.0001	0.006	0.0002	0.5	-	<0.00002	3.3	0.08	<0.000014	<0.000004	1.5	0.00009	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
S-DRAIN	26-May-2022	<0.007	0.0009	24	2.0	0.00002	0.02	0.002	1.0	-	0.0002	6.2	0.2	<0.000014	<0.000004	3.6	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00006
S-DRAIN	25-Jul-2022	<0.008	0.0007	12	0.6	<0.00001	0.008	<0.00001	0.8	-	<0.00003	4.3	0.1	<0.00002	<0.000007	2.4	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	<0.000001
S-DRAIN	7-Nov-2022	<0.007	0.0002	7.3	0.04	0.00003	0.002	0.00008	0.8	-	0.0004	4.0	0.10	<0.000014	<0.000004	2.5	0.0001	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000002
3-RUNOFF	9-Feb-2022	<0.042	0.002	5.5	0.4	<0.00005	0.004	<0.00007	0.1	<0.00009	<0.00015	3.5	0.04	<0.00008	<0.000034	2.9	<0.00009	<0.00019	<0.000014	<0.00001	<0.0006	<0.0008	<0.000005
3RUNOFF-Q	5-Nov-2022	<0.008	0.002	6.8	0.4	0.0001	0.003	<0.00001	0.1	<0.00002	<0.00003	3.4	0.05	<0.00002	<0.000007	3.3	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	<0.000001
3-RUNOFF-Q	11-May-2022	<0.008	0.001	5.1	0.3	<0.00001	0.003	0.0004	<0.01	<0.00002	<0.00003	2.9	0.04	<0.00002	<0.000007	2.0	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	<0.000001

Station (Monitoring Plan)	Date	V-d	Zn-d	Zr-d	Hg-d	Silica Reactive	Radium 226	Chlorophyll a	BOD5
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-A	31-Mar-2022	<0.00002	22	0.00004	-	-	-	-	-
MW-A	26-May-2022	<0.00002	7.4	<0.000003	-	-	-	-	-
MW-A	28-Sep-2022	<0.00002	9.9	<0.000003	-	-	-	-	-
MW-A	28-Nov-2022	<0.00002	16	<0.000003	-	-	-	-	-
MW-C	31-Mar-2022	<0.00002	1.1	<0.000003	-	-	-	-	-
MW-C	23-May-2022	<0.00002	4.2	<0.000003	-	-	-	-	-
MW-C	13-Sep-2022	<0.00002	3.3	<0.000003	-	-	-	-	-
MW-C	28-Nov-2022	<0.00002	4.8	<0.000003	-	-	-	-	-
MW-D	31-Mar-2022	<0.00002	22	0.00003	-	-	-	-	-
MW-D	23-May-2022	<0.00002	29	0.00004	-	-	-	-	-
MW-D	28-Nov-2022	<0.00002	15	<0.000003	-	-	-	-	-
MW-F	31-Mar-2022	<0.00002	0.9	<0.000003	-	-	-	-	-
MW-F	30-Jun-2022	<0.00002	0.2	<0.000003	-	-	-	-	-
MW-F	28-Nov-2022	<0.00002	5.2	<0.000003	-	-	-	-	-
MW13-14D	24-Mar-2022	<0.00002	3.5	<0.000003	-	-	-	-	-
MW13-14D	23-May-2022	<0.00002	3.8	<0.000003	-	-	-	-	-
MW13-14D	25-Jul-2022	<0.00005	4.1	<0.000006	-	-	-	-	-
MW13-14D	28-Nov-2022	<0.00002	6.1	<0.000003	-	-	-	-	-
MW13-14S	24-Mar-2022	<0.00002	1.9	<0.000003	-	-	-	-	-
MW13-14S	23-May-2022	<0.00002	1.9	<0.000003	-	-	-	-	-
MW13-14S	13-Sep-2022	<0.00002	3.2	<0.000003	-	-	-	-	-
MW13-14S	28-Nov-2022	<0.00002	7.1	<0.000003	-	-	-	-	-
MW13-15D	25-Mar-2022	<0.00002	0.005	<0.000003	-	-	-	-	-
MW13-15D	23-May-2022	<0.00002	0.006	<0.000003	-	-	-	-	-
MW13-15D	1-Sep-2022	<0.00002	0.002	<0.000003	-	-	-	-	-
MW13-15D	27-Nov-2022	<0.00002	0.2	<0.000003	-	-	-	-	-
MW13-15S	25-Mar-2022	<0.00002	0.9	<0.000003	-	-	-	-	-
MW13-15S	23-May-2022	<0.00002	0.9	<0.000003	-	-	-	-	-
MW13-15S	30-Aug-2022	<0.00002	0.4	<0.000003	-	-	-	-	-
MW13-15S	27-Nov-2022	<0.00002	0.009	<0.000003	-	-	-	-	-
IN-DRAIN	26-May-2022	<0.00002	27	0.0001	-	-	-	-	-
IN-DRAIN	24-Mar-2022	<0.00002	5.1	<0.000003	-	-	-	-	-
IN-DRAIN	27-Nov-2022	<0.00002	27	0.0001	-	-	-	-	-
IN-DRAIN	25-Jul-2022	<0.00005	36	0.0002	-	-	-	-	-
OUT-DRAIN	24-Mar-2022	<0.00002	32	0.0002	-	-	-	-	-
OUT-DRAIN	26-May-2022	<0.00002	6.3	<0.000003	-	-	-	-	-
OUT-DRAIN	25-Jul-2022	<0.00005	4.4	<0.000006	-	-	-	-	-
L-DRAIN	26-May-2022	<0.00002	7.0	<0.000003	-	-	-	-	-
L-DRAIN	7-Nov-2022	<0.00002	2.2	<0.000003	-	-	-	-	-
L-DRAIN DUP	7-Nov-2022	<0.00002	2.2	<0.000003	-	-	-	-	-
L-DRAIN	18-Mar-2022	<0.00002	2.6	<0.000003	-	-	-	-	-
L-DRAIN	25-Jul-2022	<0.00005	6.1	<0.000006	-	-	-	-	-
M-DRAIN	18-Mar-2022	<0.00002	5.0	<0.000003	-	-	-	-	-
M-DRAIN	25-Jul-2022	<0.00005	5.0	<0.000006	-	-	-	-	-
M-DRAIN	7-Nov-2022	<0.00002	3.0	<0.000003	-	-	-	-	-
M-DRAIN	26-May-2022	<0.00002	12	<0.000003	-	-	-	-	-
S-DRAIN	18-Mar-2022	<0.00002	3.0	<0.000003	-	-	-	-	-
S-DRAIN	26-May-2022	<0.00002	9.5	<0.000003	-	-	-	-	-
S-DRAIN	25-Jul-2022	<0.00005	3.7	<0.000006	-	-	-	-	-
S-DRAIN	7-Nov-2022	<0.00002	1.0	<0.000003	-	-	-	-	-
3-RUNOFF	9-Feb-2022	<0.0002	3.0	<0.00003	<0.000002	-	-	-	-
3RUNOFF-Q	5-Nov-2022	<0.00005	2.3	<0.000006	<0.000002	-	-	-	-
3-RUNOFF-Q	11-May-2022	<0.00005	2.1	<0.000006	<0.000002	-	-	-	-

Work Order	Lab ID	Re-anaysis	Field QAQC	Station (Lab Report)	Station (Monitoring Plan)	Date	pH	Conductivity	Hardness, Total (as $CaCO_3$)	Hardness, Dissolved (as $CaCO_3$)	Turbidity	Total Suspended Solids	Acidity, pH 8.3 (as $CaCO_3$)	Alkalinity, Total pH 4.5 (as $CaCO_3$)	Alkalinity, Total pH 8.3 (as $CaCO_3$)	Alkalinity, Bicarbonate (as $CaCO_3$)
							pH Unit	uS/cm	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L	mg/L
22F0325	10	No	Regular	MW 0401D-Q	MW04-01D (R)	1-Jun-2022	6.7	534	251	-	-	-	-	-	46	46
22F0325	12	No	Replicate	MW 0401D-QR	MW04-01D (R) DUP	1-Jun-2022	6.6	548	260	-	-	-	-	-	44	44
22J0166	3	No	Regular	MW0401-Q	MW04-01D (R)	28-Sep-2022	6.5	693	358	-	-	-	-	-	50	50
22F0325	11	No	Regular	MW 0401S-Q	MW04-01S (R)	1-Jun-2022	6.7	531	252	-	-	-	-	-	51	51
22F0325	9	No	Replicate	MW 0401S-QR	MW04-01S (R) DUP	1-Jun-2022	6.7	572	277	-	-	-	-	-	55	55
22F0325	7	No	Regular	MW 0402D-Q	MW04-02D (R)	1-Jun-2022	6.9	173	82	-	-	-	-	-	45	45
22J0166	2	No	Regular	MW0402D-Q	MW04-02D (R)	28-Sep-2022	6.8	117	60	-	-	-	-	-	43	43
22F0325	8	No	Replicate	MW 0402D-QR	MW04-02D (R) DUP	1-Jun-2022	6.9	168	80	-	-	-	-	-	41	41
22F3475	14	No	Regular	MW1102-SA	MW11-02	16-Jun-2022	4.7	569	231	-	-	-	-	-	<0.6	-
22L2457	3	No	Regular	MW 1102-SA	MW11-02	17-Dec-2022	5.8	322	147	-	-	-	-	-	3.7	3.7
22B0748	1	No	Regular	MW11-04	MW11-04	26-Jan-2022	4.6	948	428	-	-	-	-	-	<0.6	-
22C0739	1	No	Regular	MW11-04	MW11-04	25-Feb-2022	4.6	852	354	-	-	-	-	-	<0.6	-
22D0297	1	No	Regular	MW1104-M	MW11-04	24-Mar-2022	4.2	883	385	-	-	-	-	-	<0.6	-
22D3544	1	No	Regular	MW1104-M	MW11-04	26-Apr-2022	4.6	822	340	-	-	-	-	-	<0.6	-
22E2933	1	No	Regular	MW1104-M	MW11-04	18-May-2022	4.6	774	332	-	-	-	-	-	<0.6	-
22F3475	5	No	Regular	MW1104-M	MW11-04	15-Jun-2022	4.5	647	273	-	-	-	-	-	<0.6	-
22G2083	1	No	Regular	MW1104-M	MW11-04	7-Jul-2022	4.6	536	211	-	-	-	-	-	<0.6	-
22I0407	7	No	Regular	MW1104-M	MW11-04	29-Aug-2022	4.7	292	119	-	-	-	-	-	<0.6	-
22I2071	5	No	Regular	MW 1104-M	MW11-04	12-Sep-2022	5.0	295	123	-	-	-	-	-	<0.6	-
22K0414	1	No	Regular	MW1104-M	MW11-04	26-Oct-2022	5.8	201	79	-	-	-	-	-	4.9	4.9
22K2148	8	No	Regular	MW1104-M	MW11-04	13-Nov-2022	5.3	322	133	-	-	-	-	-	3.6	3.6
22C0739	2	No	Replicate	MW11-04-R	MW11-04 DUP	25-Feb-2022	4.6	856	344	-	-	-	-	-	<0.6	-
22G2083	2	No	Replicate	MW1104-MR	MW11-04 DUP	7-Jul-2022	4.6	566	224	-	-	-	-	-	<0.6	-
22K0414	2	No	Replicate	MW1104-MR	MW11-04 DUP	28-Oct-2022	5.7	200	90	-	-	-	-	-	4.5	4.5
22F3475	11	No	Regular	MW1302D-SA	MW13-02D	20-Jun-2022	7.6	375	189	-	-	-	-	-	74	74
22L1724	1	No	Regular	MW1302D-SA	MW13-02D	11-Dec-2022	6.8	387	181	-	-	-	-	-	98	98
22F3475	10	No	Regular	MW1302S-SA	MW13-02S	20-Jun-2022	7.1	198	93	-	-	-	-	-	47	47
22L1724	2	No	Regular	MW1302S-SA	MW13-02S	11-Dec-2022	6.5	223	101	-	-	-	-	-	62	62
22F2227	8	No	Regular	MW1305D-SA	MW13-05D	6-Jun-2022	6.5	516	268	-	-	-	-	-	27	27
22L2457	1	No	Regular	MW 1305D-SA	MW13-05D	17-Dec-2022	6.2	235	112	-	-	-	-	-	26	26
22J1090	2	No	Regular	MW1306D-SA	MW13-06D	6-Oct-2022	6.2	326	144	-	-	-	-	-	17	17
22F2227	9	No	Regular	MW1306S-SA	MW13-06S	6-Jun-2022	6.3	850	463	-	-	-	-	-	26	26
22L2457	2	No	Regular	MW 1306S-SA	MW13-06S	17-Dec-2022	6.1	303	140	-	-	-	-	-	16	16
22D0297	9	No	Regular	MW1311D-Q	MW13-11D	25-Mar-2022	6.9	290	125	-	-	-	-	-	63	63
22F0325	3	No	Regular	MW 13-11D	MW13-11D	31-May-2022	7.2	277	128	-	-	-	-	-	68	68
22G3979	1	No	Regular	MW1311D-Q	MW13-11D	20-Jul-2022	6.9	378	179	-	-	-	-	-	71	71
22L1064	1	No	Regular	MW1311D-Q	MW13-11D	5-Dec-2022	6.9	752	384	-	-	-	-	-	68	68
22D0297	10	No	Regular	MW1311S-Q	MW13-11S	25-Mar-2022	6.9	826	370	-	-	-	-	-	127	127
22F0325	4	No	Regular	MW 13-11S	MW13-11S	31-May-2022	7.0	919	484	-	-	-	-	-	111	111
22G3979	2	No	Regular	MW1311S-Q	MW13-11S	20-Jul-2022	7.1	691	337	-	-	-	-	-	113	113
22D0297	11	No	Regular	MW1313-Q	MW13-13	25-Mar-2022	4.3	663	237	-	-	-	-	-	<0.6	-
22G3979	4	No	Regular	MW1313-Q	MW13-13	26-Jul-2022	4.8	465	184	-	-	-	-	-	<0.6	-
22L1724	3	No	Regular	MW1313-Q	MW13-13	12-Dec-2022	5.2	287	106	-	-	-	-	-	1.9	1.9
22L1724	4	No	Regular	MW1316D-Q	MW13-16D	12-Dec-2022	6.5	188	87	-	-	-	-	-	67	67
22L1724	5	No	Replicate	MW1316D-QR	MW13-16D DUP	12-Dec-2022	6.5	189	87	-	-	-	-	-	59	59
22F0325	5	No	Regular	MW 13-16S	MW13-16S	31-May-2022	7.0	130	63	-	-	-	-	-	63	63
22G3979	5	No	Regular	MW1316S-Q	MW13-16S	26-Jul-2022	7.0	122	61	-	-	-	-	-	60	60
22L1064	2	No	Regular	MW1316S-Q	MW13-16S	5-Dec-2022	6.7	189	88	-	-	-	-	-	56	56
22D0297	14	No	Regular	MW1317-Q	MW13-17	25-Mar-2022	6.7	302	127	-	-	-	-	-	55	55
22F0325	6	No	Regular	MW 13-17	MW13-17	31-May-2022	6.8	216	106	-	-	-	-	-	51	51
22D0987	1	No	Regular	MW1318D-Q	MW13-18D	1-Apr-2022	7.7	348	162	-	-	-	-	-	89	89
22I0407	6	No	Regular	MW1318D-Q	MW13-18D	29-Aug-2022	6.5	348	130	-	-	-	-	-	119	119
22L1724	9	No	Regular	MW1318D-Q	MW13-18D	12-Dec-2022	6.7	452	230	-	-	-	-	-	101	101

Station (Monitoring Plan)	Date	Alkalinity, Carbonate (as $CaCO_3$)	Alkalinity, Hydroxide (as $CaCO_3$)	Chloride	Fluoride	Sulphate	Total Nitrogen	Nitrate+ Nitrite	Nitrate (as N)	Nitrite (as N)	Ammonia (as N)	Total Phosphorus	Total Dissolved Phosphorus	TOC	DOC	Al-t	S-t	As-t	B-t	Ba-t
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW04-01D (R)	1-Jun-2022	-	-	-	-	225	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04-01D (R) DUP	1-Jun-2022	-	-	-	-	234	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04-01D ®	28-Sep-2022	-	-	-	-	323	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04-01S (R)	1-Jun-2022	-	-	-	-	214	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04-01S (R) DUP	1-Jun-2022	-	-	-	-	241	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04-02D (R)	1-Jun-2022	-	-	-	-	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04-02D (R)	28-Sep-2022	-	-	-	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04-02D (R) DUP	1-Jun-2022	-	-	-	-	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-02	16-Jun-2022	-	-	-	-	312	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-02	17-Dec-2022	-	-	-	-	161	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	26-Jan-2022	-	-	-	-	647	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	25-Feb-2022	-	-	-	-	708	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	24-Mar-2022	-	-	-	-	738	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	26-Apr-2022	-	-	-	-	738	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	18-May-2022	-	-	-	-	545	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	15-Jun-2022	-	-	-	-	486	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	7-Jul-2022	-	-	-	-	330	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	29-Aug-2022	-	-	-	-	135	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	12-Sep-2022	-	-	-	-	152	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	26-Oct-2022	-	-	-	-	83	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	13-Nov-2022	-	-	-	-	157	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04 DUP	25-Feb-2022	-	-	-	-	726	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04 DUP	7-Jul-2022	-	-	-	-	535	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04 DUP	28-Oct-2022	-	-	-	-	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-02D	20-Jun-2022	-	-	-	-	124	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-02D	11-Dec-2022	-	-	-	-	126	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-02S	20-Jun-2022	-	-	-	-	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-02S	11-Dec-2022	-	-	-	-	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-05D	6-Jun-2022	-	-	-	-	255	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-05D	17-Dec-2022	-	-	-	-	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-06D	6-Oct-2022	-	-	-	-	152	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-06S	6-Jun-2022	-	-	-	-	495	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-06S	17-Dec-2022	-	-	-	-	136	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-11D	25-Mar-2022	-	-	-	-	85	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-11D	31-May-2022	-	-	-	-	79	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-11D	20-Jul-2022	-	-	-	-	126	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-11D	5-Dec-2022	-	-	-	-	350	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-11S	25-Mar-2022	-	-	-	-	296	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-11S	31-May-2022	-	-	-	-	399	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-11S	20-Jul-2022	-	-	-	-	281	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-13	25-Mar-2022	-	-	-	-	408	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-13	26-Jul-2022	-	-	-	-	266	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-13	12-Dec-2022	-	-	-	-	124	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-16D	12-Dec-2022	-	-	-	-	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-16D DUP	12-Dec-2022	-	-	-	-	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-16S	31-May-2022	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-16S	26-Jul-2022	-	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-16S	5-Dec-2022	-	-	-	-	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-17	25-Mar-2022	-	-	-	-	101	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-17	31-May-2022	-	-	-	-	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-18D	1-Apr-2022	-	-	-	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-18D	29-Aug-2022	-	-	-	-	138	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-18D	12-Dec-2022	-	-	-	-	147	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Station (Monitoring Plan)	Date	Te-t	Tl-t	Th-t	Ti-t	W-t	U-t	V-t	Zn-t	Zr-t	Hg-t	Al-d	S-d	As-d	B-d	Be-d	Bi-d	Ba-d	Cd-d	Ca-d	Cr-d	Co-d	Cu-d	Fe-d
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW04-01D (R)	1-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.05	73	0.0001	0.006	0.00002	<0.000001	0.02	0.005	73	0.0003	0.004	0.03	0.02
MW04-01D (R) DUP	1-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.06	77	0.0001	0.006	0.00003	<0.000001	0.02	0.006	75	0.0002	0.005	0.04	0.02
MW04-01D ®	28-Sep-2022	-	-	-	-	-	-	-	-	-	-	0.08	115	0.00009	0.006	0.00003	<0.000001	0.03	0.007	108	0.0003	0.003	0.03	0.04
MW04-01S (R)	1-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.04	73	<0.000014	0.005	0.00002	<0.000001	0.05	0.005	76	0.0003	0.004	0.02	<0.0007
MW04-01S (R) DUP	1-Jun-2022	-	-	-	-	-	-	-	-	-	-	1.0	79	0.0005	0.006	0.00006	<0.000001	0.07	0.007	82	0.001	0.006	0.06	1.7
MW04-02D (R)	1-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.002	15	<0.000014	0.003	<0.000002	<0.000001	0.003	0.0001	27	0.0003	0.000006	0.0005	<0.0007
MW04-02D (R)	28-Sep-2022	-	-	-	-	-	-	-	-	-	-	0.001	7.0	<0.000014	0.002	<0.000002	<0.000001	0.003	0.0003	21	0.0003	0.0002	0.003	0.003
MW04-02D (R) DUP	1-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.001	14	<0.000014	0.003	<0.000002	<0.000001	0.003	0.0001	26	0.0003	0.000006	0.0005	<0.0007
MW11-02	16-Jun-2022	-	-	-	-	-	-	-	-	-	-	2.7	90	<0.000028	0.008	0.0003	<0.000001	0.02	0.04	74	0.0003	0.004	0.9	0.007
MW11-02	17-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.5	55	<0.000014	0.006	0.0001	<0.000001	0.02	0.02	47	0.0003	0.0009	0.4	<0.0007
MW11-04	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	9.9	175	0.0004	0.010	0.0006	<0.0000004	0.02	0.05	122	0.0005	0.02	2.2	0.009
MW11-04	25-Feb-2022	-	-	-	-	-	-	-	-	-	-	7.8	158	0.0002	0.010	0.0005	<0.0000004	0.02	0.05	93	0.0004	0.02	2.0	0.004
MW11-04	24-Mar-2022	-	-	-	-	-	-	-	-	-	-	11	191	0.0002	0.010	0.0007	<0.000001	0.02	0.06	105	0.0005	0.02	2.5	0.005
MW11-04	26-Apr-2022	-	-	-	-	-	-	-	-	-	-	12	154	<0.00007	0.009	0.0006	<0.000001	0.02	0.06	90	0.0004	0.02	2.6	0.004
MW11-04	18-May-2022	-	-	-	-	-	-	-	-	-	-	10	137	<0.00007	<0.0055	0.0006	<0.000005	0.01	0.05	92	<0.0001	0.02	2.3	0.02
MW11-04	15-Jun-2022	-	-	-	-	-	-	-	-	-	-	8.4	110	<0.000056	0.008	0.0005	<0.000001	0.01	0.04	77	0.0003	0.02	2.1	0.004
MW11-04	7-Jul-2022	-	-	-	-	-	-	-	-	-	-	7.2	105	<0.000034	0.007	0.0004	<0.000001	0.01	0.04	57	0.0004	0.01	1.8	0.003
MW11-04	29-Aug-2022	-	-	-	-	-	-	-	-	-	-	1.6	45	<0.000014	0.006	0.0002	<0.000001	0.007	0.01	35	0.0003	0.003	0.7	<0.0007
MW11-04	12-Sep-2022	-	-	-	-	-	-	-	-	-	-	1.2	43	<0.000014	0.006	0.0001	<0.000001	0.007	0.01	37	0.0002	0.003	0.6	0.004
MW11-04	26-Oct-2022	-	-	-	-	-	-	-	-	-	-	0.2	27	<0.000014	0.005	0.00004	<0.000001	0.005	0.005	24	0.0003	0.0009	0.2	<0.0007
MW11-04	13-Nov-2022	-	-	-	-	-	-	-	-	-	-	1.4	49	<0.000014	0.007	0.0002	<0.000001	0.01	0.02	39	0.0004	0.004	0.7	0.02
MW11-04 DUP	25-Feb-2022	-	-	-	-	-	-	-	-	-	-	7.6	153	0.0002	0.010	0.0005	<0.0000004	0.02	0.05	90	0.0004	0.01	1.9	0.003
MW11-04 DUP	7-Jul-2022	-	-	-	-	-	-	-	-	-	-	7.3	99	<0.000034	0.007	0.0004	<0.000001	0.01	0.04	62	0.0003	0.01	1.8	0.003
MW11-04 DUP	28-Oct-2022	-	-	-	-	-	-	-	-	-	-	0.2	30	<0.000014	0.006	0.00004	<0.000001	0.005	0.006	28	0.0004	0.0010	0.2	<0.0007
MW13-02D	20-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.01	42	0.00005	0.004	<0.000002	<0.000001	0.01	0.00003	70	0.0003	0.00002	0.001	0.008
MW13-02D	11-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.002	42	0.0001	0.005	<0.000002	<0.000001	0.01	0.00002	66	0.0004	0.00003	<0.00005	0.002
MW13-02S	20-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.009	16	<0.000014	0.003	<0.000002	<0.000001	0.009	0.00005	32	0.0002	0.00002	0.001	0.02
MW13-02S	11-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.002	19	<0.000014	0.005	<0.000002	<0.000001	0.01	0.00004	34	0.0003	0.00001	0.0002	<0.0007
MW13-05D	6-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.2	88	<0.000014	0.008	0.00005	<0.000001	0.02	0.01	85	0.0002	0.002	0.2	0.01
MW13-05D	17-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.03	31	<0.000014	0.006	0.00001	<0.000001	0.01	0.003	36	0.0003	0.0002	0.04	<0.0007
MW13-06D	6-Oct-2022	-	-	-	-	-	-	-	-	-	-	0.02	46	<0.000014	0.007	0.00001	<0.000001	0.02	0.004	44	0.0002	0.00001	0.07	0.003
MW13-06S	6-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.08	159	<0.000014	0.01	0.00004	<0.000001	0.05	0.02	145	0.0001	0.00007	0.2	0.02
MW13-06S	17-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.02	46	<0.000014	0.007	0.00001	<0.000001	0.02	0.004	43	0.0002	0.000010	0.07	<0.0007
MW13-11D	25-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.004	31	0.00008	0.01	<0.000002	<0.000001	0.01	0.00006	44	0.0002	0.00003	0.004	<0.0007
MW13-11D	31-May-2022	-	-	-	-	-	-	-	-	-	-	0.004	27	0.00008	0.01	<0.000002	<0.000001	0.01	0.000007	46	0.0002	<0.0000031	0.001	<0.0007
MW13-11D	20-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.02	41	<0.00003	<0.0008	<0.000002	<0.000002	0.02	0.00007	64	<0.00004	<0.000002	0.002	<0.0008
MW13-11D	5-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.005	114	0.0004	0.02	<0.000002	<0.000001	0.04	0.00006	136	0.0002	0.00003	0.002	0.005
MW13-11S	25-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.02	114	0.0002	0.02	<0.000002	<0.000001	0.02	0.007	131	0.0001	0.005	0.03	0.08
MW13-11S	31-May-2022	-	-	-	-	-	-	-	-	-	-	0.02	144	0.0003	0.02	<0.000002	<0.000001	0.02	0.008	170	0.0001	0.004	0.03	0.1
MW13-11S	20-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.010	96	<0.00003	<0.0008	<0.000002	<0.000002	0.02	0.005	119	<0.00004	0.002	0.02	0.10
MW13-13	25-Mar-2022	-	-	-	-	-	-	-	-	-	-	4.6	111	0.0002	0.005	0.0006	<0.000001	0.04	0.07	71	0.0003	0.01	5.4	0.003
MW13-13	26-Jul-2022	-	-	-	-	-	-	-	-	-	-	3.0	76	<0.00003	<0.0008	0.0004	<0.000002	0.04	0.05	57	<0.00004	0.005	4.4	<0.0008
MW13-13	12-Dec-2022	-	-	-	-	-	-	-	-	-	-	2.0	44	<0.000014	0.005	0.0003	<0.000001	0.04	0.04	32	0.0003	0.004	3.1	<0.0007
MW13-16D	12-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.002	14	0.00005	0.003	<0.000002	<0.000001	0.01	0.0006	31	0.0003	0.00001	0.004	<0.0007
MW13-16D DUP	12-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.002	14	<0.000014	0.003	<0.000002	<0.000001	0.01	0.0006	30	0.0003	0.00001	0.004	<0.0007
MW13-16S	31-May-2022	-	-	-	-	-	-	-	-	-	-	0.004	5.5	<0.000014	0.002	<0.000002	<0.000001	0.009	0.0002	23	0.0002	0.000008	0.002	<0.0007
MW13-16S	26-Jul-2022	-	-	-	-	-	-	-	-	-	-	<0.0007	4.5	<0.00003	<0.0008	<0.000002	<0.000002	0.01	0.0004	22	<0.00004	<0.000002	0.006	<0.0008
MW13-16S	5-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.004	13	0.00005	0.003	<0.000002	<0.000001	0.01	0.0006	32	0.0003	0.00001	0.003	<0.0007
MW13-17	25-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.008	35	<0.000014	0.003	<0.000002	<0.000001	0.01	0.0008	45	0.0002	0.00004	0.02	<0.0007
MW13-17	31-May-2022	-	-	-	-	-	-	-	-	-	-	0.004	21	<0.000014	0.003	<0.000002	<0.000001	0.008	0.0004	38	0.0002	0.00002	0.004	<0.0007
MW13-18D	1-Apr-2022	-	-	-	-	-	-	-	-	-	-	0.003	34	0.00006	0.007	<0.000002	<0.000001	0.02	0.00007	50	0.0005	0.000007	0.003	<0.0007
MW13-18D	29-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.009	25	<0.000014	0.005	<0.000002	<0.000001	0.02	0.00010	42	0.0003	0.00001	0.004	<0.0007
MW13-18D	12-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.002	49	<0.000014	0.010	<0.000002	<0.000001	0.02	0.00001	70	0.0007	<0.0000031	0.0002	<0.0007

Station (Monitoring Plan)	Date	Be-t	Bi-t	Cd-t	Ca-t	Cr-t	Co-t	Cu-t	Fe-t	P-t	Li-t	Mg-t	Mn-t	Mo-t	Ni-t	Pb-t	K-t	Se-t	Sn-t	Si-t	Ag-t	Na-t	Sr-t
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW04-01D (R)	1-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04-01D (R) DUP	1-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04-01D ®	28-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04-01S (R)	1-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04-01S (R) DUP	1-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04-02D (R)	1-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04-02D (R)	28-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW04-02D (R) DUP	1-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-02	16-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-02	17-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	25-Feb-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	24-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	26-Apr-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	18-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	15-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	7-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	29-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	12-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	26-Oct-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04	13-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04 DUP	25-Feb-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04 DUP	7-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-04 DUP	28-Oct-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-02D	20-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-02D	11-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-02S	20-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-02S	11-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-05D	6-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-05D	17-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-06D	6-Oct-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-06S	6-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-06S	17-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-11D	25-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-11D	31-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-11D	20-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-11D	5-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-11S	25-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-11S	31-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-11S	20-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-13	25-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-13	26-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-13	12-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-16D	12-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-16D DUP	12-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-16S	31-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-16S	26-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-16S	5-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-17	25-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-17	31-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-18D	1-Apr-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-18D	29-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-18D	12-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Station (Monitoring Plan)	Date	P-d	Li-d	Mg-d	Mn-d	Mo-d	Ni-d	Pb-d	K-d	Sb-t	Se-d	Si-d	Sr-d	Sn-d	Ag-d	Na-d	Sb-d	Te-d	Tl-d	Th-d	Ti-d	W-d	U-d
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW04-01D (R)	1-Jun-2022	<0.007	0.0001	17	1.5	0.0005	0.009	0.00005	0.5	-	0.0002	5.9	0.1	<0.000014	<0.000004	3.1	0.00006	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00004
MW04-01D (R) DUP	1-Jun-2022	<0.007	0.0002	18	1.6	0.0004	0.01	<0.000024	0.5	-	0.0002	6.0	0.2	<0.000014	<0.000004	3.1	0.00007	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003
MW04-01D ®	28-Sep-2022	<0.007	0.0001	21	1.1	0.0002	0.01	0.00009	0.5	-	0.0002	7.8	0.2	<0.000014	<0.000004	3.6	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003
MW04-01S (R)	1-Jun-2022	<0.007	0.0002	15	1.0	0.0001	0.008	0.00005	0.5	-	0.0002	5.5	0.1	<0.000014	<0.000004	2.3	0.0001	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003
MW04-01S (R) DUP	1-Jun-2022	0.07	0.0005	17	1.5	0.0002	0.01	0.003	0.6	-	0.0002	6.7	0.2	<0.000014	0.00002	2.6	0.0002	<0.000034	<0.0000026	0.00005	0.03	<0.00001	0.00009
MW04-02D (R)	1-Jun-2022	<0.007	<0.000007	3.4	0.0004	0.00008	0.0002	<0.000024	0.2	-	0.0001	3.4	0.05	<0.000014	<0.000004	1.4	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000004
MW04-02D (R)	28-Sep-2022	<0.007	<0.000007	2.2	0.03	0.00006	0.0003	0.00006	0.2	-	0.0005	2.9	0.03	<0.000014	<0.000004	1.1	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000002
MW04-02D (R) DUP	1-Jun-2022	<0.007	<0.000007	3.5	0.0003	0.00007	0.0003	<0.000024	0.2	-	<0.00002	3.3	0.05	<0.000014	<0.000004	1.4	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000004
MW11-02	16-Jun-2022	<0.007	0.0006	11	0.7	0.00003	0.03	0.001	0.9	-	0.002	6.7	0.1	<0.000014	<0.000004	3.4	0.00009	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00002
MW11-02	17-Dec-2022	<0.007	0.0004	7.2	0.2	0.00004	0.01	0.0007	0.7	-	0.003	6.3	0.09	<0.000014	<0.000004	2.6	0.0001	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000005
MW11-04	26-Jan-2022	<0.004	0.0007	30	2.8	<0.000005	0.04	0.0005	1.1	-	0.0003	18	0.3	<0.000003	0.00003	3.8	0.00005	<0.000006	0.000005	<0.0000003	0.0002	<0.00001	0.00008
MW11-04	25-Feb-2022	<0.004	0.0006	30	2.4	<0.000005	0.04	0.0004	1.2	-	0.0004	18	0.2	<0.000003	0.00003	4.0	<0.000003	<0.000006	<0.00000009	<0.0000003	<0.00002	<0.00001	0.00007
MW11-04	24-Mar-2022	<0.007	0.0010	30	2.6	<0.000007	0.04	0.0005	1.0	-	0.0003	21	0.2	<0.000014	0.00004	3.3	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00009
MW11-04	26-Apr-2022	<0.007	0.0009	28	2.5	<0.000007	0.04	0.002	1.0	-	0.0002	18	0.2	<0.000014	0.00002	3.4	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00008
MW11-04	18-May-2022	<0.035	0.001	25	2.1	<0.000035	0.03	0.0007	0.9	-	<0.0001	17	0.2	<0.00007	<0.00002	2.9	<0.000095	<0.00017	<0.000013	<0.00001	<0.00045	<0.00005	0.00007
MW11-04	15-Jun-2022	<0.007	0.001	20	1.6	<0.000007	0.03	0.0005	0.8	-	0.0002	15	0.2	<0.000014	0.00003	2.8	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00007
MW11-04	7-Jul-2022	<0.007	0.001	17	1.3	<0.000007	0.02	0.0004	0.8	-	0.0002	17	0.2	<0.000014	0.00003	2.8	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00006
MW11-04	29-Aug-2022	<0.007	0.0007	7.5	0.4	<0.000007	0.008	0.0003	0.5	-	0.0001	8.5	0.08	<0.000014	0.00002	1.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00002
MW11-04	12-Sep-2022	<0.007	0.0007	7.6	0.5	<0.000007	0.009	0.0003	0.5	-	0.0002	8.5	0.09	<0.000014	0.00002	1.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00002
MW11-04	26-Oct-2022	<0.007	0.0003	4.5	0.2	<0.000007	0.004	0.0001	0.4	-	0.0002	5.9	0.06	<0.000014	0.00001	1.5	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000007
MW11-04	13-Nov-2022	<0.007	0.0006	8.5	0.6	<0.000007	0.010	0.0003	0.6	-	0.0002	10	0.1	<0.000014	0.00002	2.1	<0.000019	<0.000034	<0.0000026	<0.000002	0.001	<0.00001	0.00002
MW11-04 DUP	25-Feb-2022	<0.004	0.0006	29	2.3	<0.000005	0.04	0.0004	1.2	-	0.0005	17	0.2	<0.000003	0.00004	3.9	<0.000003	<0.000006	<0.00000009	<0.0000003	<0.00002	<0.00001	0.00007
MW11-04 DUP	7-Jul-2022	<0.007	0.001	17	1.3	<0.000007	0.02	0.0004	0.8	-	0.0001	16	0.2	<0.000014	0.00003	2.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00006
MW11-04 DUP	28-Oct-2022	<0.007	0.0003	5.0	0.2	<0.000007	0.004	0.0002	0.4	-	0.0002	6.5	0.06	<0.000014	0.00001	1.6	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000007
MW13-02D	20-Jun-2022	<0.007	0.0002	3.6	0.004	0.0001	0.0001	<0.000024	0.2	-	<0.00002	3.9	0.07	<0.000014	<0.000004	2.8	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	0.0003	0.00005
MW13-02D	11-Dec-2022	<0.007	0.0002	4.0	0.02	0.0002	0.0002	<0.000024	0.2	-	<0.00002	5.0	0.07	<0.000014	<0.000004	2.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	0.0004	0.00009
MW13-02S	20-Jun-2022	<0.007	<0.000007	2.8	0.0010	0.00002	0.0001	<0.000024	0.1	-	0.0001	3.1	0.05	<0.000014	<0.000004	1.9	0.00006	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000004
MW13-02S	11-Dec-2022	<0.007	<0.000007	3.6	0.001	0.00002	0.00009	<0.000024	0.1	-	0.0002	4.1	0.05	<0.000014	<0.000004	2.4	0.00007	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000006
MW13-05D	6-Jun-2022	<0.007	0.00006	14	0.3	<0.000007	0.01	0.0001	0.7	-	0.0003	7.3	0.2	<0.000014	0.00001	4.2	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000008
MW13-05D	17-Dec-2022	<0.007	<0.000007	5.1	0.03	0.00002	0.002	<0.000024	0.6	-	0.0003	6.2	0.09	<0.000014	<0.000004	2.0	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000002
MW13-06D	6-Oct-2022	<0.007	0.0001	8.0	0.01	0.00001	0.004	<0.000024	0.6	-	<0.00002	7.5	0.1	<0.000014	<0.000004	3.3	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000002
MW13-06S	6-Jun-2022	<0.007	0.0002	25	0.5	<0.000007	0.02	0.0001	0.9	-	<0.00002	9.5	0.4	<0.000014	<0.000004	6.6	<0.000019	<0.000034	<0.0000026	<0.000002	0.0005	<0.00001	0.000004
MW13-06S	17-Dec-2022	<0.007	0.00010	7.8	0.005	<0.000007	0.004	<0.000024	0.5	-	<0.00002	7.2	0.1	<0.000014	<0.000004	3.1	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000001
MW13-11D	25-Mar-2022	<0.007	0.00006	3.5	0.003	0.002	<0.000024	0.00010	1.2	-	0.0005	2.2	0.1	<0.000014	<0.000004	3.6	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00002
MW13-11D	31-May-2022	<0.007	<0.000007	3.6	0.0003	0.002	<0.000024	0.00007	1.2	-	0.0006	2.2	0.1	<0.000014	<0.000004	3.4	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
MW13-11D	20-Jul-2022	<0.008	<0.000008	4.8	0.006	0.003	<0.00004	<0.00001	1.6	-	<0.00003	2.2	0.2	<0.00002	<0.00004	4.6	<0.00002	<0.000007	<0.000003	<0.000002	<0.0001	<0.0002	0.00006
MW13-11D	5-Dec-2022	<0.007	<0.000007	11	0.3	0.005	0.0001	0.00009	2.8	-	0.0002	2.3	0.4	<0.000014	<0.000004	9.0	<0.000019	<0.000034	0.000005	<0.000002	<0.00009	<0.00001	0.0002
MW13-11S	25-Mar-2022	<0.007	0.003	10	0.9	0.003	0.004	0.0003	2.1	-	0.002	2.8	0.4	<0.000014	<0.000004	4.6	0.0003	<0.000034	0.000005	<0.000002	<0.00009	0.0002	0.00008
MW13-11S	31-May-2022	<0.007	0.002	14	1.2	0.003	0.004	0.0004	2.5	-	0.0009	2.9	0.4	<0.000014	<0.000004	5.8	0.0002	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.0001
MW13-11S	20-Jul-2022	<0.008	0.002	9.6	0.8	0.003	0.003	<0.00001	2.3	-	<0.00003	2.4	0.3	<0.00002	<0.000007	6.9	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	0.00007
MW13-13	25-Mar-2022	<0.007	0.003	14	2.2	<0.000007	0.02	1.2	0.3	-	0.0002	9.3	0.1	<0.000014	0.00003	3.1	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.0003
MW13-13	26-Jul-2022	<0.008	0.002	10.0	1.6	<0.00001	0.02	0.6	0.3	-	<0.00003	7.5	0.08	<0.00002	<0.000007	2.1	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	0.0002
MW13-13	12-Dec-2022	<0.007	0.002	6.4	0.5	<0.000007	0.01	0.5	0.2	-	0.0002	7.5	0.05	<0.000014	0.00002	1.7	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.0001
MW13-16D	12-Dec-2022	<0.007	<0.000007	2.6	0.0001	0.0002	0.0001	<0.000024	0.2	-	0.0002	2.5	0.04	<0.000014	<0.000004	1.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003
MW13-16D DUP	12-Dec-2022	<0.007	<0.000007	2.6	0.0002	0.0002	0.0001	<0.000024	0.2	-	0.0002	2.5	0.04	<0.000014	<0.000004	1.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003
MW13-16S	31-May-2022	<0.007	<0.000007	1.6	0.00010	0.0002	0.00005	0.00009	0.2	-	<0.00002	2.3	0.03	<0.000014	<0.000004	1.1	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000001
MW13-16S	26-Jul-2022	<0.008	<0.000008	1.5	0.006	0.0001	<0.00004	0.0002	0.1	-	<0.00003	2.1	0.03	<0.00002	<0.00004	0.9	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	<0.000001
MW13-16S	5-Dec-2022	<0.007	<0.000007	2.2	0.0007	0.0002	0.0001	<0.000024	0.2	-	0.0002	2.2	0.04	<0.000014	<0.000004	1.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003
MW13-17	25-Mar-2022	<0.007	0.00009	3.9	0.003	0.0001	0.0004	0.01	0.3	-	<0.00002	2.3	0.05	<0.000014	<0.000004	1.1	0.00006	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000002
MW13-17	31-May-2022	<0.007	<0.000007	2.8	0.0005	0.0001	0.0002	0.0001	0.3	-	<0.00002	2.3	0.04	<0.000014	<0.000004	1.1	0.00006	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000004
MW13-18D	1-Apr-2022	<0.007	0.0001	8.8	0.0005	0.00009	<0.000024	0.0002	0.4	-	0.001	5.6	0.10	<0.000014	<0.000004	2.0	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00002
MW13-18D	29-Aug-2022	<0.007	<0.000007	5.8	0.0003	0.00006	0.00008	0.00006	0.3	-	0.0006	4.2	0.07	<0.000014	<0.000004	1.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000001
MW13-18D	12-Dec-2022	<0.007	0.0002	13	<0.000027	0.00008	0.00005	<0.000024	0.5	-	0.001	7.1	0.1	<0.000014	<0.000004	2.6	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003

Station (Monitoring Plan)	Date	V-d	Zn-d	Zr-d	Hg-d	Silica Reactive	Radium 226	Chlorophyll a	BOD5
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW04-01D (R)	1-Jun-2022	<0.00002	3.4	<0.000003	-	-	-	-	-
MW04-01D (R) DUP	1-Jun-2022	<0.00002	3.8	<0.000003	-	-	-	-	-
MW04-01D ®	28-Sep-2022	<0.00002	5.9	<0.000003	-	-	-	-	-
MW04-01S (R)	1-Jun-2022	<0.00002	3.3	<0.000003	-	-	-	-	-
MW04-01S (R) DUP	1-Jun-2022	0.003	4.1	0.0002	-	-	-	-	-
MW04-02D (R)	1-Jun-2022	<0.00002	0.3	<0.000003	-	-	-	-	-
MW04-02D (R)	28-Sep-2022	<0.00002	0.2	<0.000003	-	-	-	-	-
MW04-02D (R) DUP	1-Jun-2022	<0.00002	0.3	<0.000003	-	-	-	-	-
MW11-02	16-Jun-2022	<0.00002	15	0.00003	-	-	-	-	-
MW11-02	17-Dec-2022	<0.00002	7.7	<0.000003	-	-	-	-	-
MW11-04	26-Jan-2022	<0.0000007	19	0.00004	-	-	-	-	-
MW11-04	25-Feb-2022	<0.0000007	0.2	0.00002	-	-	-	-	-
MW11-04	24-Mar-2022	<0.00002	21	0.00002	-	-	-	-	-
MW11-04	26-Apr-2022	<0.00002	21	0.00002	-	-	-	-	-
MW11-04	18-May-2022	<0.0001	18	<0.000015	-	-	-	-	-
MW11-04	15-Jun-2022	<0.00002	15	<0.000003	-	-	-	-	-
MW11-04	7-Jul-2022	<0.00002	12	<0.000003	-	-	-	-	-
MW11-04	29-Aug-2022	<0.00002	4.8	<0.000003	-	-	-	-	-
MW11-04	12-Sep-2022	<0.00002	4.9	<0.000003	-	-	-	-	-
MW11-04	26-Oct-2022	<0.00002	2.0	<0.000003	-	-	-	-	-
MW11-04	13-Nov-2022	<0.00002	5.8	<0.000003	-	-	-	-	-
MW11-04 DUP	25-Feb-2022	<0.0000007	0.2	0.00003	-	-	-	-	-
MW11-04 DUP	7-Jul-2022	<0.00002	12	<0.000003	-	-	-	-	-
MW11-04 DUP	28-Oct-2022	<0.00002	2.1	<0.000003	-	-	-	-	-
MW13-02D	20-Jun-2022	<0.00002	0.007	<0.000003	-	-	-	-	-
MW13-02D	11-Dec-2022	<0.00002	0.003	<0.000003	-	-	-	-	-
MW13-02S	20-Jun-2022	<0.00002	0.03	<0.000003	-	-	-	-	-
MW13-02S	11-Dec-2022	<0.00002	0.04	<0.000003	-	-	-	-	-
MW13-05D	6-Jun-2022	<0.00002	5.2	<0.000003	-	-	-	-	-
MW13-05D	17-Dec-2022	<0.00002	1.2	<0.000003	-	-	-	-	-
MW13-06D	6-Oct-2022	<0.00002	5.9	<0.000003	-	-	-	-	-
MW13-06S	6-Jun-2022	<0.00002	19	<0.000003	-	-	-	-	-
MW13-06S	17-Dec-2022	<0.00002	5.8	<0.000003	-	-	-	-	-
MW13-11D	25-Mar-2022	<0.00002	0.07	<0.000003	-	-	-	-	-
MW13-11D	31-May-2022	<0.00002	0.010	<0.000003	-	-	-	-	-
MW13-11D	20-Jul-2022	<0.00005	0.02	<0.000006	-	-	-	-	-
MW13-11D	5-Dec-2022	<0.00002	0.006	<0.000003	-	-	-	-	-
MW13-11S	25-Mar-2022	<0.00002	6.1	<0.000003	-	-	-	-	-
MW13-11S	31-May-2022	<0.00002	7.2	<0.000003	-	-	-	-	-
MW13-11S	20-Jul-2022	<0.00005	4.7	<0.000006	-	-	-	-	-
MW13-13	25-Mar-2022	<0.00002	18	<0.000003	-	-	-	-	-
MW13-13	26-Jul-2022	<0.00005	14	<0.000006	-	-	-	-	-
MW13-13	12-Dec-2022	<0.00002	10	<0.000003	-	-	-	-	-
MW13-16D	12-Dec-2022	<0.00002	0.2	<0.000003	-	-	-	-	-
MW13-16D DUP	12-Dec-2022	<0.00002	0.2	<0.000003	-	-	-	-	-
MW13-16S	31-May-2022	<0.00002	0.07	<0.000003	-	-	-	-	-
MW13-16S	26-Jul-2022	<0.00005	0.10	<0.000006	-	-	-	-	-
MW13-16S	5-Dec-2022	<0.00002	0.2	<0.000003	-	-	-	-	-
MW13-17	25-Mar-2022	<0.00002	0.1	<0.000003	-	-	-	-	-
MW13-17	31-May-2022	<0.00002	0.05	<0.000003	-	-	-	-	-
MW13-18D	1-Apr-2022	<0.00002	0.008	<0.000003	-	-	-	-	-
MW13-18D	29-Aug-2022	<0.00002	0.06	<0.000003	-	-	-	-	-
MW13-18D	12-Dec-2022	<0.00002	0.005	<0.000003	-	-	-	-	-

Work Order	Lab ID	Re-anaysis	Field QAQC	Station (Lab Report)	Station (Monitoring Plan)	Date	pH	Conductivity	Hardness, Total (as $CaCO_3$)	Hardness, Dissolved (as $CaCO_3$)	Turbidity	Total Suspended Solids	Acidity, pH 8.3 (as $CaCO_3$)	Alkalinity, Total pH 4.5 (as $CaCO_3$)	Alkalinity, Total pH 8.3 (as $CaCO_3$)	Alkalinity, Bicarbonate (as $CaCO_3$)
							pH Unit	uS/cm	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L	mg/L
22D0987	2	No	Regular	MW1318S-Q	MW13-18S	1-Apr-2022	7.5	274	127	-	-	-	-	-	69	69
22I0407	10	No	Regular	MW1318S-Q	MW13-18S	29-Aug-2022	6.4	263	177	-	-	-	-	-	81	81
22L2457	7	No	Regular	MW 1318S-Q	MW13-18S	15-Dec-2022	6.8	323	167	-	-	-	-	-	57	57
22L2457	9	No	Replicate	MW 1318S-QR	MW13-18S DUP	15-Dec-2022	6.9	329	170	-	-	-	-	-	65	65
22F3475	12	No	Regular	MW1319-SA	MW13-19	20-Jun-2022	7.3	104	50	-	-	-	-	-	44	44
22L1064	7	No	Regular	MW1319-SA	MW13-19	7-Dec-2022	6.7	90	44	-	-	-	-	-	40	40
22H3142	2	No	Regular	MW1401-M	MW14-01	19-Aug-2022	6.2	728	350	-	-	-	-	-	29	29
22F2227	12	No	Regular	MW1401S-SA	MW14-01S	5-Jun-2022	4.8	668	308	-	-	-	-	-	<0.6	-
22B0748	7	No	Regular	MW14-03	MW14-03	26-Jan-2022	4.9	1100	554	-	-	-	-	-	<0.6	-
22F3475	4	No	Regular	MW1403-M	MW14-03	17-Jun-2022	5.7	954	445	-	-	-	-	-	7.3	7.3
22H3142	3	No	Regular	MW 1403-M	MW14-03	19-Aug-2022	5.9	797	371	-	-	-	-	-	12	12
22L1064	10	No	Regular	MW1403-M	MW14-03	8-Dec-2022	5.9	946	466	-	-	-	-	-	11	11
22L2457	4	No	Regular	MW 1403D-SA	MW14-03D	17-Dec-2022	6.4	107	52	-	-	-	-	-	42	42
22F2227	4	No	Regular	MW1403S-SA	MW14-03S	8-Jun-2022	6.7	292	149	-	-	-	-	-	38	38
22L2457	5	No	Regular	MW 1403S-SA	MW14-03S	17-Dec-2022	6.3	205	99	-	-	-	-	-	38	38
22F2227	7	No	Replicate	MW1403S-SAR	MW14-03S DUP	8-Jun-2022	6.8	290	149	-	-	-	-	-	39	39
22B0748	8	No	Regular	MW14-04	MW14-04	26-Jan-2022	4.7	1770	942	-	-	-	-	-	<0.6	-
22F2227	10	No	Regular	MW1404D-SA	MW14-04D	8-Jun-2022	3.9	1650	916	-	-	-	-	-	<0.6	-
22I0407	2	No	Regular	MW1405-SA	MW14-05	28-Aug-2022	6.1	286	137	-	-	-	-	-	56	56
22F2227	3	No	Regular	MW1405D-SA	MW14-05D	8-Jun-2022	7.0	264	142	-	-	-	-	-	41	41
22L1724	8	No	Regular	MW1405D-SA	MW14-05D	12-Dec-2022	6.4	242	108	-	-	-	-	-	42	42
22F2227	2	No	Regular	MW1405M-SA	MW14-05M	8-Jun-2022	6.7	361	182	-	-	-	-	-	33	33
22B0748	2	No	Regular	MW16-01	MW16-01	26-Jan-2022	6.0	504	249	-	-	-	-	-	30	30
22C0739	3	No	Regular	MW16-01	MW16-01	25-Feb-2022	6.5	506	219	-	-	-	-	-	36	36
22C3616	1	No	Regular	MW1601-M	MW16-01	18-Mar-2022	7.3	184	82	-	-	-	-	-	48	48
22D3544	2	No	Regular	MW1601-M	MW16-01	26-Apr-2022	6.6	250	116	-	-	-	-	-	59	59
22E2933	2	No	Regular	MW1601-M	MW16-01	18-May-2022	6.1	391	185	-	-	-	-	-	45	45
22F2227	5	No	Regular	MW1601-M	MW16-01	1-Jun-2022	6.9	466	240	-	-	-	-	-	38	38
22G2083	3	No	Regular	MW1601-M	MW16-01	7-Jul-2022	6.8	481	223	-	-	-	-	-	56	56
22H3142	1	No	Regular	MW1601-M	MW16-01	19-Aug-2022	6.6	593	299	-	-	-	-	-	68	68
22K2148	3	No	Regular	MW1601-M	MW16-01	13-Nov-2022	6.6	521	265	-	-	-	-	-	50	50
22B0748	3	No	Regular	MW16-02	MW16-02	26-Jan-2022	4.7	741	368	-	-	-	-	-	<0.6	-
22C0739	4	No	Regular	MW16-02	MW16-02	25-Feb-2022	4.7	905	405	-	-	-	-	-	<0.6	-
22C3616	2	No	Regular	MW1602-M	MW16-02	18-Mar-2022	4.4	542	211	-	-	-	-	-	<0.6	-
22D3544	3	No	Regular	MW1602-M	MW16-02	26-Apr-2022	4.8	692	301	-	-	-	-	-	<0.6	-
22E2933	3	No	Regular	MW1602-M	MW16-02	18-May-2022	4.7	783	391	-	-	-	-	-	<0.6	-
22F2227	11	No	Regular	MW1602-M	MW16-02	1-Jun-2022	4.6	741	395	-	-	-	-	-	<0.6	-
22G2083	4	No	Regular	MW1602-M	MW16-02	7-Jul-2022	4.7	806	391	-	-	-	-	-	<0.6	-
22I2071	1	No	Regular	MW 1602-M	MW16-02	11-Sep-2022	6.4	792	402	-	-	-	-	-	39	39
22K2148	4	No	Regular	MW1602-M	MW16-02	13-Nov-2022	4.2	1400	701	-	-	-	-	-	<0.6	-
22L1064	6	No	Regular	MW1602-M	MW16-02	7-Dec-2022	4.3	1400	667	-	-	-	-	-	<0.6	-
22B0748	4	No	Regular	MW16-03	MW16-03	26-Jan-2022	6.1	993	553	-	-	-	-	-	47	47
22C3616	3	No	Regular	MW1603-M	MW16-03	18-Mar-2022	6.7	828	415	-	-	-	-	-	40	40
22D3544	4	No	Regular	MW1603-M	MW16-03	26-Apr-2022	6.3	776	387	-	-	-	-	-	45	45
22E2933	4	No	Regular	MW1603-M	MW16-03	18-May-2022	6.3	732	364	-	-	-	-	-	60	60
22F3475	9	No	Regular	MW1603-M	MW16-03	15-Jun-2022	6.5	815	421	-	-	-	-	-	40	40
22G2083	9	No	Regular	MW1603-M	MW16-03	8-Jul-2022	6.6	787	415	-	-	-	-	-	35	35
22H3142	4	No	Regular	MW 1603-M	MW16-03	19-Aug-2022	6.6	647	327	-	-	-	-	-	48	48
22C0739	5	No	Regular	MW16-04	MW16-04	25-Feb-2022	4.9	254	91	-	-	-	-	-	<0.6	-
22C3616	4	No	Regular	MW1604-M	MW16-04	18-Mar-2022	4.8	330	122	-	-	-	-	-	<0.6	-
22D3544	5	No	Regular	MW1604-M	MW16-04	26-Apr-2022	4.8	272	101	-	-	-	-	-	<0.6	-
22E2933	5	No	Regular	MW1604-M	MW16-04	18-May-2022	4.8	286	113	-	-	-	-	-	<0.6	-
22F3475	2	No	Regular	MW1604-M	MW16-04	15-Jun-2022	4.8	274	110	-	-	-	-	-	<0.6	-

Station (Monitoring Plan)	Date	Alkalinity, Carbonate (as $CaCO_3$)	Alkalinity, Hydroxide (as $CaCO_3$)	Chloride	Fluoride	Sulphate	Total Nitrogen	Nitrate+ Nitrite	Nitrate (as N)	Nitrite (as N)	Ammonia (as N)	Total Phosphorus	Total Dissolved Phosphorus	TOC	DOC	Al-t	S-t	As-t	B-t	Ba-t
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW13-18S	1-Apr-2022	-	-	-	-	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-18S	29-Aug-2022	-	-	-	-	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-18S	15-Dec-2022	-	-	-	-	114	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-18S DUP	15-Dec-2022	-	-	-	-	114	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-19	20-Jun-2022	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-19	7-Dec-2022	-	-	-	-	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-01	19-Aug-2022	-	-	-	-	361	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-01S	5-Jun-2022	-	-	-	-	498	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-03	26-Jan-2022	-	-	-	-	611	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-03	17-Jun-2022	-	-	-	-	468	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-03	19-Aug-2022	-	-	-	-	416	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-03	8-Dec-2022	-	-	-	-	520	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-03D	17-Dec-2022	-	-	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-03S	8-Jun-2022	-	-	-	-	117	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-03S	17-Dec-2022	-	-	-	-	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-03S DUP	8-Jun-2022	-	-	-	-	119	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-04	26-Jan-2022	-	-	-	-	1350	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-04D	8-Jun-2022	-	-	-	-	1140	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-05	28-Aug-2022	-	-	-	-	163	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-05D	8-Jun-2022	-	-	-	-	105	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-05D	12-Dec-2022	-	-	-	-	85	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-05M	8-Jun-2022	-	-	-	-	168	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	26-Jan-2022	-	-	-	-	237	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	25-Feb-2022	-	-	-	-	251	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	18-Mar-2022	-	-	-	-	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	26-Apr-2022	-	-	-	-	78	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	18-May-2022	-	-	-	-	140	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	1-Jun-2022	-	-	-	-	215	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	7-Jul-2022	-	-	-	-	212	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	19-Aug-2022	-	-	-	-	244	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	13-Nov-2022	-	-	-	-	232	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	26-Jan-2022	-	-	-	-	471	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	25-Feb-2022	-	-	-	-	643	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	18-Mar-2022	-	-	-	-	274	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	26-Apr-2022	-	-	-	-	453	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	18-May-2022	-	-	-	-	503	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	1-Jun-2022	-	-	-	-	698	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	7-Jul-2022	-	-	-	-	497	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	11-Sep-2022	-	-	-	-	388	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	13-Nov-2022	-	-	-	-	866	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	7-Dec-2022	-	-	-	-	899	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-03	26-Jan-2022	-	-	-	-	490	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-03	18-Mar-2022	-	-	-	-	395	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-03	26-Apr-2022	-	-	-	-	390	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-03	18-May-2022	-	-	-	-	348	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-03	15-Jun-2022	-	-	-	-	398	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-03	8-Jul-2022	-	-	-	-	403	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-03	19-Aug-2022	-	-	-	-	323	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-04	25-Feb-2022	-	-	-	-	190	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-04	18-Mar-2022	-	-	-	-	146	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-04	26-Apr-2022	-	-	-	-	135	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-04	18-May-2022	-	-	-	-	133	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-04	15-Jun-2022	-	-	-	-	135	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Station (Monitoring Plan)	Date	Be-t	Bi-t	Cd-t	Ca-t	Cr-t	Co-t	Cu-t	Fe-t	P-t	Li-t	Mg-t	Mn-t	Mo-t	Ni-t	Pb-t	K-t	Se-t	Sn-t	Si-t	Ag-t	Na-t	Sr-t
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW13-18S	1-Apr-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-18S	29-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-18S	15-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-18S DUP	15-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-19	20-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-19	7-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-01	19-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-01S	5-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-03	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-03	17-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-03	19-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-03	8-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-03D	17-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-03S	8-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-03S	17-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-03S DUP	8-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-04	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-04D	8-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-05	28-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-05D	8-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-05D	12-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14-05M	8-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	25-Feb-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	26-Apr-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	18-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	1-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	7-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	19-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-01	13-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	25-Feb-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	26-Apr-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	18-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	1-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	7-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	11-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	13-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-02	7-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-03	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-03	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-03	26-Apr-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-03	18-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-03	15-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-03	8-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-03	19-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-04	25-Feb-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-04	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-04	26-Apr-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-04	18-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-04	15-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Station (Monitoring Plan)	Date	Te-t	Tl-t	Th-t	Ti-t	W-t	U-t	V-t	Zn-t	Zr-t	Hg-t	Al-d	S-d	As-d	B-d	Be-d	Bi-d	Ba-d	Cd-d	Ca-d	Cr-d	Co-d	Cu-d	Fe-d
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW13-18S	1-Apr-2022	-	-	-	-	-	-	-	-	-	-	0.004	26	0.00008	0.005	<0.000002	<0.000001	0.02	0.0001	40	0.0003	0.00001	0.003	<0.0007
MW13-18S	29-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.003	33	<0.000014	0.007	<0.000002	<0.000001	0.02	0.00001	56	0.0007	0.000008	0.0006	<0.0007
MW13-18S	15-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.002	39	<0.000014	0.006	<0.000002	<0.000001	0.02	0.00009	54	0.0004	0.000009	0.0007	<0.0007
MW13-18S DUP	15-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.003	39	0.00006	0.006	<0.000002	<0.000001	0.02	0.00009	55	0.0007	0.000008	0.0006	<0.0007
MW13-19	20-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.008	2.9	<0.000014	0.002	<0.000002	<0.000001	0.005	0.00005	18	0.0002	0.00001	0.0010	0.01
MW13-19	7-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.002	2.3	<0.000014	0.003	<0.000002	<0.000001	0.002	0.00004	16	0.0003	0.000006	0.0004	<0.0007
MW14-01	19-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.1	120	<0.000014	0.009	0.00004	<0.000001	0.02	0.02	107	0.0002	0.006	0.3	0.008
MW14-01S	5-Jun-2022	-	-	-	-	-	-	-	-	-	-	3.6	122	<0.00007	0.007	0.0004	<0.000001	0.02	0.02	94	0.0002	0.009	1.3	0.005
MW14-03	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	3.4	194	0.0004	0.01	0.0003	<0.0000004	0.03	0.06	180	0.0002	0.01	2.1	0.02
MW14-03	17-Jun-2022	-	-	-	-	-	-	-	-	-	-	2.8	163	<0.000056	0.01	0.0003	<0.000001	0.02	0.06	141	0.0003	0.010	1.7	0.008
MW14-03	19-Aug-2022	-	-	-	-	-	-	-	-	-	-	1.9	153	<0.000028	0.010	0.0002	<0.000001	0.02	0.04	120	0.0002	0.007	1.2	0.007
MW14-03	8-Dec-2022	-	-	-	-	-	-	-	-	-	-	2.1	166	<0.000056	0.01	0.0003	<0.000001	0.02	0.05	154	0.0002	0.008	1.3	0.008
MW14-03D	17-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.002	5.8	<0.000014	0.003	<0.000002	<0.000001	0.02	0.0005	18	0.0005	0.00004	0.006	<0.0007
MW14-03S	8-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.007	42	<0.000014	0.005	<0.000002	<0.000001	0.02	0.004	50	0.0002	0.00001	0.03	<0.0007
MW14-03S	17-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.004	22	<0.000014	0.005	<0.000002	<0.000001	0.02	0.002	33	0.0002	0.000009	0.02	<0.0007
MW14-03S DUP	8-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.007	41	<0.000014	0.005	<0.000002	<0.000001	0.02	0.004	49	0.0002	0.00001	0.03	<0.0007
MW14-04	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	9.3	354	0.0006	0.01	0.0006	<0.0000004	0.02	0.06	287	0.0004	0.04	1.8	1.1
MW14-04D	8-Jun-2022	-	-	-	-	-	-	-	-	-	-	8.0	352	<0.00014	0.02	0.0005	<0.000001	0.02	0.05	271	0.0006	0.03	1.3	5.5
MW14-05	28-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.08	37	<0.000014	0.006	<0.000002	<0.000001	0.008	0.001	46	0.0003	0.0002	0.02	0.003
MW14-05D	8-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.002	38	<0.000014	0.005	<0.000002	<0.000001	0.006	0.0002	49	0.0003	<0.0000031	0.003	<0.0007
MW14-05D	12-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.001	26	<0.000014	0.006	<0.000002	<0.000001	0.004	0.0002	36	0.0003	<0.0000031	0.0004	<0.0007
MW14-05M	8-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.02	60	<0.000014	0.006	0.00002	<0.000001	0.01	0.005	60	0.0003	0.00006	0.05	0.003
MW16-01	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	0.08	76	0.00010	0.009	0.00003	<0.0000004	0.03	0.008	82	0.0002	0.0004	0.07	<0.0008
MW16-01	25-Feb-2022	-	-	-	-	-	-	-	-	-	-	0.1	78	0.00005	0.008	0.00004	<0.0000004	0.02	0.009	67	0.0003	0.0003	0.09	0.004
MW16-01	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.007	15	<0.000014	<0.0011	<0.000002	<0.000001	0.02	0.0007	30	0.0001	0.00002	0.004	0.004
MW16-01	26-Apr-2022	-	-	-	-	-	-	-	-	-	-	0.006	26	<0.000014	0.004	<0.000002	<0.000001	0.02	0.002	41	0.0001	0.00002	0.01	<0.0007
MW16-01	18-May-2022	-	-	-	-	-	-	-	-	-	-	0.02	49	<0.000014	0.006	0.00001	<0.000001	0.04	0.004	62	0.0003	0.0001	0.03	0.003
MW16-01	1-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.04	76	<0.000014	0.007	0.00002	<0.000001	0.03	0.007	77	0.0003	0.0002	0.05	<0.0007
MW16-01	7-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.05	67	<0.000014	0.006	0.00002	<0.000001	0.03	0.006	73	0.0002	0.0001	0.05	<0.0007
MW16-01	19-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.003	79	<0.000014	0.009	0.00001	<0.000001	0.02	0.007	97	0.0002	0.00008	0.02	0.005
MW16-01	13-Nov-2022	-	-	-	-	-	-	-	-	-	-	0.006	80	<0.000014	0.005	<0.000002	<0.000001	0.01	0.003	94	0.0002	0.00002	0.009	0.002
MW16-02	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	8.6	137	0.0004	0.01	0.0004	<0.0000004	0.01	0.02	119	0.0002	0.02	0.8	0.02
MW16-02	25-Feb-2022	-	-	-	-	-	-	-	-	-	-	6.9	173	0.0003	0.01	0.0003	<0.0000004	0.01	0.03	114	0.0004	0.02	1.1	0.02
MW16-02	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	9.7	87	0.0002	0.007	0.0004	<0.000001	0.010	0.01	64	0.0003	0.01	1.0	0.04
MW16-02	26-Apr-2022	-	-	-	-	-	-	-	-	-	-	7.3	124	<0.000056	0.009	0.0003	<0.000001	0.01	0.02	91	0.0002	0.01	0.9	0.01
MW16-02	18-May-2022	-	-	-	-	-	-	-	-	-	-	0.5	122	0.0003	0.008	0.00002	<0.000002	0.02	0.01	131	0.0004	0.006	0.07	0.5
MW16-02	1-Jun-2022	-	-	-	-	-	-	-	-	-	-	6.9	148	<0.000056	0.01	0.0003	<0.000001	0.01	0.02	123	0.0002	0.02	1.0	0.01
MW16-02	7-Jul-2022	-	-	-	-	-	-	-	-	-	-	6.7	156	<0.00005	0.01	0.0003	<0.000001	0.01	0.03	116	0.0003	0.02	1.0	0.01
MW16-02	11-Sep-2022	-	-	-	-	-	-	-	-	-	-	0.6	141	<0.000028	0.01	0.00009	<0.000001	0.01	0.02	128	0.0001	0.01	0.4	0.01
MW16-02	13-Nov-2022	-	-	-	-	-	-	-	-	-	-	32	319	<0.000154	0.02	0.002	<0.000001	0.01	0.06	221	0.0007	0.03	3.1	0.08
MW16-02	7-Dec-2022	-	-	-	-	-	-	-	-	-	-	27	285	<0.00021	0.02	0.001	<0.000001	0.010	0.05	210	0.0005	0.03	2.5	0.07
MW16-03	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	0.08	174	0.0001	0.009	0.00001	<0.0000004	0.02	0.01	191	0.0004	0.007	0.06	0.05
MW16-03	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.06	134	<0.000014	0.008	0.00001	<0.000001	0.01	0.01	137	0.0002	0.007	0.08	0.002
MW16-03	26-Apr-2022	-	-	-	-	-	-	-	-	-	-	0.05	132	<0.000014	0.008	0.00001	<0.000001	0.01	0.01	126	<0.00002	0.005	0.07	<0.0007
MW16-03	18-May-2022	-	-	-	-	-	-	-	-	-	-	8.5	137	<0.000056	0.009	0.0004	<0.000002	0.01	0.02	111	0.0002	0.02	1.0	0.02
MW16-03	15-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.06	138	0.00007	0.009	0.00001	<0.000001	0.02	0.02	142	0.0001	0.005	0.05	0.05
MW16-03	8-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.06	140	<0.000014	0.008	0.00002	<0.000001	0.01	0.02	134	0.0001	0.007	0.1	<0.0007
MW16-03	19-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.02	112	<0.000014	0.010	<0.000002	<0.000001	0.03	0.01	106	0.0002	0.005	0.03	0.03
MW16-04	25-Feb-2022	-	-	-	-	-	-	-	-	-	-	2.2	40	0.00006	0.005	0.0001	<0.0000004	0.01	0.01	25	0.0003	0.004	0.7	0.003
MW16-04	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	2.6	47	0.00006	0.005	0.0001	<0.000001	0.01	0.02	34	0.0003	0.008	0.9	0.004
MW16-04	26-Apr-2022	-	-	-	-	-	-	-	-	-	-	2.7	40	<0.00002	0.005	0.0001	<0.000001	0.01	0.02	29	0.0002	0.005	0.8	0.003
MW16-04	18-May-2022	-	-	-	-	-	-	-	-	-	-	2.2	43	<0.000014	0.005	0.0001	<0.000001	0.01	0.02	33	0.0003	0.006	0.7	0.009
MW16-04	15-Jun-2022	-	-	-	-	-	-	-	-	-	-	2.4	41	<0.000014	0.005	0.0001	<0.000001	0.01	0.02	32	0.0003	0.006	0.8	0.004

Station (Monitoring Plan)	Date	P-d	Li-d	Mg-d	Mn-d	Mo-d	Ni-d	Pb-d	K-d	Sb-t	Se-d	Si-d	Sr-d	Sn-d	Ag-d	Na-d	Sb-d	Te-d	Tl-d	Th-d	Ti-d	W-d	U-d
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW13-18S	1-Apr-2022	<0.007	0.00006	6.3	0.002	0.00010	0.00008	0.0002	0.3	-	0.0007	4.0	0.07	<0.000014	<0.000004	1.7	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003
MW13-18S	29-Aug-2022	<0.007	0.0001	8.9	<0.000027	0.00009	<0.000024	<0.000024	0.4	-	0.001	6.1	0.1	<0.000014	<0.000004	2.1	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000005
MW13-18S	15-Dec-2022	<0.007	0.00005	7.6	0.0002	0.00008	0.00009	<0.000024	0.4	-	0.0007	4.7	0.09	<0.000014	<0.000004	2.5	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003
MW13-18S DUP	15-Dec-2022	<0.007	0.00005	7.6	0.0001	0.00008	0.0002	<0.000024	0.4	-	0.0006	4.7	0.09	<0.000014	<0.000004	2.5	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003
MW13-19	20-Jun-2022	<0.007	<0.000007	1.3	0.0007	0.00004	0.00006	<0.000024	0.1	-	0.0001	2.2	0.03	<0.000014	<0.000004	0.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000002
MW13-19	7-Dec-2022	<0.007	<0.000007	1.1	0.0002	0.00005	0.00008	<0.000024	0.1	-	0.0002	2.3	0.02	<0.000014	<0.000004	0.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	<0.0000007
MW14-01	19-Aug-2022	<0.007	0.00009	20	1.8	0.00001	0.01	0.0001	0.6	-	<0.00002	7.4	0.2	<0.000014	<0.000004	5.6	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000004
MW14-01S	5-Jun-2022	<0.007	0.0002	18	1.1	<0.000007	0.02	0.0007	0.5	-	0.0003	10	0.2	<0.000014	0.00001	7.0	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003
MW14-03	26-Jan-2022	<0.004	0.0001	25	3.2	<0.000005	0.03	0.0005	1.0	-	0.0004	9.5	0.3	<0.000003	<0.0000005	10	<0.000003	<0.000006	0.000005	<0.0000003	<0.00002	<0.00001	0.00005
MW14-03	17-Jun-2022	<0.007	0.0001	23	2.9	<0.000007	0.02	0.0004	1.0	-	0.0003	8.0	0.3	<0.000014	<0.000004	10	<0.000019	<0.000034	0.000005	<0.000002	<0.00009	<0.00001	0.00005
MW14-03	19-Aug-2022	<0.007	0.00008	18	2.4	<0.000007	0.02	0.0003	0.8	-	0.0002	8.5	0.2	<0.000014	<0.000004	7.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00004
MW14-03	8-Dec-2022	<0.007	0.0001	19	3.2	0.00001	0.02	0.0004	1.1	-	0.0002	8.0	0.3	<0.000014	<0.000004	9.3	<0.000019	<0.000034	0.000008	<0.000002	<0.00009	<0.00001	0.00005
MW14-03D	17-Dec-2022	<0.007	<0.000007	2.0	0.0005	0.00002	0.0006	<0.000024	0.2	-	<0.00002	3.7	0.04	<0.000014	<0.000004	1.3	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	<0.0000007
MW14-03S	8-Jun-2022	<0.007	<0.000007	6.1	0.0007	<0.000007	0.003	<0.000024	0.6	-	0.0002	5.8	0.1	<0.000014	<0.000004	2.6	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000002
MW14-03S	17-Dec-2022	<0.007	<0.000007	4.0	0.0003	<0.000007	0.002	<0.000024	0.5	-	0.0002	5.1	0.07	<0.000014	<0.000004	2.1	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000001
MW14-03S DUP	8-Jun-2022	<0.007	<0.000007	6.2	0.0006	<0.000007	0.003	<0.000024	0.6	-	0.0002	5.8	0.1	<0.000014	<0.000004	2.7	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	<0.0000007
MW14-04	26-Jan-2022	<0.004	0.002	54	7.4	<0.000005	0.05	0.0004	1.2	-	0.0006	14	0.6	<0.000003	<0.0000005	8.1	<0.000003	<0.000006	0.000008	<0.0000003	<0.00002	<0.00001	0.0002
MW14-04D	8-Jun-2022	<0.007	0.004	58	8.1	<0.000007	0.05	0.0007	1.3	-	0.0003	15	0.6	<0.000014	<0.000004	10	<0.000019	<0.000034	0.000005	<0.000002	<0.00009	<0.00001	0.0002
MW14-05	28-Aug-2022	<0.007	<0.000007	5.1	0.02	<0.000007	0.002	0.0003	0.5	-	0.0005	4.9	0.1	<0.000014	<0.000004	1.8	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000007
MW14-05D	8-Jun-2022	<0.007	<0.000007	4.9	0.0001	<0.000007	0.0003	<0.000024	0.5	-	0.0005	4.4	0.1	<0.000014	<0.000004	1.7	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	<0.0000007
MW14-05D	12-Dec-2022	<0.007	<0.000007	4.2	0.0001	<0.000007	0.0003	<0.000024	0.4	-	0.0005	4.9	0.09	<0.000014	<0.000004	1.7	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	<0.0000007
MW14-05M	8-Jun-2022	<0.007	<0.000007	7.7	0.02	<0.000007	0.008	<0.000024	0.8	-	0.0006	7.7	0.2	<0.000014	<0.000004	2.5	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000002
MW16-01	26-Jan-2022	<0.004	0.0001	11	0.1	0.00010	0.008	0.0005	0.6	-	0.0002	10	0.2	<0.000003	<0.0000005	2.7	0.0003	<0.000006	0.000004	<0.0000003	<0.00002	<0.00001	0.000009
MW16-01	25-Feb-2022	<0.004	0.0001	12	0.1	0.00005	0.008	0.0004	0.6	-	0.0003	10	0.2	<0.000003	0.00001	2.8	0.0003	<0.000006	<0.00000009	<0.0000003	<0.00002	<0.00001	0.00001
MW16-01	18-Mar-2022	<0.007	0.00006	1.8	0.001	0.0005	0.0007	0.00006	0.2	-	0.0002	1.6	0.05	<0.000014	<0.000004	0.4	0.0003	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000001
MW16-01	26-Apr-2022	<0.007	0.00009	3.5	0.002	0.0005	0.001	0.0002	0.3	-	0.0003	2.7	0.09	<0.000014	<0.000004	0.8	0.0005	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000005
MW16-01	18-May-2022	<0.007	0.00007	7.2	0.04	0.0003	0.004	0.0001	0.4	-	0.0002	6.1	0.1	<0.000014	<0.000004	1.5	0.0004	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000007
MW16-01	1-Jun-2022	<0.007	0.0001	11	0.09	0.0001	0.007	<0.000024	0.5	-	0.0002	8.3	0.2	<0.000014	<0.000004	2.5	0.0003	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
MW16-01	7-Jul-2022	<0.007	0.00010	9.7	0.05	0.0002	0.006	0.0004	0.5	-	0.0002	7.4	0.2	<0.000014	<0.000004	2.4	0.0006	<0.000034	0.000005	<0.000002	<0.00009	<0.00001	0.000008
MW16-01	19-Aug-2022	<0.007	0.00007	14	0.04	0.0001	0.006	0.0001	0.6	-	<0.00002	9.1	0.2	<0.000014	0.00002	2.8	0.0004	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
MW16-01	13-Nov-2022	<0.007	<0.000007	7.1	0.002	0.0004	0.002	0.00008	0.4	-	0.0005	4.3	0.2	<0.000014	<0.000004	1.2	0.0006	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
MW16-02	26-Jan-2022	<0.004	0.002	17	1.0	0.00002	0.04	0.003	0.5	-	0.0004	20	0.2	<0.000003	0.00002	1.9	0.00009	<0.000006	0.00003	<0.0000003	<0.00002	<0.00001	0.0001
MW16-02	25-Feb-2022	<0.004	0.001	29	1.8	0.00002	0.05	0.004	0.7	-	0.0004	23	0.3	<0.000003	0.00002	3.1	0.00010	<0.000006	0.00003	<0.0000003	<0.00002	<0.00001	0.00008
MW16-02	18-Mar-2022	<0.007	0.002	13	0.6	0.00002	0.04	0.004	0.4	-	<0.00002	17	0.1	<0.000014	0.00001	1.3	0.00006	<0.000034	0.00002	<0.000002	<0.00009	<0.00001	0.0001
MW16-02	26-Apr-2022	<0.007	0.002	18	0.9	0.00002	0.04	0.004	0.5	-	0.0002	19	0.2	<0.000014	0.00002	2.0	0.00007	<0.000034	0.00002	<0.000002	<0.00009	<0.00001	0.00009
MW16-02	18-May-2022	<0.014	0.0002	15	3.5	0.00004	0.01	0.002	0.6	-	<0.00004	9.2	0.2	<0.000028	0.00002	2.7	<0.000038	<0.000068	<0.0000052	<0.000004	0.02	<0.00002	0.00001
MW16-02	1-Jun-2022	<0.007	0.002	21	1.2	0.00001	0.04	0.001	0.5	-	0.0002	20	0.2	<0.000014	<0.000004	2.2	0.00007	<0.000034	0.00002	<0.000002	<0.00009	<0.00001	0.00009
MW16-02	7-Jul-2022	<0.007	0.002	24	1.6	0.00002	0.04	0.004	0.7	-	0.0001	23	0.2	<0.000014	0.00003	3.1	0.00010	<0.000034	0.00002	<0.000002	<0.00009	<0.00001	0.00008
MW16-02	11-Sep-2022	<0.007	0.0007	20	1.6	0.00007	0.02	0.002	0.6	-	0.0001	14	0.2	<0.000014	0.00003	3.2	0.00009	<0.000034	0.00002	<0.000002	<0.00009	<0.00001	0.00003
MW16-02	13-Nov-2022	<0.007	0.004	36	2.6	0.00002	0.1	0.02	1.0	-	<0.00012	33	0.4	<0.000014	0.00003	3.5	0.00009	<0.000034	0.00005	0.00001	<0.00009	<0.00001	0.0006
MW16-02	7-Dec-2022	<0.007	0.004	35	2.2	0.00004	0.09	0.01	0.9	-	0.0004	28	0.4	<0.000014	0.00002	3.3	0.00009	<0.000034	0.00004	<0.000002	0.0004	<0.00001	0.0004
MW16-03	26-Jan-2022	<0.004	0.0003	18	5.2	0.00005	0.01	0.0008	0.8	-	0.0001	9.7	0.3	0.0002	<0.0000005	3.2	0.0002	<0.000006	0.000008	<0.0000003	0.001	<0.00001	0.00001
MW16-03	18-Mar-2022	<0.007	0.0002	18	4.0	0.00003	0.01	0.0003	0.6	-	0.0001	9.0	0.2	<0.000014	<0.000004	3.3	0.0001	<0.000034	0.000008	<0.000002	<0.00009	<0.00001	0.000006
MW16-03	26-Apr-2022	<0.007	0.0002	17	4.0	0.00003	0.01	0.0006	0.7	-	<0.00002	8.9	0.2	<0.000014	<0.000004	3.2	0.0002	<0.000034	0.000007	<0.000002	<0.00009	<0.00001	0.000010
MW16-03	18-May-2022	<0.014	0.002	21	1.1	<0.000014	0.04	0.003	0.5	-	<0.00004	22	0.2	<0.000028	0.00002	2.0	<0.000038	<0.000068	0.00001	<0.000004	<0.00018	<0.00002	0.00009
MW16-03	15-Jun-2022	<0.007	0.0001	16	3.1	0.00002	0.01	0.0009	0.7	-	0.0001	9.0	0.2	<0.000014	<0.000004	3.1	0.0001	<0.000034	0.000005	<0.000002	0.0010	<0.00001	0.000007
MW16-03	8-Jul-2022	<0.007	0.0001	20	3.8	0.00002	0.02	0.0002	0.8	-	<0.00002	12	0.3	<0.000014	<0.000004	3.4	0.0001	<0.000034	0.000007	<0.000002	<0.00009	<0.00001	0.000006
MW16-03	19-Aug-2022	<0.007	0.0001	15	3.0	0.00003	0.01	0.0002	0.7	-	<0.00002	11	0.2	<0.000014	0.00002	3.1	0.0001	<0.000034	0.000007	<0.000002	0.0004	<0.00001	0.000005
MW16-04	25-Feb-2022	<0.004	0.002	6.7	0.3	<0.000005	0.007	0.001	0.4	-	0.0002	8.7	0.06	<0.000003	<0.0000005	2.3	<0.000003	<0.000006	<0.00000009	<0.0000003	<0.00002	<0.00001	0.00003
MW16-04	18-Mar-2022	<0.007	0.002	9.2	0.5	<0.000007	0.01	0.0009	0.4	-	0.0002	9.5	0.08	<0.000014	<0.000004	2.8	0.00006	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003
MW16-04	26-Apr-2022	<0.007	0.002	7.1	0.4	<0.000007	0.009	0.001	0.4	-	0.0002	7.9	0.07	<0.000014	<0.000004	2.2	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003
MW16-04	18-May-2022	<0.007	0.002	7.6	0.4	0.00001	0.009	0.0007	0.4	-	0.0002	9.1	0.07	<0.000014	0.00001	2.0	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003
MW16-04	15-Jun-2022	<0.007	0.002	7.1	0.4	<0.000007	0.009	0.0009	0.4	-	0.0002	8.5	0.07	<0.000014	0.00001	2.0	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003

Station (Monitoring Plan)	Date	V-d	Zn-d	Zr-d	Hg-d	Silica Reactive	Radium 226	Chlorophyll a	BOD5
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW13-18S	1-Apr-2022	<0.00002	0.04	<0.000003	-	-	-	-	-
MW13-18S	29-Aug-2022	<0.00002	0.006	<0.000003	-	-	-	-	-
MW13-18S	15-Dec-2022	<0.00002	0.08	<0.000003	-	-	-	-	-
MW13-18S DUP	15-Dec-2022	<0.00002	0.08	<0.000003	-	-	-	-	-
MW13-19	20-Jun-2022	<0.00002	0.02	<0.000003	-	-	-	-	-
MW13-19	7-Dec-2022	<0.00002	0.02	<0.000003	-	-	-	-	-
MW14-01	19-Aug-2022	<0.00002	12	<0.000003	-	-	-	-	-
MW14-01S	5-Jun-2022	<0.00002	20	<0.000003	-	-	-	-	-
MW14-03	26-Jan-2022	0.0003	25	0.00008	-	-	-	-	-
MW14-03	17-Jun-2022	<0.00002	21	0.00007	-	-	-	-	-
MW14-03	19-Aug-2022	<0.00002	16	0.00005	-	-	-	-	-
MW14-03	8-Dec-2022	<0.00002	16	0.00005	-	-	-	-	-
MW14-03D	17-Dec-2022	<0.00002	0.7	<0.000003	-	-	-	-	-
MW14-03S	8-Jun-2022	<0.00002	2.0	<0.000003	-	-	-	-	-
MW14-03S	17-Dec-2022	<0.00002	1.4	<0.000003	-	-	-	-	-
MW14-03S DUP	8-Jun-2022	<0.00002	2.1	<0.000003	-	-	-	-	-
MW14-04	26-Jan-2022	<0.0000007	22	<0.000004	-	-	-	-	-
MW14-04D	8-Jun-2022	<0.00002	20	<0.000003	-	-	-	-	-
MW14-05	28-Aug-2022	<0.00002	0.8	<0.000003	-	-	-	-	-
MW14-05D	8-Jun-2022	<0.00002	0.2	<0.000003	-	-	-	-	-
MW14-05D	12-Dec-2022	<0.00002	0.2	<0.000003	-	-	-	-	-
MW14-05M	8-Jun-2022	<0.00002	3.4	<0.000003	-	-	-	-	-
MW16-01	26-Jan-2022	<0.0000007	3.6	<0.000004	-	-	-	-	-
MW16-01	25-Feb-2022	<0.0000007	3.9	<0.000004	-	-	-	-	-
MW16-01	18-Mar-2022	<0.00002	0.3	<0.000003	-	-	-	-	-
MW16-01	26-Apr-2022	<0.00002	0.6	<0.000003	-	-	-	-	-
MW16-01	18-May-2022	<0.00002	1.7	<0.000003	-	-	-	-	-
MW16-01	1-Jun-2022	<0.00002	3.6	<0.000003	-	-	-	-	-
MW16-01	7-Jul-2022	<0.00002	2.8	<0.000003	-	-	-	-	-
MW16-01	19-Aug-2022	<0.00002	3.3	<0.000003	-	-	-	-	-
MW16-01	13-Nov-2022	<0.00002	1.0	<0.000003	-	-	-	-	-
MW16-02	26-Jan-2022	<0.0000007	4.5	<0.000004	-	-	-	-	-
MW16-02	25-Feb-2022	<0.0000007	0.08	<0.000004	-	-	-	-	-
MW16-02	18-Mar-2022	<0.00002	3.8	<0.000003	-	-	-	-	-
MW16-02	26-Apr-2022	<0.00002	5.3	<0.000003	-	-	-	-	-
MW16-02	18-May-2022	<0.00004	5.1	0.00006	-	-	-	-	-
MW16-02	1-Jun-2022	<0.00002	6.2	<0.000003	-	-	-	-	-
MW16-02	7-Jul-2022	<0.00002	7.4	<0.000003	-	-	-	-	-
MW16-02	11-Sep-2022	<0.00002	6.0	<0.000003	-	-	-	-	-
MW16-02	13-Nov-2022	<0.00002	15	0.00007	-	-	-	-	-
MW16-02	7-Dec-2022	<0.00002	12	0.00006	-	-	-	-	-
MW16-03	26-Jan-2022	<0.0000007	4.5	<0.000004	-	-	-	-	-
MW16-03	18-Mar-2022	<0.00002	6.1	<0.000003	-	-	-	-	-
MW16-03	26-Apr-2022	<0.00002	5.1	<0.000003	-	-	-	-	-
MW16-03	18-May-2022	<0.00004	6.1	<0.000006	-	-	-	-	-
MW16-03	15-Jun-2022	<0.00002	5.8	<0.000003	-	-	-	-	-
MW16-03	8-Jul-2022	<0.00002	7.4	<0.000003	-	-	-	-	-
MW16-03	19-Aug-2022	<0.00002	5.1	<0.000003	-	-	-	-	-
MW16-04	25-Feb-2022	<0.0000007	3.4	<0.000004	-	-	-	-	-
MW16-04	18-Mar-2022	<0.00002	5.5	<0.000003	-	-	-	-	-
MW16-04	26-Apr-2022	<0.00002	4.3	<0.000003	-	-	-	-	-
MW16-04	18-May-2022	<0.00002	4.2	<0.000003	-	-	-	-	-
MW16-04	15-Jun-2022	<0.00002	4.2	<0.000003	-	-	-	-	-

Work Order	Lab ID	Re-anaysis	Field QAQC	Station (Lab Report)	Station (Monitoring Plan)	Date	pH	Conductivity	Hardness, Total (as $CaCO_3$)	Hardness, Dissolved (as $CaCO_3$)	Turbidity	Total Suspended Solids	Acidity, pH 8.3 (as $CaCO_3$)	Alkalinity, Total pH 4.5 (as $CaCO_3$)	Alkalinity, Total pH 8.3 (as $CaCO_3$)	Alkalinity, Bicarbonate (as $CaCO_3$)
							pH Unit	uS/cm	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L	mg/L
22G2083	5	No	Regular	MW1604-M	MW16-04	7-Jul-2022	5.1	218	88	-	-	-	-	-	<0.6	-
22C0739	6	No	Regular	MW16-05	MW16-05	25-Feb-2022	6.6	178	71	-	-	-	-	-	32	32
22D0297	2	No	Regular	MW1605-M	MW16-05	24-Mar-2022	6.5	370	137	-	-	-	-	-	68	68
22D3544	6	No	Regular	MW1605-M	MW16-05	26-Apr-2022	6.4	275	90	-	-	-	-	-	57	57
22E2933	6	No	Regular	MW1605-M	MW16-05	18-May-2022	6.2	201	91	-	-	-	-	-	37	37
22F3475	3	No	Regular	MW1605-M	MW16-05	22-Jun-2022	6.8	178	79	-	-	-	-	-	45	45
22G2083	10	No	Regular	MW1605-M	MW16-05	8-Jul-2022	6.8	168	70	-	-	-	-	-	36	36
22B0748	5	No	Regular	MW17-02D	MW17-02D	26-Jan-2022	3.9	1800	850	-	-	-	-	-	<0.6	-
22C0739	10	No	Regular	MW17-02D	MW17-02D	26-Feb-2022	3.8	1780	817	-	-	-	-	-	<0.6	-
22E0803	1	No	Regular	MW1702D-M	MW17-02D	28-Apr-2022	3.7	1770	804	-	-	-	-	-	<0.6	-
22E2933	10	No	Regular	MW1702D-M	MW17-02D	18-May-2022	4.1	1760	856	-	-	-	-	-	<0.6	3.7
22F2227	13	No	Regular	MW1702D-M	MW17-02D	13-Jun-2022	4.0	1430	729	-	-	-	-	-	<0.6	-
22G2083	17	No	Regular	MW1702D-M	MW17-02D	11-Jul-2022	4.0	1310	642	-	-	-	-	-	<0.6	-
22I0407	3	No	Regular	MW1702D-M	MW17-02D	28-Aug-2022	3.9	1240	571	-	-	-	-	-	<0.6	-
22I2071	2	No	Regular	MW 1702D-M	MW17-02D	11-Sep-2022	3.8	1210	549	-	-	-	-	-	<0.6	-
22K0414	3	No	Regular	MW1702D-M	MW17-02D	28-Oct-2022	3.7	1010	465	-	-	-	-	-	<0.6	-
22K2148	10	No	Regular	MW1702D-M	MW17-02D	13-Nov-2022	4.0	836	400	-	-	-	-	-	<0.6	-
22L1724	6	No	Regular	MW1702D-M	MW17-02D	13-Dec-2022	4.1	1100	484	-	-	-	-	-	<0.6	-
22B0748	6	No	Regular	MW17-03	MW17-03	26-Jan-2022	3.5	2800	1300	-	-	-	-	-	<0.6	-
22C0739	11	No	Regular	MW17-03	MW17-03	26-Feb-2022	3.3	2620	467	-	-	-	-	-	<0.6	-
22E0803	2	No	Regular	MW1703-M	MW17-03	5-May-2022	3.8	2110	1120	-	-	-	-	-	<0.6	-
22E2933	8	No	Regular	MW1703-M	MW17-03	18-May-2022	3.7	2050	1050	-	-	-	-	-	<0.6	-
22F2227	1	No	Regular	MW17-03	MW17-03	2-Jun-2022	3.2	2110	1100	-	-	-	-	-	<0.6	-
22G2083	18	No	Regular	MW1703-M	MW17-03	11-Jul-2022	3.4	1850	903	-	-	-	-	-	<0.6	-
22I0407	1	No	Regular	MW1703-M	MW17-03	28-Aug-2022	4.4	1330	661	-	-	-	-	-	<0.6	-
22I2071	3	No	Regular	MW 1703-M	MW17-03	11-Sep-2022	3.7	1210	595	-	-	-	-	-	<0.6	-
22K0414	4	No	Regular	MW1703-M	MW17-03	28-Oct-2022	3.9	849	412	-	-	-	-	-	<0.6	-
22K2904	1	No	Regular	MW 1703-M	MW17-03	20-Nov-2022	3.9	940	458	-	-	-	-	-	<0.6	-
22L1724	7	No	Regular	MW1703-M	MW17-03	13-Dec-2022	3.4	1190	502	-	-	-	-	-	<0.6	-
22E2933	9	No	Replicate	MW1703-MR	MW17-03 DUP	18-May-2022	3.7	2070	1060	-	-	-	-	-	<0.6	-
22D0987	3	No	Regular	MW1704-Q	MW17-04	1-Apr-2022	7.4	201	80	-	-	-	-	-	42	42
22D0987	4	No	Regular	MW1705-Q	MW17-05	1-Apr-2022	7.5	172	79	-	-	-	-	-	60	60
22F2227	6	No	Regular	MW1706-Q	MW17-06	5-Jun-2022	6.5	778	415	-	-	-	-	-	25	25
22D0987	5	No	Regular	MW1707-Q	MW17-07	1-Apr-2022	7.3	219	95	-	-	-	-	-	51	51
22D0297	15	No	Regular	MW1708-Q	MW17-08	31-Mar-2022	6.4	492	208	-	-	-	-	-	45	45
22E3862	10	No	Regular	MW17-08-Q	MW17-08	25-May-2022	6.3	449	210	-	-	-	-	-	47	47
22L1064	3	No	Regular	MW1708-Q	MW17-08	5-Dec-2022	6.6	346	163	-	-	-	-	-	54	54
22E3862	11	No	Regular	MW17-13-Q	MW17-13	25-May-2022	4.6	655	259	-	-	-	-	-	<0.6	-
22C0739	8	No	Regular	MW18-06D	MW18-06D	26-Feb-2022	6.6	179	74	-	-	-	-	-	30	30
22E2933	11	No	Regular	MW1806D-M	MW18-06D	18-May-2022	6.0	180	76	-	-	-	-	-	25	25
22F3475	6	No	Regular	MW1806D-M	MW18-06D	16-Jun-2022	6.8	153	69	-	-	-	-	-	27	27
22G2083	6	No	Regular	MW1806D-M	MW18-06D	7-Jul-2022	6.7	154	76	-	-	-	-	-	27	27
22H3943	2	No	Regular	MW1806D-M	MW18-06D	24-Aug-2022	6.4	190	85	-	-	-	-	-	23	23
22K0414	5	No	Regular	MW1806D-M	MW18-06D	31-Oct-2022	6.1	177	88	-	-	-	-	-	12	12
22K2148	1	No	Regular	MW1806D-M	MW18-06D	15-Nov-2022	6.3	190	80	-	-	-	-	-	18	18
22L1064	11	No	Regular	MW1806D-M	MW18-06D	8-Dec-2022	6.2	190	83	-	-	-	-	-	17	17
22C0739	7	No	Regular	MW18-06S	MW18-06S	26-Feb-2022	5.7	220	84	-	-	-	-	-	4.2	4.2
22F3475	7	No	Regular	MW1806S-M	MW18-06S	20-Jun-2022	5.6	193	80	-	-	-	-	-	2.4	2.4
22G2083	11	No	Regular	MW1806S-M	MW18-06S	8-Jul-2022	5.9	193	82	-	-	-	-	-	3.5	3.5
22G2083	12	No	Regular	MW1806S-M	MW18-06S	10-Jul-2022	5.8	190	78	-	-	-	-	-	4.0	4.0
22H3943	1	No	Regular	MW1806S-M	MW18-06S	25-Aug-2022	6.0	204	88	-	-	-	-	-	5.0	5.0
22K0414	6	No	Regular	MW1806S-M	MW18-06S	26-Oct-2022	5.8	204	74	-	-	-	-	-	4.7	4.7
22K2148	2	No	Regular	MW1806S-M	MW18-06S	15-Nov-2022	5.8	210	87	-	-	-	-	-	4.2	4.2

Station (Monitoring Plan)	Date	Alkalinity, Carbonate (as $CaCO_3$)	Alkalinity, Hydroxide (as $CaCO_3$)	Chloride	Fluoride	Sulphate	Total Nitrogen	Nitrate+ Nitrite	Nitrate (as N)	Nitrite (as N)	Ammonia (as N)	Total Phosphorus	Total Dissolved Phosphorus	TOC	DOC	Al-t	S-t	As-t	B-t	Ba-t
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW16-04	7-Jul-2022	-	-	-	-	137	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-05	25-Feb-2022	-	-	-	-	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-05	24-Mar-2022	-	-	-	-	122	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-05	26-Apr-2022	-	-	-	-	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-05	18-May-2022	-	-	-	-	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-05	22-Jun-2022	-	-	-	-	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-05	8-Jul-2022	-	-	-	-	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	26-Jan-2022	-	-	-	-	1210	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	26-Feb-2022	-	-	-	-	1350	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	28-Apr-2022	-	-	-	-	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	18-May-2022	-	-	-	-	1560	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	13-Jun-2022	-	-	-	-	1520	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	11-Jul-2022	-	-	-	-	769	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	28-Aug-2022	-	-	-	-	996	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	11-Sep-2022	-	-	-	-	906	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	28-Oct-2022	-	-	-	-	580	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	13-Nov-2022	-	-	-	-	595	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	13-Dec-2022	-	-	-	-	799	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	26-Jan-2022	-	-	-	-	3600	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	26-Feb-2022	-	-	-	-	4350	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	5-May-2022	-	-	-	-	5370	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	18-May-2022	-	-	-	-	1410	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	2-Jun-2022	-	-	-	-	1470	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	11-Jul-2022	-	-	-	-	2770	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	28-Aug-2022	-	-	-	-	924	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	11-Sep-2022	-	-	-	-	933	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	28-Oct-2022	-	-	-	-	1570	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	20-Nov-2022	-	-	-	-	492	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	13-Dec-2022	-	-	-	-	2530	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03 DUP	18-May-2022	-	-	-	-	1680	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-04	1-Apr-2022	-	-	-	-	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-05	1-Apr-2022	-	-	-	-	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-06	5-Jun-2022	-	-	-	-	430	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-07	1-Apr-2022	-	-	-	-	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-08	31-Mar-2022	-	-	-	-	190	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-08	25-May-2022	-	-	-	-	182	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-08	5-Dec-2022	-	-	-	-	122	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-13	25-May-2022	-	-	-	-	387	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06D	26-Feb-2022	-	-	-	-	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06D	18-May-2022	-	-	-	-	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06D	16-Jun-2022	-	-	-	-	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06D	7-Jul-2022	-	-	-	-	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06D	24-Aug-2022	-	-	-	-	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06D	31-Oct-2022	-	-	-	-	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06D	15-Nov-2022	-	-	-	-	71	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06D	8-Dec-2022	-	-	-	-	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06S	26-Feb-2022	-	-	-	-	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06S	20-Jun-2022	-	-	-	-	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06S	8-Jul-2022	-	-	-	-	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06S	10-Jul-2022	-	-	-	-	79	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06S	25-Aug-2022	-	-	-	-	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06S	26-Oct-2022	-	-	-	-	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06S	15-Nov-2022	-	-	-	-	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Station (Monitoring Plan)	Date	Be-t	Bi-t	Cd-t	Ca-t	Cr-t	Co-t	Cu-t	Fe-t	P-t	Li-t	Mg-t	Mn-t	Mo-t	Ni-t	Pb-t	K-t	Se-t	Sn-t	Si-t	Ag-t	Na-t	Sr-t
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW16-04	7-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-05	25-Feb-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-05	24-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-05	26-Apr-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-05	18-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-05	22-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16-05	8-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	26-Feb-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	28-Apr-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	18-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	13-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	11-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	28-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	11-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	28-Oct-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	13-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-02D	13-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	26-Feb-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	5-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	18-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	2-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	11-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	28-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	11-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	28-Oct-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	20-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03	13-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-03 DUP	18-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-04	1-Apr-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-05	1-Apr-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-06	5-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-07	1-Apr-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-08	31-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-08	25-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-08	5-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW17-13	25-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06D	26-Feb-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06D	18-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06D	16-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06D	7-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06D	24-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06D	31-Oct-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06D	15-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06D	8-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06S	26-Feb-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06S	20-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06S	8-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06S	10-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06S	25-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06S	26-Oct-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-06S	15-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Station (Monitoring Plan)	Date	Te-t	Tl-t	Th-t	Ti-t	W-t	U-t	V-t	Zn-t	Zr-t	Hg-t	Al-d	S-d	As-d	B-d	Be-d	Bi-d	Ba-d	Cd-d	Ca-d	Cr-d	Co-d	Cu-d	Fe-d
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW16-04	7-Jul-2022	-	-	-	-	-	-	-	-	-	-	1.4	33	<0.000014	0.004	0.00008	<0.000001	0.01	0.01	26	0.0003	0.003	0.5	0.003
MW16-05	25-Feb-2022	-	-	-	-	-	-	-	-	-	-	0.04	19	<0.000001	0.004	<0.0000003	<0.0000004	0.02	0.003	23	0.0002	0.00007	0.02	0.009
MW16-05	24-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.02	31	<0.000014	0.005	<0.000002	<0.000001	0.02	0.004	49	0.0002	0.00005	0.01	0.03
MW16-05	26-Apr-2022	-	-	-	-	-	-	-	-	-	-	0.009	22	<0.000014	0.004	<0.000002	<0.000001	0.02	0.003	31	0.0001	0.00006	0.006	0.02
MW16-05	18-May-2022	-	-	-	-	-	-	-	-	-	-	0.08	20	<0.000014	0.004	<0.000002	<0.000001	0.02	0.003	31	0.0002	0.0001	0.03	0.04
MW16-05	22-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.03	17	<0.000014	0.004	<0.000002	<0.000001	0.02	0.003	27	0.0002	0.00006	0.01	0.02
MW16-05	8-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.02	15	<0.000014	0.003	<0.000002	<0.000001	0.02	0.002	23	0.0002	0.00004	0.01	0.02
MW17-02D	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	15	367	0.001	0.02	0.001	<0.0000004	0.04	0.07	234	0.0002	0.07	1.8	18
MW17-02D	26-Feb-2022	-	-	-	-	-	-	-	-	-	-	16	367	0.001	0.02	0.001	<0.0000004	0.03	0.07	212	0.0003	0.08	1.9	25
MW17-02D	28-Apr-2022	-	-	-	-	-	-	-	-	-	-	16	331	0.001	<0.011	0.001	<0.00001	0.02	0.06	212	<0.0002	0.07	1.7	36
MW17-02D	18-May-2022	-	-	-	-	-	-	-	-	-	-	18	363	<0.00028	<0.011	0.001	<0.00001	0.02	0.07	231	<0.0002	0.07	1.8	41
MW17-02D	13-Jun-2022	-	-	-	-	-	-	-	-	-	-	13	305	<0.000224	0.01	0.001	<0.000001	0.02	0.05	202	0.0002	0.05	1.5	26
MW17-02D	11-Jul-2022	-	-	-	-	-	-	-	-	-	-	10	265	<0.000168	0.01	0.0008	<0.000001	0.02	0.05	178	0.0002	0.04	1.2	19
MW17-02D	28-Aug-2022	-	-	-	-	-	-	-	-	-	-	11	258	<0.00014	0.01	0.0008	<0.000001	0.02	0.04	160	0.0003	0.04	1.1	20
MW17-02D	11-Sep-2022	-	-	-	-	-	-	-	-	-	-	11	243	<0.000182	0.01	0.0008	<0.000001	0.01	0.04	156	0.0002	0.04	1.0	21
MW17-02D	28-Oct-2022	-	-	-	-	-	-	-	-	-	-	8.9	199	<0.00014	0.01	0.0008	<0.000001	0.01	0.03	131	0.0003	0.03	0.9	17
MW17-02D	13-Nov-2022	-	-	-	-	-	-	-	-	-	-	5.2	158	<0.000056	0.01	0.0005	<0.000001	0.01	0.02	114	0.0004	0.02	0.7	9.3
MW17-02D	13-Dec-2022	-	-	-	-	-	-	-	-	-	-	12	215	0.0005	0.02	0.0009	<0.000001	0.01	0.03	125	0.0003	0.04	1.1	24
MW17-03	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	32	599	0.002	0.02	0.001	<0.0000004	0.02	0.2	340	0.002	0.1	4.5	69
MW17-03	26-Feb-2022	-	-	-	-	-	-	-	-	-	-	29	567	0.002	0.02	0.001	<0.0000004	0.02	0.2	3.5	0.001	0.1	4.5	39
MW17-03	5-May-2022	-	-	-	-	-	-	-	-	-	-	23	444	0.001	<0.011	0.001	<0.00001	0.02	0.1	294	0.001	0.10	3.7	5.1
MW17-03	18-May-2022	-	-	-	-	-	-	-	-	-	-	24	424	<0.00056	<0.011	0.001	<0.00001	0.02	0.1	276	0.002	0.09	3.4	13
MW17-03	2-Jun-2022	-	-	-	-	-	-	-	-	-	-	24	501	<0.00035	0.02	0.001	<0.000001	0.02	0.1	294	0.002	0.09	3.6	30
MW17-03	11-Jul-2022	-	-	-	-	-	-	-	-	-	-	18	411	<0.00021	0.02	0.0009	<0.000001	0.01	0.10	243	0.0008	0.07	2.7	19
MW17-03	28-Aug-2022	-	-	-	-	-	-	-	-	-	-	9.9	271	<0.000112	0.01	0.0006	<0.000001	0.01	0.06	186	0.0003	0.04	1.7	1.4
MW17-03	11-Sep-2022	-	-	-	-	-	-	-	-	-	-	7.4	238	<0.000112	0.01	0.0005	<0.000001	0.009	0.05	171	0.0005	0.03	1.4	0.5
MW17-03	28-Oct-2022	-	-	-	-	-	-	-	-	-	-	4.6	160	<0.000056	0.01	0.0004	<0.000001	0.01	0.03	119	0.0003	0.02	0.8	0.6
MW17-03	20-Nov-2022	-	-	-	-	-	-	-	-	-	-	4.7	173	<0.00007	0.01	0.0004	0.00001	0.010	0.04	132	0.0004	0.02	1.0	0.4
MW17-03	13-Dec-2022	-	-	-	-	-	-	-	-	-	-	9.3	216	0.0003	0.01	0.0005	<0.000001	0.009	0.05	137	0.001	0.03	1.3	5.8
MW17-03 DUP	18-May-2022	-	-	-	-	-	-	-	-	-	-	23	428	<0.00042	<0.011	0.001	<0.00001	0.02	0.1	279	0.001	0.09	3.5	11
MW17-04	1-Apr-2022	-	-	-	-	-	-	-	-	-	-	0.005	19	0.0002	0.006	<0.000002	<0.000001	0.01	0.00009	28	0.0001	0.000006	0.002	<0.0007
MW17-05	1-Apr-2022	-	-	-	-	-	-	-	-	-	-	0.003	9.7	0.00006	0.005	<0.000002	<0.000001	0.02	0.0002	28	0.0003	0.000008	0.002	<0.0007
MW17-06	5-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.3	147	<0.000014	0.009	0.00002	<0.000001	0.02	0.02	116	0.0003	0.0005	0.06	0.01
MW17-07	1-Apr-2022	-	-	-	-	-	-	-	-	-	-	0.004	20	0.00008	0.004	<0.000002	<0.000001	0.01	0.0008	32	0.0002	0.000008	0.004	<0.0007
MW17-08	31-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.006	69	0.001	0.007	<0.000002	<0.000001	0.07	0.0001	71	0.0001	0.002	0.002	2.3
MW17-08	25-May-2022	-	-	-	-	-	-	-	-	-	-	0.007	62	0.001	0.006	<0.000002	<0.000001	0.07	0.00008	72	0.0002	0.003	0.0004	2.3
MW17-08	5-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.01	41	0.001	0.007	<0.000002	<0.000001	0.05	0.0001	56	0.0002	0.001	0.0004	2.5
MW17-13	25-May-2022	-	-	-	-	-	-	-	-	-	-	5.1	109	0.0002	0.005	0.0005	<0.000001	0.05	0.08	78	0.0003	0.01	6.4	0.004
MW18-06D	26-Feb-2022	-	-	-	-	-	-	-	-	-	-	0.02	19	<0.000001	0.004	<0.0000003	<0.0000004	0.01	0.001	23	0.0004	0.00004	0.02	<0.0008
MW18-06D	18-May-2022	-	-	-	-	-	-	-	-	-	-	0.03	17	<0.000014	0.004	0.00001	<0.000001	0.01	0.001	25	0.0003	0.00004	0.02	0.03
MW18-06D	16-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.010	14	<0.000014	0.004	<0.000002	<0.000001	0.01	0.001	23	0.0004	0.00002	0.01	0.006
MW18-06D	7-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.010	15	<0.000014	0.004	<0.000002	<0.000001	0.01	0.001	26	0.0003	0.00002	0.01	0.002
MW18-06D	24-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.02	22	<0.00003	<0.0008	<0.000002	<0.000002	0.02	0.002	28	<0.00004	<0.000002	0.03	<0.0008
MW18-06D	31-Oct-2022	-	-	-	-	-	-	-	-	-	-	0.04	25	<0.000014	0.006	0.00003	<0.000001	0.02	0.003	29	0.0005	0.00007	0.04	0.005
MW18-06D	15-Nov-2022	-	-	-	-	-	-	-	-	-	-	0.04	23	<0.000014	0.005	0.00003	<0.000001	0.02	0.002	26	0.0004	0.00007	0.04	0.003
MW18-06D	8-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.04	23	<0.000014	0.006	0.00002	<0.000001	0.01	0.002	27	0.0003	0.00004	0.04	<0.0007
MW18-06S	26-Feb-2022	-	-	-	-	-	-	-	-	-	-	0.2	33	<0.000001	0.006	0.00005	<0.0000004	0.01	0.005	25	0.0001	0.003	0.10	<0.0008
MW18-06S	20-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.1	26	<0.000014	0.006	0.00005	<0.000001	0.01	0.004	25	0.0001	0.002	0.09	0.003
MW18-06S	8-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.1	27	<0.000014	0.005	0.00005	<0.000001	0.01	0.004	26	0.0001	0.002	0.09	<0.0007
MW18-06S	10-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.10	27	<0.000014	0.005	0.00004	<0.000001	0.02	0.003	24	<0.00002	0.002	0.08	0.003
MW18-06S	25-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.1	28	<0.00003	<0.0008	<0.000002	<0.000002	0.02	0.004	28	<0.00004	0.002	0.08	<0.0008
MW18-06S	26-Oct-2022	-	-	-	-	-	-	-	-	-	-	0.07	21	<0.000014	0.006	0.00004	<0.000001	0.01	0.003	24	0.0004	0.0002	0.05	<0.0007
MW18-06S	15-Nov-2022	-	-	-	-	-	-	-	-	-	-	0.1	29	<0.000014	0.006	0.00007	<0.000001	0.02	0.004	27	0.0001	0.002	0.09	0.003

Station (Monitoring Plan)	Date	P-d	Li-d	Mg-d	Mn-d	Mo-d	Ni-d	Pb-d	K-d	Sb-t	Se-d	Si-d	Sr-d	Sn-d	Ag-d	Na-d	Sb-d	Te-d	Tl-d	Th-d	Ti-d	W-d	U-d
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW16-04	7-Jul-2022	<0.007	0.001	5.6	0.2	<0.000007	0.007	0.0008	0.4	-	0.0001	7.6	0.06	<0.000014	<0.000004	1.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00002
MW16-05	25-Feb-2022	<0.004	0.00008	3.4	0.04	0.00004	0.002	0.0001	0.4	-	0.0002	5.4	0.05	<0.000003	<0.0000005	2.1	0.0001	<0.000006	<0.00000009	<0.0000003	<0.00002	<0.00001	0.000003
MW16-05	24-Mar-2022	<0.007	0.00009	3.3	0.1	0.00009	0.002	0.0002	0.4	-	0.0001	4.3	0.08	<0.000014	<0.000004	2.7	0.0002	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000003
MW16-05	26-Apr-2022	<0.007	0.00008	3.2	0.1	0.00006	0.002	0.0001	0.4	-	0.0001	4.4	0.06	<0.000014	<0.000004	2.2	0.0002	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000002
MW16-05	18-May-2022	<0.007	0.00009	3.1	0.1	0.00001	0.002	0.0001	0.3	-	0.0001	4.8	0.06	<0.000014	<0.000004	1.8	0.0001	<0.000034	<0.0000026	<0.000002	0.0005	<0.00001	<0.0000007
MW16-05	22-Jun-2022	<0.007	0.00008	2.9	0.07	<0.000007	0.002	0.00008	0.4	-	0.0002	4.1	0.05	<0.000014	<0.000004	1.8	0.0001	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000003
MW16-05	8-Jul-2022	<0.007	<0.000007	2.7	0.08	0.00003	0.001	0.00009	0.3	-	0.0002	4.4	0.05	<0.000014	<0.000004	1.7	0.0001	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	<0.0000007
MW17-02D	26-Jan-2022	<0.004	0.0010	65	9.5	<0.000005	0.08	0.0006	1.4	-	0.0005	15	0.6	0.0002	<0.0000005	7.4	<0.000003	<0.000006	0.00001	<0.0000003	<0.00002	<0.00001	0.0002
MW17-02D	26-Feb-2022	<0.004	0.001	70	0.1	<0.000005	0.09	0.0005	1.4	-	0.0006	14	0.5	0.00008	<0.0000005	8.1	<0.000003	<0.000006	0.00001	0.00001	<0.00002	<0.00001	0.0002
MW17-02D	28-Apr-2022	<0.07	0.001	67	9.8	0.0001	0.09	0.001	1.3	-	<0.0002	12	0.5	<0.00014	<0.00004	7.7	<0.00019	<0.00034	<0.000026	<0.00002	<0.0009	<0.0001	0.0002
MW17-02D	18-May-2022	<0.07	0.001	68	10	0.0001	0.1	0.001	1.4	-	<0.0002	12	0.5	<0.00014	<0.00004	8.0	<0.00019	<0.00034	<0.000026	<0.00002	<0.0009	<0.0001	0.0002
MW17-02D	13-Jun-2022	<0.007	0.001	54	7.7	<0.000007	0.07	0.0006	1.2	-	0.0003	12	0.4	<0.000014	<0.000004	7.4	<0.000019	<0.000034	0.000009	<0.000002	<0.00009	<0.00001	0.0001
MW17-02D	11-Jul-2022	<0.007	0.001	48	6.4	<0.000007	0.06	0.0004	1.2	-	0.0002	11	0.4	<0.000014	<0.000004	8.0	<0.000019	<0.000034	0.000009	<0.000002	<0.00009	<0.00001	0.0001
MW17-02D	28-Aug-2022	<0.007	0.001	42	5.8	<0.000007	0.06	0.0005	1.0	-	0.0002	11	0.4	<0.000014	<0.000004	6.8	<0.000019	<0.000034	0.000010	<0.000002	<0.00009	<0.00001	0.0001
MW17-02D	11-Sep-2022	<0.007	0.001	39	5.6	<0.000007	0.05	0.0003	1.0	-	0.0002	10	0.3	<0.000014	<0.000004	6.3	<0.000019	<0.000034	0.000009	<0.000002	<0.00009	<0.00001	0.0001
MW17-02D	28-Oct-2022	<0.007	0.001	33	4.3	<0.000007	0.04	0.0003	1.1	-	0.0001	11	0.3	<0.000014	<0.000004	5.6	<0.000019	<0.000034	0.00001	<0.000002	<0.00009	<0.00001	0.0001
MW17-02D	13-Nov-2022	<0.007	0.001	28	3.4	<0.000007	0.03	0.0004	0.9	-	<0.00006	10	0.3	0.00006	<0.000004	5.4	<0.000019	<0.000034	0.000006	<0.000002	<0.00009	<0.00001	0.00007
MW17-02D	13-Dec-2022	<0.007	0.001	41	5.8	<0.000007	0.05	0.0003	1.1	-	0.0002	12	0.3	<0.000014	<0.000004	6.2	<0.000019	<0.000034	0.00001	0.00001	<0.00009	<0.00001	0.0001
MW17-03	26-Jan-2022	<0.004	0.003	109	17	<0.000005	0.1	0.003	1.3	-	0.0006	19	0.9	<0.000003	<0.0000005	7.2	<0.000003	<0.000006	0.00005	0.00006	0.001	<0.00001	0.0007
MW17-03	26-Feb-2022	<0.004	0.003	111	0.2	<0.000005	0.1	0.002	1.4	-	0.0009	19	0.8	<0.000003	0.00001	8.1	<0.000003	<0.000006	0.00003	0.00004	0.0005	<0.00001	0.0006
MW17-03	5-May-2022	<0.07	0.001	93	13	0.0001	0.10	0.004	1.0	-	<0.0002	16	0.6	<0.00014	<0.00004	7.9	<0.00019	<0.00034	<0.000026	<0.00002	0.004	<0.0001	0.0003
MW17-03	18-May-2022	<0.07	0.002	88	12	0.0002	0.09	0.01	1.0	-	<0.0002	16	0.6	<0.00014	<0.00004	7.4	<0.00019	<0.00034	<0.000026	<0.00002	0.02	<0.0001	0.0004
MW17-03	2-Jun-2022	<0.007	0.002	90	13	0.00002	0.1	0.006	1.1	-	<0.0001	17	0.6	<0.000014	<0.000004	8.0	<0.000019	<0.000034	0.00003	0.00006	0.0010	<0.00001	0.0005
MW17-03	11-Jul-2022	<0.007	0.002	72	9.5	<0.000007	0.08	0.002	1.0	-	0.0002	17	0.5	<0.000014	0.00001	7.9	<0.000019	<0.000034	0.00002	0.00003	0.0007	<0.00001	0.0003
MW17-03	28-Aug-2022	<0.007	0.0008	48	6.1	<0.000007	0.05	0.002	0.8	-	0.0002	13	0.4	<0.000014	0.00001	6.4	<0.000019	<0.000034	0.00001	0.00001	0.0003	<0.00001	0.0001
MW17-03	11-Sep-2022	<0.007	0.0007	41	5.1	0.00001	0.04	0.002	0.7	-	0.0001	11	0.4	0.00006	<0.000004	5.9	<0.000019	<0.000034	0.00001	<0.000002	0.0003	<0.00001	0.00009
MW17-03	28-Oct-2022	<0.007	0.0008	28	2.9	<0.000007	0.02	0.003	0.7	-	<0.00002	10	0.2	<0.000014	<0.000004	4.9	<0.000019	<0.000034	0.00001	<0.000002	0.0003	<0.00001	0.00008
MW17-03	20-Nov-2022	<0.007	0.0006	31	3.6	0.00006	0.03	0.001	0.7	-	0.0001	11	0.3	<0.000014	<0.000004	5.3	<0.000019	<0.000034	0.000006	<0.000002	<0.00009	<0.00001	0.00008
MW17-03	13-Dec-2022	<0.007	0.002	39	4.1	<0.000007	0.04	0.002	0.7	-	0.0002	14	0.3	<0.000014	0.00001	6.1	<0.000019	<0.000034	0.00001	0.00004	0.0007	<0.00001	0.0003
MW17-03 DUP	18-May-2022	<0.07	0.002	87	12	0.0003	0.09	0.007	1.0	-	<0.0002	16	0.6	<0.00014	0.0001	7.5	<0.00019	<0.00034	<0.000026	<0.00002	0.009	<0.0001	0.0004
MW17-04	1-Apr-2022	<0.007	0.00005	2.3	0.0001	0.0008	0.00004	0.00010	0.7	-	0.0005	1.8	0.08	<0.000014	<0.000004	2.1	0.00007	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
MW17-05	1-Apr-2022	<0.007	<0.000007	2.3	0.0002	0.0006	0.0002	0.0001	0.4	-	0.0004	2.5	0.06	<0.000014	<0.000004	1.2	0.00009	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
MW17-06	5-Jun-2022	<0.007	0.0002	30	0.3	0.00001	0.03	0.0004	1.1	-	0.0002	8.3	0.2	<0.000014	<0.000004	4.4	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00003
MW17-07	1-Apr-2022	<0.007	<0.000007	4.0	0.0007	0.0005	0.0007	0.0001	0.4	-	0.0003	2.7	0.07	<0.000014	<0.000004	1.6	0.00008	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00002
MW17-08	31-Mar-2022	<0.007	<0.000007	7.4	1.0	0.0001	0.0003	0.0001	0.6	-	<0.00002	2.9	0.1	<0.000014	<0.000004	3.4	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
MW17-08	25-May-2022	<0.007	<0.000007	7.4	1.1	0.0001	0.0004	<0.000024	0.6	-	<0.00002	2.7	0.2	<0.000014	<0.000004	3.6	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
MW17-08	5-Dec-2022	<0.007	<0.000007	5.3	1.0	0.0001	0.0003	<0.000024	0.5	-	<0.00002	2.9	0.1	<0.000014	<0.000004	2.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
MW17-13	25-May-2022	<0.007	0.002	16	2.3	<0.000007	0.03	1.3	0.3	-	0.0002	9.1	0.1	<0.000014	0.00002	3.2	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.0003
MW18-06D	26-Feb-2022	<0.004	<0.000001	4.0	0.005	<0.000005	0.002	<0.000003	0.4	-	0.0004	4.9	0.06	<0.000003	<0.0000005	1.5	0.00008	<0.000006	<0.00000009	<0.0000003	<0.00002	<0.00001	0.000002
MW18-06D	18-May-2022	<0.007	<0.000007	3.2	0.004	<0.000007	0.002	0.0002	0.4	-	0.0003	4.5	0.06	<0.000014	<0.000004	1.1	<0.000019	<0.000034	<0.0000026	<0.000002	0.0004	<0.00001	0.000002
MW18-06D	16-Jun-2022	<0.007	<0.000007	2.9	0.001	<0.000007	0.001	0.0002	0.4	-	0.0003	3.5	0.05	<0.000014	<0.000004	1.2	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000003
MW18-06D	7-Jul-2022	<0.007	<0.000007	2.9	0.002	<0.000007	0.002	0.00008	0.4	-	0.0003	3.9	0.06	<0.000014	<0.000004	1.2	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000001
MW18-06D	24-Aug-2022	<0.008	<0.000008	3.8	0.01	<0.00001	0.003	<0.00001	0.5	-	<0.00003	5.5	0.08	<0.00002	<0.000007	1.3	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	<0.000001
MW18-06D	31-Oct-2022	<0.007	0.00005	3.9	0.01	0.00002	0.003	0.0001	0.6	-	0.0002	5.9	0.08	<0.000014	<0.000004	1.4	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000006
MW18-06D	15-Nov-2022	<0.007	<0.000007	3.8	0.01	<0.000007	0.003	0.0002	0.5	-	0.0002	5.5	0.07	<0.000014	<0.000004	1.3	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000002
MW18-06D	8-Dec-2022	<0.007	<0.000007	3.6	0.009	<0.000007	0.003	0.00006	0.5	-	0.0003	5.3	0.08	<0.000014	<0.000004	1.3	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000005
MW18-06S	26-Feb-2022	<0.004	0.0001	5.2	0.4	0.00001	0.005	0.0001	0.7	-	0.0003	7.6	0.09	0.00007	<0.0000005	1.7	<0.000003	<0.000006	<0.00000009	<0.0000003	<0.00002	<0.00001	0.000006
MW18-06S	20-Jun-2022	<0.007	0.00010	4.0	0.3	<0.000007	0.005	0.0002	0.6	-	0.0002	5.5	0.08	<0.000014	<0.000004	1.4	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000005
MW18-06S	8-Jul-2022	<0.007	0.00009	4.1	0.3	<0.000007	0.005	0.0002	0.6	-	0.0002	6.1	0.08	<0.000014	<0.000004	1.5	<0.000019	<0.000034	0.000006	<0.000002	<0.00009	<0.00001	0.000004
MW18-06S	10-Jul-2022	<0.007	0.00007	4.1	0.3	<0.000007	0.004	0.0002	0.6	-	0.0002	6.0	0.08	<0.000014	<0.000004	1.5	<0.000019	<0.000034	0.000004	<0.000002	<0.00009	<0.00001	0.000004
MW18-06S	25-Aug-2022	<0.008	<0.000008	4.2	0.2	<0.00001	0.004	0.0004	0.5	-	<0.00003	6.3	0.09	<0.00002	<0.000007	1.4	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	<0.000001
MW18-06S	26-Oct-2022	<0.007	<0.000007	3.4	0.01	<0.000007	0.003	0.0002	0.5	-	0.0002	6.6	0.07	<0.000014	<0.000004	1.8	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000004
MW18-06S	15-Nov-2022	<0.007	0.00008	4.6	0.3	<0.000007	0.005	0.0002	0.6	-	0.0002	6.8	0.09	<0.000014	<0.000004	1.5	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000004

Station (Monitoring Plan)	Date	V-d	Zn-d	Zr-d	Hg-d	Silica Reactive	Radium 226	Chlorophyll a	BOD5
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW16-04	7-Jul-2022	<0.00002	3.1	<0.000003	-	-	-	-	-
MW16-05	25-Feb-2022	<0.0000007	1.0	<0.000004	-	-	-	-	-
MW16-05	24-Mar-2022	<0.00002	1.2	<0.000003	-	-	-	-	-
MW16-05	26-Apr-2022	<0.00002	1.1	<0.000003	-	-	-	-	-
MW16-05	18-May-2022	<0.00002	1.0	<0.000003	-	-	-	-	-
MW16-05	22-Jun-2022	<0.00002	1.1	<0.000003	-	-	-	-	-
MW16-05	8-Jul-2022	<0.00002	0.9	<0.000003	-	-	-	-	-
MW17-02D	26-Jan-2022	<0.0000007	29	0.00003	-	-	-	-	-
MW17-02D	26-Feb-2022	<0.0000007	0.3	0.00004	-	-	-	-	-
MW17-02D	28-Apr-2022	<0.0002	32	<0.00003	-	-	-	-	-
MW17-02D	18-May-2022	<0.0002	35	<0.00003	-	-	-	-	-
MW17-02D	13-Jun-2022	<0.00002	27	<0.000003	-	-	-	-	-
MW17-02D	11-Jul-2022	<0.00002	23	0.00002	-	-	-	-	-
MW17-02D	28-Aug-2022	<0.00002	20	<0.000003	-	-	-	-	-
MW17-02D	11-Sep-2022	<0.00002	20	<0.000003	-	-	-	-	-
MW17-02D	28-Oct-2022	<0.00002	16	<0.000003	-	-	-	-	-
MW17-02D	13-Nov-2022	<0.00002	13	<0.000003	-	-	-	-	-
MW17-02D	13-Dec-2022	<0.00002	20	<0.000003	-	-	-	-	-
MW17-03	26-Jan-2022	0.0009	58	0.00010	-	-	-	-	-
MW17-03	26-Feb-2022	<0.0000007	0.6	0.00008	-	-	-	-	-
MW17-03	5-May-2022	<0.0002	44	0.0003	-	-	-	-	-
MW17-03	18-May-2022	<0.0002	40	<0.00003	-	-	-	-	-
MW17-03	2-Jun-2022	<0.00002	45	0.00007	-	-	-	-	-
MW17-03	11-Jul-2022	<0.00002	33	0.00004	-	-	-	-	-
MW17-03	28-Aug-2022	<0.00002	21	0.00002	-	-	-	-	-
MW17-03	11-Sep-2022	<0.00002	18	<0.000003	-	-	-	-	-
MW17-03	28-Oct-2022	<0.00002	11	<0.000003	-	-	-	-	-
MW17-03	20-Nov-2022	<0.00002	13	<0.000003	-	-	-	-	-
MW17-03	13-Dec-2022	<0.00002	15	<0.000003	-	-	-	-	-
MW17-03 DUP	18-May-2022	<0.0002	42	<0.00003	-	-	-	-	-
MW17-04	1-Apr-2022	<0.00002	0.06	<0.000003	-	-	-	-	-
MW17-05	1-Apr-2022	<0.00002	0.1	<0.000003	-	-	-	-	-
MW17-06	5-Jun-2022	<0.00002	15	<0.000003	-	-	-	-	-
MW17-07	1-Apr-2022	<0.00002	0.5	<0.000003	-	-	-	-	-
MW17-08	31-Mar-2022	<0.00002	0.3	<0.000003	-	-	-	-	-
MW17-08	25-May-2022	<0.00002	0.4	<0.000003	-	-	-	-	-
MW17-08	5-Dec-2022	<0.00002	0.2	<0.000003	-	-	-	-	-
MW17-13	25-May-2022	<0.00002	22	<0.000003	-	-	-	-	-
MW18-06D	26-Feb-2022	<0.0000007	0.5	<0.000004	-	-	-	-	-
MW18-06D	18-May-2022	<0.00002	0.5	<0.000003	-	-	-	-	-
MW18-06D	16-Jun-2022	<0.00002	0.4	<0.000003	-	-	-	-	-
MW18-06D	7-Jul-2022	<0.00002	0.4	<0.000003	-	-	-	-	-
MW18-06D	24-Aug-2022	<0.00005	0.8	<0.000006	-	-	-	-	-
MW18-06D	31-Oct-2022	<0.00002	1.0	<0.000003	-	-	-	-	-
MW18-06D	15-Nov-2022	<0.00002	0.8	<0.000003	-	-	-	-	-
MW18-06D	8-Dec-2022	<0.00002	0.9	<0.000003	-	-	-	-	-
MW18-06S	26-Feb-2022	<0.0000007	1.3	<0.000004	-	-	-	-	-
MW18-06S	20-Jun-2022	<0.00002	1.1	<0.000003	-	-	-	-	-
MW18-06S	8-Jul-2022	<0.00002	1.2	<0.000003	-	-	-	-	-
MW18-06S	10-Jul-2022	<0.00002	1.1	<0.000003	-	-	-	-	-
MW18-06S	25-Aug-2022	<0.00005	1.2	<0.000006	-	-	-	-	-
MW18-06S	26-Oct-2022	<0.00002	1.5	<0.000003	-	-	-	-	-
MW18-06S	15-Nov-2022	<0.00002	1.3	<0.000003	-	-	-	-	-

Work Order	Lab ID	Re-anaysis	Field QAQC	Station (Lab Report)	Station (Monitoring Plan)	Date	pH	Conductivity	Hardness, Total (as $CaCO_3$)	Hardness, Dissolved (as $CaCO_3$)	Turbidity	Total Suspended Solids	Acidity, pH 8.3 (as $CaCO_3$)	Alkalinity, Total pH 4.5 (as $CaCO_3$)	Alkalinity, Total pH 8.3 (as $CaCO_3$)	Alkalinity, Bicarbonate (as $CaCO_3$)
							pH Unit	uS/cm	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L	mg/L
22L1064	8	No	Regular	MW1806S-M	MW18-06S	8-Dec-2022	5.8	208	87	-	-	-	-	-	4.1	4.1
22C0739	9	No	Regular	MW18-07D	MW18-07D	26-Feb-2022	6.7	115	46	-	-	-	-	-	31	31
22D0297	3	No	Regular	MW1807D-M	MW18-07D	25-Mar-2022	4.3	207	65	-	-	-	-	-	<0.6	-
22E2933	13	No	Regular	MW1807D-M	MW18-07D	18-May-2022	6.3	101	46	-	-	-	-	-	30	30
22F3475	8	No	Regular	MW1807D-M	MW18-07D	16-Jun-2022	7.0	100	46	-	-	-	-	-	32	32
22G2083	7	No	Regular	MW1807D-M	MW18-07D	7-Jul-2022	6.8	100	46	-	-	-	-	-	35	35
22H3943	3	No	Regular	MW1807D-M	MW18-07D	24-Aug-2022	6.5	104	46	-	-	-	-	-	27	27
22I2071	10	No	Regular	MW 1807D-M	MW18-07D	12-Sep-2022	6.5	109	47	-	-	-	-	-	24	24
22K0414	7	No	Regular	MW1807D-M	MW18-07D	26-Oct-2022	6.5	83	42	-	-	-	-	-	27	27
22K2148	9	No	Regular	MW1807D-M	MW18-07D	13-Nov-2022	5.9	129	50	-	-	-	-	-	7.4	7.4
22L1064	12	No	Regular	MW1807D-M	MW18-07D	7-Dec-2022	6.0	105	47	-	-	-	-	-	11	11
22H3943	4	No	Replicate	MW1807D-MR	MW18-07D DUP	24-Aug-2022	6.5	106	46	-	-	-	-	-	27	27
22D0297	4	No	Regular	MW1807S-M	MW18-07S	25-Mar-2022	7.0	409	201	-	-	-	-	-	99	99
22G2083	15	No	Regular	MW1808D-M	MW18-08D	10-Jul-2022	6.6	185	76	-	-	-	-	-	21	21
22I2071	4	No	Regular	MW 1808D-M	MW18-08D	12-Sep-2022	6.3	163	69	-	-	-	-	-	24	24
22K0414	8	No	Regular	MW1808D-M	MW18-08D	26-Oct-2022	6.3	152	69	-	-	-	-	-	17	17
22K2148	6	No	Regular	MW1808D-M	MW18-08D	13-Nov-2022	6.2	184	97	-	-	-	-	-	23	23
22L1064	13	No	Regular	MW1808D-M	MW18-08D	7-Dec-2022	6.2	149	72	-	-	-	-	-	19	19
22G2083	16	No	Replicate	MW1808D-MR	MW18-08D DUP	10-Jul-2022	6.6	184	77	-	-	-	-	-	21	21
22H3943	6	No	Replicate	MW1808D-MR	MW18-08D DUP	24-Aug-2022	6.3	169	71	-	-	-	-	-	21	21
22G2083	13	No	Regular	MW1808S-M	MW18-08S	10-Jul-2022	6.3	197	81	-	-	-	-	-	13	13
22K0414	9	No	Regular	MW1808S-M	MW18-08S	26-Oct-2022	6.1	165	94	-	-	-	-	-	10	10
22K2148	5	No	Regular	MW1808S-M	MW18-08S	13-Nov-2022	6.1	229	79	-	-	-	-	-	13	13
22L1064	4	No	Regular	MW1808S-M	MW18-08S	7-Dec-2022	6.1	207	86	-	-	-	-	-	12	12
22G2083	14	No	Replicate	MW1808S-MR	MW18-08S DUP	10-Jul-2022	6.4	199	81	-	-	-	-	-	12	12
22L1064	5	No	Replicate	MW1808S-MR	MW18-08S DUP	7-Dec-2022	6.1	206	87	-	-	-	-	-	10	10
22E3862	8	No	Regular	MW19-01D-Q	MW19-01D	25-May-2022	6.8	132	65	-	-	-	-	-	82	82
22L1724	10	No	Regular	MW1901D-Q	MW19-01D	12-Dec-2022	6.8	132	70	-	-	-	-	-	93	93
22E3862	9	No	Regular	MW19-01S-Q	MW19-01S	25-May-2022	6.7	135	66	-	-	-	-	-	84	84
22J0166	4	No	Regular	MW1901S-Q	MW19-01S	29-Sep-2022	7.2	126	68	-	-	-	-	-	83	83
22L1724	11	No	Regular	MW1901S-Q	MW19-01S	12-Dec-2022	6.8	121	65	-	-	-	-	-	92	92
22E3862	7	No	Regular	MW19-03D-Q	MW19-03D	25-May-2022	6.7	110	52	-	-	-	-	-	62	62
22L2457	8	No	Regular	MW 2105D-Q	MW21-05D	15-Dec-2022	6.7	74	36	-	-	-	-	-	49	49
22L2457	6	No	Regular	MW 2105S-Q	MW21-05S	15-Dec-2022	6.7	257	88	-	-	-	-	-	48	48
22F0325	1	No	Regular	MW 2106-D	MW21-06	31-May-2022	7.8	495	237	-	-	-	-	-	67	67
22J1090	1	No	Regular	MW2106D-Q	MW21-06D	29-Sep-2022	7.4	543	265	-	-	-	-	-	77	77
22L2457	10	No	Regular	MW2106D-Q	MW21-06D	18-Dec-2022	7.2	706	352	-	-	-	-	-	86	86
22B0748	12	No	Regular	MW21-06D (1)	MW21-06D (1)	26-Jan-2022	7.0	497	253	-	-	-	-	-	79	79
22B0748	13	No	Regular	MW21-06D (2)	MW21-06D (2)	26-Jan-2022	7.0	497	253	-	-	-	-	-	80	80
22B0748	14	No	Regular	MW21-06D (3)	MW21-06D (3)	26-Jan-2022	7.0	499	251	-	-	-	-	-	80	80
22F0325	2	No	Regular	MW 2106-S	MW21-06S	31-May-2022	7.1	609	289	-	-	-	-	-	64	64
22L2457	11	No	Regular	MW2106S-Q	MW21-06S	18-Dec-2022	6.6	762	371	-	-	-	-	-	40	40
22B0748	9	No	Regular	MW21-06S (1)	MW21-06S (1)	26-Jan-2022	7.5	543	262	-	-	-	-	-	58	58
22B0748	10	No	Regular	MW21-06S (2)	MW21-06S (2)	26-Jan-2022	6.7	547	274	-	-	-	-	-	70	70
22B0748	11	No	Regular	MW21-06S (3)	MW21-06S (3)	26-Jan-2022	6.7	549	276	-	-	-	-	-	70	70
22F3475	13	No	Regular	MW403D-SA	MW4-03D	20-Jun-2022	7.2	115	51	-	-	-	-	-	41	41
22K0414	11	No	Regular	PW1043-M	PW1043	28-Oct-2022	6.0	832	427	-	-	-	-	-	14	14
22L1064	15	No	Regular	PW1104-M	PW1104	7-Dec-2022	5.1	273	123	-	-	-	-	-	1.8	1.8
22I1308	3	No	Regular	PW1401-M	PW14-01	5-Sep-2022	6.3	662	318	-	-	-	-	-	33	33
22K0414	10	No	Regular	PW1401-M	PW14-01	28-Oct-2022	6.2	572	293	-	-	-	-	-	27	27
22L1064	14	No	Regular	PW1401-M	PW14-01	8-Dec-2022	6.0	615	318	-	-	-	-	-	31	31
22B1848	1	No	Regular	PW14-03	PW14-03	10-Feb-2022	5.6	1030	469	-	-	-	-	-	5.3	5.3

Station (Monitoring Plan)	Date	Alkalinity, Carbonate (as $CaCO_3$)	Alkalinity, Hydroxide (as $CaCO_3$)	Chloride	Fluoride	Sulphate	Total Nitrogen	Nitrate+ Nitrite	Nitrate (as N)	Nitrite (as N)	Ammonia (as N)	Total Phosphorus	Total Dissolved Phosphorus	TOC	DOC	Al-t	S-t	As-t	B-t	Ba-t
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW18-06S	8-Dec-2022	-	-	-	-	105	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	26-Feb-2022	-	-	-	-	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	25-Mar-2022	-	-	-	-	169	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	18-May-2022	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	16-Jun-2022	-	-	-	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	7-Jul-2022	-	-	-	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	24-Aug-2022	-	-	-	-	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	12-Sep-2022	-	-	-	-	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	26-Oct-2022	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	13-Nov-2022	-	-	-	-	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	7-Dec-2022	-	-	-	-	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D DUP	24-Aug-2022	-	-	-	-	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07S	25-Mar-2022	-	-	-	-	124	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08D	10-Jul-2022	-	-	-	-	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08D	12-Sep-2022	-	-	-	-	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08D	26-Oct-2022	-	-	-	-	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08D	13-Nov-2022	-	-	-	-	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08D	7-Dec-2022	-	-	-	-	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08D DUP	10-Jul-2022	-	-	-	-	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08D DUP	24-Aug-2022	-	-	-	-	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08S	10-Jul-2022	-	-	-	-	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08S	26-Oct-2022	-	-	-	-	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08S	13-Nov-2022	-	-	-	-	93	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08S	7-Dec-2022	-	-	-	-	79	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08S DUP	10-Jul-2022	-	-	-	-	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08S DUP	7-Dec-2022	-	-	-	-	82	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW19-01D	25-May-2022	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW19-01D	12-Dec-2022	-	-	-	-	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW19-01S	25-May-2022	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW19-01S	29-Sep-2022	-	-	-	-	4.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW19-01S	12-Dec-2022	-	-	-	-	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW19-03D	25-May-2022	-	-	-	-	8.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-05D	15-Dec-2022	-	-	-	-	3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-05S	15-Dec-2022	-	-	-	-	78	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06	31-May-2022	-	-	-	-	190	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06D	29-Sep-2022	-	-	-	-	229	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06D	18-Dec-2022	-	-	-	-	313	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06D (1)	26-Jan-2022	-	-	-	-	179	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06D (2)	26-Jan-2022	-	-	-	-	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06D (3)	26-Jan-2022	-	-	-	-	178	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06S	31-May-2022	-	-	-	-	255	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06S	18-Dec-2022	-	-	-	-	367	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06S (1)	26-Jan-2022	-	-	-	-	225	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06S (2)	26-Jan-2022	-	-	-	-	208	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06S (3)	26-Jan-2022	-	-	-	-	211	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4-03D	20-Jun-2022	-	-	-	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW1043	28-Oct-2022	-	-	-	-	463	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW1104	7-Dec-2022	-	-	-	-	134	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-01	5-Sep-2022	-	-	-	-	340	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-01	28-Oct-2022	-	-	-	-	285	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-01	8-Dec-2022	-	-	-	-	306	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-03	10-Feb-2022	-	-	-	-	475	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Station (Monitoring Plan)	Date	Be-t	Bi-t	Cd-t	Ca-t	Cr-t	Co-t	Cu-t	Fe-t	P-t	Li-t	Mg-t	Mn-t	Mo-t	Ni-t	Pb-t	K-t	Se-t	Sn-t	Si-t	Ag-t	Na-t	Sr-t
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW18-06S	8-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	26-Feb-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	25-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	18-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	16-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	7-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	24-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	12-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	26-Oct-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	13-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D	7-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07D DUP	24-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-07S	25-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08D	10-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08D	12-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08D	26-Oct-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08D	13-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08D	7-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08D DUP	10-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08D DUP	24-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08S	10-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08S	26-Oct-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08S	13-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08S	7-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08S DUP	10-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW18-08S DUP	7-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW19-01D	25-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW19-01D	12-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW19-01S	25-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW19-01S	29-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW19-01S	12-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW19-03D	25-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-05D	15-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-05S	15-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06	31-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06D	29-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06D	18-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06D (1)	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06D (2)	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06D (3)	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06S	31-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06S	18-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06S (1)	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06S (2)	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW21-06S (3)	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4-03D	20-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW1043	28-Oct-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW1104	7-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-01	5-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-01	28-Oct-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-01	8-Dec-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-03	10-Feb-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Station (Monitoring Plan)	Date	Te-t	Tl-t	Th-t	Ti-t	W-t	U-t	V-t	Zn-t	Zr-t	Hg-t	Al-d	S-d	As-d	B-d	Be-d	Bi-d	Ba-d	Cd-d	Ca-d	Cr-d	Co-d	Cu-d	Fe-d
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW18-06S	8-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.1	28	<0.000014	0.007	0.00005	<0.000001	0.02	0.004	28	0.0002	0.002	0.09	0.005
MW18-07D	26-Feb-2022	-	-	-	-	-	-	-	-	-	-	0.9	9.4	<0.000001	0.002	0.00007	<0.0000004	0.009	0.005	15	0.0003	0.002	0.1	0.004
MW18-07D	25-Mar-2022	-	-	-	-	-	-	-	-	-	-	7.0	32	0.0001	0.003	0.0004	<0.000001	0.02	0.02	21	0.0005	0.007	0.9	0.008
MW18-07D	18-May-2022	-	-	-	-	-	-	-	-	-	-	0.06	6.1	<0.000014	<0.0011	0.00001	<0.000001	0.006	0.0009	16	0.0002	0.0002	0.02	0.006
MW18-07D	16-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.1	5.0	<0.000014	0.002	0.00002	<0.000001	0.007	0.002	16	0.0002	0.0007	0.05	<0.0007
MW18-07D	7-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.4	7.5	<0.000014	<0.0011	0.00003	<0.000001	0.009	0.002	16	0.0003	0.0008	0.08	<0.0007
MW18-07D	24-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.4	8.4	<0.00003	<0.0008	<0.000002	<0.000002	0.008	0.002	16	<0.00004	0.0007	0.08	<0.0008
MW18-07D	12-Sep-2022	-	-	-	-	-	-	-	-	-	-	0.4	9.5	<0.000014	0.003	0.00005	<0.000001	0.009	0.002	16	0.0003	0.0009	0.08	0.002
MW18-07D	26-Oct-2022	-	-	-	-	-	-	-	-	-	-	0.03	5.1	<0.000014	0.003	0.00001	<0.000001	0.006	0.0007	15	0.0002	0.0002	0.01	<0.0007
MW18-07D	13-Nov-2022	-	-	-	-	-	-	-	-	-	-	1.3	14	<0.000014	0.003	0.0001	<0.000001	0.010	0.006	16	0.0004	0.002	0.2	0.003
MW18-07D	7-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.7	12	<0.000014	0.004	0.00007	<0.000001	0.008	0.004	16	0.0003	0.001	0.1	<0.0007
MW18-07D DUP	24-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.2	7.5	<0.00003	<0.0008	<0.000002	<0.000002	0.008	0.002	16	<0.00004	0.0005	0.06	<0.0008
MW18-07S	25-Mar-2022	-	-	-	-	-	-	-	-	-	-	0.02	42	0.00007	0.005	<0.000002	<0.000001	0.02	0.01	70	0.0002	0.007	0.06	<0.0007
MW18-08D	10-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.05	22	<0.000014	0.004	0.00003	<0.000001	0.01	0.003	25	0.0004	0.00005	0.04	<0.0007
MW18-08D	12-Sep-2022	-	-	-	-	-	-	-	-	-	-	0.04	17	<0.000014	0.004	0.00002	<0.000001	0.009	0.002	23	0.0003	0.00003	0.03	<0.0007
MW18-08D	26-Oct-2022	-	-	-	-	-	-	-	-	-	-	0.03	18	<0.000014	0.005	0.00002	<0.000001	0.009	0.002	23	0.0005	0.00002	0.03	0.003
MW18-08D	13-Nov-2022	-	-	-	-	-	-	-	-	-	-	0.08	30	<0.000014	0.006	0.00004	<0.000001	0.02	0.004	31	0.0004	0.0002	0.06	0.004
MW18-08D	7-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.03	19	<0.000014	0.005	0.00002	<0.000001	0.010	0.002	24	0.0004	0.00002	0.03	<0.0007
MW18-08D DUP	10-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.05	22	<0.000014	0.004	0.00003	<0.000001	0.01	0.003	25	0.0004	0.00006	0.05	<0.0007
MW18-08D DUP	24-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.04	18	<0.00003	<0.0008	<0.000002	<0.000002	0.01	0.002	23	<0.00004	<0.000002	0.04	<0.0008
MW18-08S	10-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.1	26	<0.000014	0.004	0.00004	<0.000001	0.01	0.004	26	0.0004	0.0002	0.07	<0.0007
MW18-08S	26-Oct-2022	-	-	-	-	-	-	-	-	-	-	0.1	31	<0.000014	0.007	0.00005	<0.000001	0.02	0.004	30	0.0001	0.002	0.08	0.003
MW18-08S	13-Nov-2022	-	-	-	-	-	-	-	-	-	-	0.04	22	<0.000014	0.005	0.00003	<0.000001	0.01	0.003	26	0.0005	0.00003	0.03	<0.0007
MW18-08S	7-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.07	26	<0.000014	0.006	0.00003	<0.000001	0.01	0.004	28	0.0004	0.00009	0.05	<0.0007
MW18-08S DUP	10-Jul-2022	-	-	-	-	-	-	-	-	-	-	0.1	27	<0.000014	0.004	0.00004	<0.000001	0.01	0.004	25	0.0004	0.0002	0.07	<0.0007
MW18-08S DUP	7-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.07	26	<0.000014	0.006	0.00003	<0.000001	0.01	0.004	28	0.0004	0.00009	0.05	<0.0007
MW19-01D	25-May-2022	-	-	-	-	-	-	-	-	-	-	0.002	2.6	<0.000014	0.002	<0.000002	<0.000001	0.004	0.00003	24	0.0003	0.00002	0.0008	<0.0007
MW19-01D	12-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.008	<0.42	<0.000014	0.003	<0.000002	<0.000001	0.005	0.00005	25	0.0003	0.00002	0.003	<0.0007
MW19-01S	25-May-2022	-	-	-	-	-	-	-	-	-	-	0.09	2.7	<0.000014	<0.0011	<0.000002	<0.000001	0.003	0.00002	24	0.0003	0.00004	0.0008	0.09
MW19-01S	29-Sep-2022	-	-	-	-	-	-	-	-	-	-	0.002	1.3	<0.000014	<0.0011	<0.000002	<0.000001	0.003	0.00002	25	0.0003	<0.0000031	0.0002	0.003
MW19-01S	12-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.009	<0.42	<0.000014	0.003	<0.000002	<0.000001	0.003	0.0001	24	0.0003	0.00001	0.009	<0.0007
MW19-03D	25-May-2022	-	-	-	-	-	-	-	-	-	-	0.002	1.6	<0.000014	<0.0011	<0.000002	<0.000001	0.005	0.00003	19	0.0002	0.0001	0.0004	<0.0007
MW21-05D	15-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.002	1.0	<0.000014	0.003	<0.000002	<0.000001	0.007	0.00002	13	0.0003	<0.0000031	0.0003	<0.0007
MW21-05S	15-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.02	23	0.0002	0.008	<0.000002	<0.000001	0.02	0.0009	31	0.0007	0.0002	0.01	0.01
MW21-06	31-May-2022	-	-	-	-	-	-	-	-	-	-	0.02	63	0.006	0.02	<0.000002	<0.000001	0.03	<0.0000013	83	<0.00002	0.00006	<0.00005	0.1
MW21-06D	29-Sep-2022	-	-	-	-	-	-	-	-	-	-	0.01	72	0.006	0.02	<0.000002	<0.000001	0.04	0.00002	93	0.0001	0.00008	0.0001	0.1
MW21-06D	18-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.01	108	0.008	0.02	<0.000002	<0.000001	0.05	<0.0000026	124	0.0002	0.0001	<0.00005	0.3
MW21-06D (1)	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	0.02	65	0.008	0.03	<0.0000003	<0.0000004	0.03	0.000006	90	<0.00002	0.00007	0.0001	0.1
MW21-06D (2)	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	0.02	64	0.008	0.03	<0.0000003	<0.0000004	0.03	0.000004	90	<0.00002	0.00006	0.0001	0.1
MW21-06D (3)	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	0.02	66	0.008	0.03	<0.0000003	<0.0000004	0.03	0.000004	89	<0.00002	0.00006	0.0001	0.1
MW21-06S	31-May-2022	-	-	-	-	-	-	-	-	-	-	0.007	85	0.007	0.02	<0.000002	<0.000001	0.02	0.000003	101	0.0001	0.0003	0.001	5.2
MW21-06S	18-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.005	122	0.010	0.03	<0.000002	<0.000001	0.04	0.000006	130	0.0002	0.0005	0.002	5.7
MW21-06S (1)	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	0.01	74	0.009	0.03	<0.0000003	<0.0000004	0.02	0.00004	93	<0.00002	0.0004	0.003	3.9
MW21-06S (2)	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	0.006	74	0.009	0.03	<0.0000003	<0.0000004	0.02	0.00002	97	<0.00002	0.0004	0.002	4.1
MW21-06S (3)	26-Jan-2022	-	-	-	-	-	-	-	-	-	-	0.005	77	0.009	0.03	<0.0000003	<0.0000004	0.02	0.000009	97	<0.00002	0.0004	0.002	4.2
MW4-03D	20-Jun-2022	-	-	-	-	-	-	-	-	-	-	0.01	5.2	<0.000014	0.003	<0.000002	<0.000001	0.02	0.0005	17	0.0004	0.00002	0.003	0.03
PW1043	28-Oct-2022	-	-	-	-	-	-	-	-	-	-	1.8	149	<0.000042	0.01	0.0002	<0.000001	0.02	0.04	139	0.0003	0.007	1.2	0.010
PW1104	7-Dec-2022	-	-	-	-	-	-	-	-	-	-	1.1	45	<0.000014	0.007	0.0002	<0.000001	0.01	0.01	37	0.0003	0.003	0.6	<0.0007
PW14-01	5-Sep-2022	-	-	-	-	-	-	-	-	-	-	0.1	110	<0.000014	0.009	0.00004	<0.000001	0.01	0.02	99	0.0001	0.005	0.3	0.009
PW14-01	28-Oct-2022	-	-	-	-	-	-	-	-	-	-	0.10	98	<0.000014	0.01	0.00004	<0.000001	0.01	0.02	92	0.0002	0.005	0.2	0.008
PW14-01	8-Dec-2022	-	-	-	-	-	-	-	-	-	-	0.1	105	<0.000028	0.01	0.00004	<0.000001	0.01	0.02	100	0.0002	0.005	0.2	0.009
PW14-03	10-Feb-2022	-	-	-	-	-	-	-	-	-	-	3.3	185	0.0004	0.01	0.0003	<0.0000004	0.03	0.06	149	0.0002	0.01	2.0	0.008

Station (Monitoring Plan)	Date	P-d	Li-d	Mg-d	Mn-d	Mo-d	Ni-d	Pb-d	K-d	Sb-t	Se-d	Si-d	Sr-d	Sn-d	Ag-d	Na-d	Sb-d	Te-d	Tl-d	Th-d	Ti-d	W-d	U-d
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW18-06S	8-Dec-2022	<0.007	0.0001	4.1	0.2	<0.000007	0.005	0.0001	0.6	-	0.0002	6.5	0.09	<0.000014	<0.000004	1.5	<0.000019	<0.000034	0.000005	<0.000002	<0.00009	<0.00001	0.000004
MW18-07D	26-Feb-2022	<0.004	<0.000001	2.0	0.1	0.00006	0.003	0.0002	0.2	-	0.0002	3.8	0.03	<0.000003	<0.0000005	1.2	<0.000003	<0.000006	<0.00000009	<0.0000003	<0.00002	<0.00001	0.000002
MW18-07D	25-Mar-2022	<0.007	0.0002	3.1	0.4	0.00003	0.01	0.0009	0.3	-	0.0001	5.7	0.04	<0.000014	<0.000004	1.1	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00005
MW18-07D	18-May-2022	<0.007	<0.000007	1.3	0.01	0.00003	0.0007	0.00006	0.1	-	0.0001	2.2	0.03	<0.000014	<0.000004	0.8	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	<0.0000007
MW18-07D	16-Jun-2022	<0.007	<0.000007	1.4	0.04	0.00003	0.002	0.00006	0.1	-	0.0002	2.3	0.03	<0.000014	<0.000004	0.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000002
MW18-07D	7-Jul-2022	<0.007	<0.000007	1.5	0.05	0.00007	0.002	0.0001	0.2	-	0.0002	3.5	0.03	<0.000014	<0.000004	1.0	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	<0.0000007
MW18-07D	24-Aug-2022	<0.008	<0.000008	1.4	0.05	<0.00001	0.001	0.0004	0.2	-	<0.00003	3.0	0.03	<0.00002	<0.000007	1.0	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	<0.000001
MW18-07D	12-Sep-2022	<0.007	<0.000007	1.7	0.07	0.00002	0.002	0.0004	0.2	-	0.0001	3.5	0.03	<0.000014	<0.000004	1.0	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000002
MW18-07D	26-Oct-2022	<0.007	<0.000007	1.1	0.02	0.00005	0.0005	0.00006	0.2	-	0.0001	2.6	0.02	<0.000014	<0.000004	0.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	<0.0000007
MW18-07D	13-Nov-2022	<0.007	0.00006	2.2	0.1	0.00003	0.005	0.0005	0.2	-	0.0001	4.0	0.04	<0.000014	0.00001	1.4	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000008
MW18-07D	7-Dec-2022	<0.007	0.00006	1.7	0.09	0.00003	0.003	0.0004	0.2	-	<0.00002	3.8	0.03	<0.000014	<0.000004	1.2	<0.000019	<0.000034	0.000004	<0.000002	<0.00009	<0.00001	0.000004
MW18-07D DUP	24-Aug-2022	<0.008	<0.000008	1.3	0.03	<0.00001	0.001	0.0003	0.2	-	<0.00003	2.8	0.03	<0.00002	<0.000007	0.9	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	<0.000001
MW18-07S	25-Mar-2022	<0.007	0.002	6.8	0.7	0.0003	0.01	0.0001	0.7	-	0.0002	2.9	0.08	0.00009	<0.000004	2.6	0.0003	<0.000034	0.000009	<0.000002	<0.00009	<0.00001	0.00003
MW18-08D	10-Jul-2022	<0.007	<0.000007	3.5	0.02	<0.000007	0.004	0.00006	0.4	-	0.0002	6.1	0.07	<0.000014	<0.000004	2.0	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000003
MW18-08D	12-Sep-2022	<0.007	0.00006	3.0	0.007	<0.000007	0.003	0.002	0.4	-	0.0002	5.4	0.06	<0.000014	<0.000004	1.7	0.00008	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000002
MW18-08D	26-Oct-2022	<0.007	<0.000007	3.0	0.006	<0.000007	0.002	0.00006	0.4	-	0.0002	5.7	0.06	<0.000014	<0.000004	1.6	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000004
MW18-08D	13-Nov-2022	<0.007	<0.000007	5.1	0.02	<0.000007	0.005	0.0002	0.6	-	0.0002	7.1	0.09	<0.000014	<0.000004	2.7	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000004
MW18-08D	7-Dec-2022	<0.007	<0.000007	3.1	0.005	<0.000007	0.002	<0.000024	0.4	-	0.0002	5.4	0.06	<0.000014	<0.000004	1.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000003
MW18-08D DUP	10-Jul-2022	<0.007	<0.000007	3.6	0.02	<0.000007	0.004	<0.000024	0.5	-	0.0002	6.1	0.07	<0.000014	<0.000004	2.0	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000003
MW18-08D DUP	24-Aug-2022	<0.008	<0.000008	3.0	0.008	<0.00001	0.003	0.0003	0.4	-	<0.00003	5.9	0.06	<0.00002	<0.000007	1.7	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	<0.000001
MW18-08S	10-Jul-2022	<0.007	<0.000007	4.1	0.04	<0.000007	0.004	0.00010	0.5	-	0.0002	6.9	0.08	<0.000014	0.00001	2.3	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000003
MW18-08S	26-Oct-2022	<0.007	0.0001	4.5	0.3	<0.000007	0.005	0.0002	0.6	-	0.0002	6.9	0.09	<0.000014	<0.000004	1.5	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000005
MW18-08S	13-Nov-2022	<0.007	<0.000007	3.7	0.007	<0.000007	0.003	0.0001	0.4	-	0.0002	6.0	0.07	<0.000014	<0.000004	2.0	<0.000019	<0.000034	<0.0000026	<0.000002	0.0003	<0.00001	0.000004
MW18-08S	7-Dec-2022	<0.007	<0.000007	3.9	0.02	0.00001	0.004	<0.000024	0.5	-	0.0002	6.5	0.08	<0.000014	<0.000004	2.4	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000003
MW18-08S DUP	10-Jul-2022	<0.007	<0.000007	4.1	0.04	<0.000007	0.005	0.0001	0.5	-	0.0002	7.3	0.08	<0.000014	<0.000004	2.4	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000003
MW18-08S DUP	7-Dec-2022	<0.007	<0.000007	4.0	0.02	<0.000007	0.004	<0.000024	0.5	-	0.0002	6.5	0.08	<0.000014	<0.000004	2.3	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000003
MW19-01D	25-May-2022	<0.007	<0.000007	1.4	0.002	0.00008	0.0001	0.00007	0.1	-	<0.00002	2.2	0.03	<0.000014	<0.000004	0.9	0.0001	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
MW19-01D	12-Dec-2022	<0.007	0.00007	1.7	0.001	0.00006	0.0001	0.0003	0.1	-	<0.00002	2.6	0.03	<0.000014	<0.000004	1.2	0.00008	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
MW19-01S	25-May-2022	<0.007	<0.000007	1.5	0.002	0.00004	0.00004	0.00005	0.08	-	<0.00002	2.4	0.03	<0.000014	<0.000004	0.8	<0.000019	<0.000034	<0.0000026	<0.000002	0.003	<0.00001	0.000007
MW19-01S	29-Sep-2022	<0.007	<0.000007	1.3	0.0001	0.00004	0.00005	0.00005	0.08	-	<0.00002	2.3	0.02	<0.000014	<0.000004	0.7	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000004
MW19-01S	12-Dec-2022	<0.007	<0.000007	1.5	0.002	0.00005	0.00006	0.002	0.08	-	<0.00002	2.7	0.03	<0.000014	<0.000004	0.9	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000004
MW19-03D	25-May-2022	<0.007	<0.000007	1.1	0.0001	0.00004	<0.000024	<0.000024	0.04	-	<0.00002	1.5	0.02	<0.000014	<0.000004	0.8	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000007
MW21-05D	15-Dec-2022	<0.007	<0.000007	0.7	0.0003	0.0001	<0.000024	<0.000024	0.09	-	<0.00002	2.2	0.02	<0.000014	<0.000004	0.8	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000002
MW21-05S	15-Dec-2022	<0.007	0.00006	2.5	0.02	0.0008	0.0005	0.001	1.1	-	0.0002	2.3	0.08	0.0001	0.00001	16	0.001	<0.000034	<0.0000026	<0.000002	0.0005	<0.00001	0.000008
MW21-06	31-May-2022	<0.007	<0.000007	7.2	0.6	0.006	<0.000024	<0.000024	2.4	-	<0.00002	2.1	0.3	<0.000014	<0.000004	6.5	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	0.0002	0.0001
MW21-06D	29-Sep-2022	<0.007	<0.000007	7.8	0.7	0.005	0.00006	<0.000024	2.7	-	<0.00002	2.2	0.3	<0.000014	<0.000004	7.1	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	0.0002	0.0001
MW21-06D	18-Dec-2022	<0.007	<0.000007	10	0.9	0.006	0.00008	<0.000024	3.4	-	<0.00002	2.4	0.5	<0.000014	<0.000004	9.7	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	0.0002	0.0001
MW21-06D (1)	26-Jan-2022	<0.004	<0.000001	6.8	0.6	0.008	0.00004	<0.000003	2.6	-	<0.000000[7]	2.4	0.3	<0.000003	<0.0000005	6.9	<0.000003	<0.000006	<0.00000009	<0.0000003	<0.00002	0.0003	0.0001
MW21-06D (2)	26-Jan-2022	0.01	0.00006	6.7	0.6	0.008	0.00004	<0.000003	2.6	-	<0.000000[7]	2.4	0.3	<0.000003	<0.0000005	6.8	<0.000003	<0.000006	<0.00000009	<0.0000003	<0.00002	0.0003	0.0001
MW21-06D (3)	26-Jan-2022	0.01	<0.000001	6.9	0.6	0.008	<0.00001	<0.000003	2.6	-	<0.000000[7]	2.5	0.3	<0.000003	<0.0000005	7.0	<0.000003	<0.000006	<0.00000009	<0.0000003	<0.00002	0.0003	0.0001
MW21-06S	31-May-2022	<0.007	0.00009	9.1	0.5	0.001	0.00006	0.00007	2.9	-	<0.00002	2.7	0.3	<0.000014	<0.000004	7.1	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00005
MW21-06S	18-Dec-2022	<0.007	0.0001	11	0.5	0.001	0.0002	<0.000024	4.7	-	<0.00002	2.6	0.5	<0.000014	<0.000004	13	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00005
MW21-06S (1)	26-Jan-2022	<0.004	0.0003	7.6	0.5	0.001	0.0002	<0.000003	3.1	-	<0.000000[7]	3.1	0.3	<0.000003	<0.0000005	6.7	<0.000003	<0.000006	<0.00000009	<0.0000003	<0.00002	<0.00001	0.00007
MW21-06S (2)	26-Jan-2022	0.01	0.0002	7.6	0.5	0.002	0.0001	<0.000003	3.2	-	<0.000000[7]	3.2	0.3	<0.000003	<0.0000005	6.6	<0.000003	<0.000006	<0.00000009	<0.0000003	<0.00002	<0.00001	0.00007
MW21-06S (3)	26-Jan-2022	<0.004	0.0003	8.0	0.5	0.002	0.0002	<0.000003	3.2	-	<0.000000[7]	3.2	0.3	<0.000003	<0.0000005	7.0	<0.000003	<0.000006	<0.00000009	<0.0000003	<0.00002	<0.00001	0.00008
MW4-03D	20-Jun-2022	<0.007	<0.000007	2.0	0.001	0.00001	0.0005	0.00005	0.1	-	<0.00002	3.3	0.04	<0.000014	<0.000004	1.3	<0.000019	<0.000034	<0.0000026	<0.000002	0.0005	<0.00001	0.000002
PW1043	28-Oct-2022	<0.007	0.00009	19	3.1	<0.000007	0.01	0.0003	1.1	-	0.0002	7.7	0.2	<0.000014	<0.000004	8.5	<0.000019	<0.000034	0.000005	<0.000002	<0.00009	<0.00001	0.00005
PW1104	7-Dec-2022	<0.007	0.0005	7.3	0.5	<0.000007	0.009	0.00010	0.6	-	0.0002	9.4	0.10	<0.000014	0.00002	2.0	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00002
PW14-01	5-Sep-2022	<0.007	0.0001	17	1.7	0.00004	0.01	0.0001	0.6	-	<0.00002	7.0	0.2	<0.000014	<0.000004	5.2	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000003
PW14-01	28-Oct-2022	<0.007	0.0001	16	1.5	<0.000007	0.010	<0.000024	0.6	-	0.0001	7.4	0.2	<0.000014	<0.000004	5.2	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000004
PW14-01	8-Dec-2022	<0.007	0.00010	16	1.6	0.00002	0.010	<0.000024	0.6	-	0.0001	7.2	0.2	<0.000014	<0.000004	5.3	<0.000019	<0.000034	0.000004	<0.000002	<0.00009	<0.00001	0.000003
PW14-03	10-Feb-2022	<0.004	0.00008	24	2.8	<0.000005	0.03	0.0005	0.9	-	0.0003	9.3	0.3	<0.000003	0.00002	9.4	<0.000003	0.00008	0.00001	<0.0000003	<0.00002	<0.00001	0.00005

Station (Monitoring Plan)	Date	V-d	Zn-d	Zr-d	Hg-d	Silica Reactive	Radium 226	Chlorophyll a	BOD5
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW18-06S	8-Dec-2022	<0.00002	1.2	<0.000003	-	-	-	-	-
MW18-07D	26-Feb-2022	<0.0000007	0.8	<0.000004	-	-	-	-	-
MW18-07D	25-Mar-2022	<0.00002	4.3	0.00003	-	-	-	-	-
MW18-07D	18-May-2022	<0.00002	0.2	<0.000003	-	-	-	-	-
MW18-07D	16-Jun-2022	<0.00002	0.4	<0.000003	-	-	-	-	-
MW18-07D	7-Jul-2022	<0.00002	0.5	<0.000003	-	-	-	-	-
MW18-07D	24-Aug-2022	<0.00005	0.5	<0.000006	-	-	-	-	-
MW18-07D	12-Sep-2022	<0.00002	0.6	<0.000003	-	-	-	-	-
MW18-07D	26-Oct-2022	<0.00002	0.2	<0.000003	-	-	-	-	-
MW18-07D	13-Nov-2022	<0.00002	1.3	<0.000003	-	-	-	-	-
MW18-07D	7-Dec-2022	<0.00002	0.8	<0.000003	-	-	-	-	-
MW18-07D DUP	24-Aug-2022	<0.00005	0.4	<0.000006	-	-	-	-	-
MW18-07S	25-Mar-2022	<0.00002	2.2	<0.000003	-	-	-	-	-
MW18-08D	10-Jul-2022	<0.00002	1.9	<0.000003	-	-	-	-	-
MW18-08D	12-Sep-2022	<0.00002	1.2	<0.000003	-	-	-	-	-
MW18-08D	26-Oct-2022	<0.00002	1.0	<0.000003	-	-	-	-	-
MW18-08D	13-Nov-2022	<0.00002	2.1	<0.000003	-	-	-	-	-
MW18-08D	7-Dec-2022	<0.00002	1.1	<0.000003	-	-	-	-	-
MW18-08D DUP	10-Jul-2022	<0.00002	1.8	<0.000003	-	-	-	-	-
MW18-08D DUP	24-Aug-2022	<0.00005	1.3	<0.000006	-	-	-	-	-
MW18-08S	10-Jul-2022	<0.00002	2.2	<0.000003	-	-	-	-	-
MW18-08S	26-Oct-2022	<0.00002	1.2	<0.000003	-	-	-	-	-
MW18-08S	13-Nov-2022	<0.00002	1.3	<0.000003	-	-	-	-	-
MW18-08S	7-Dec-2022	<0.00002	1.8	<0.000003	-	-	-	-	-
MW18-08S DUP	10-Jul-2022	<0.00002	2.3	<0.000003	-	-	-	-	-
MW18-08S DUP	7-Dec-2022	<0.00002	1.9	<0.000003	-	-	-	-	-
MW19-01D	25-May-2022	<0.00002	0.02	<0.000003	-	-	-	-	-
MW19-01D	12-Dec-2022	<0.00002	0.02	<0.000003	-	-	-	-	-
MW19-01S	25-May-2022	<0.00002	0.01	0.00002	-	-	-	-	-
MW19-01S	29-Sep-2022	<0.00002	0.009	<0.000003	-	-	-	-	-
MW19-01S	12-Dec-2022	<0.00002	0.03	<0.000003	-	-	-	-	-
MW19-03D	25-May-2022	<0.00002	0.003	<0.000003	-	-	-	-	-
MW21-05D	15-Dec-2022	<0.00002	0.006	<0.000003	-	-	-	-	-
MW21-05S	15-Dec-2022	<0.00002	0.1	<0.000003	-	-	-	-	-
MW21-06	31-May-2022	<0.00002	<0.0003	<0.000003	-	-	-	-	-
MW21-06D	29-Sep-2022	<0.00002	0.01	<0.000003	-	-	-	-	-
MW21-06D	18-Dec-2022	<0.00002	0.001	<0.000003	-	-	-	-	-
MW21-06D (1)	26-Jan-2022	<0.0000007	0.001	<0.000004	-	-	-	-	-
MW21-06D (2)	26-Jan-2022	<0.0000007	<0.0005	<0.000004	-	-	-	-	-
MW21-06D (3)	26-Jan-2022	<0.0000007	<0.0005	<0.000004	-	-	-	-	-
MW21-06S	31-May-2022	<0.00002	0.004	<0.000003	-	-	-	-	-
MW21-06S	18-Dec-2022	<0.00002	0.004	<0.000003	-	-	-	-	-
MW21-06S (1)	26-Jan-2022	<0.0000007	0.02	<0.000004	-	-	-	-	-
MW21-06S (2)	26-Jan-2022	<0.0000007	0.008	<0.000004	-	-	-	-	-
MW21-06S (3)	26-Jan-2022	<0.0000007	0.006	<0.000004	-	-	-	-	-
MW4-03D	20-Jun-2022	<0.00002	0.7	<0.000003	-	-	-	-	-
PW1043	28-Oct-2022	<0.00002	14	0.00003	-	-	-	-	-
PW1104	7-Dec-2022	<0.00002	5.2	<0.000003	-	-	-	-	-
PW14-01	5-Sep-2022	<0.00002	11	0.00009	-	-	-	-	-
PW14-01	28-Oct-2022	<0.00002	9.4	<0.000003	-	-	-	-	-
PW14-01	8-Dec-2022	<0.00002	9.9	<0.000003	-	-	-	-	-
PW14-03	10-Feb-2022	0.0003	26	0.00007	-	-	-	-	-

Work Order	Lab ID	Re-anaysis	Field QAQC	Station (Lab Report)	Station (Monitoring Plan)	Date	pH	Conductivity	Hardness, Total (as $CaCO_3$)	Hardness, Dissolved (as $CaCO_3$)	Turbidity	Total Suspended Solids	Acidity, pH 8.3 (as $CaCO_3$)	Alkalinity, Total pH 4.5 (as $CaCO_3$)	Alkalinity, Total pH 8.3 (as $CaCO_3$)	Alkalinity, Bicarbonate (as $CaCO_3$)
							pH Unit	uS/cm	mg/L	mg/L	NTU	mg/L	mg/L	mg/L	mg/L	mg/L
22C3616	5	No	Regular	PW1403-M	PW14-03	18-Mar-2022	5.6	978	426	-	-	-	-	-	6.1	6.1
22D3544	7	No	Regular	PW1403-M	PW14-03	26-Apr-2022	5.2	1060	488	-	-	-	-	-	5.8	5.8
22E2933	7	No	Regular	PW1403-M	PW14-03	18-May-2022	5.2	1030	507	-	-	-	-	-	4.9	4.9
22G2083	8	No	Regular	PW1403-M	PW14-03	8-Jul-2022	5.9	944	455	-	-	-	-	-	8.2	8.2
22I1308	2	No	Regular	PW1403-M	PW14-03	5-Sep-2022	6.0	817	396	-	-	-	-	-	12	12
22K2148	7	No	Regular	PW1403-M	PW14-03	13-Nov-2022	5.8	952	464	-	-	-	-	-	12	12
22D3544	8	No	Regular	PW1403-MR	PW14-03 DUP	26-Apr-2022	5.2	1060	494	-	-	-	-	-	6.4	6.4
22B1848	2	No	Regular	PW14-04	PW14-04	10-Feb-2022	4.9	1720	948	-	-	-	-	-	1.9	1.9
22C3616	6	No	Regular	PW1404-M	PW14-04	18-Mar-2022	4.8	1650	841	-	-	-	-	-	2.1	2.1
22F3475	1	No	Regular	PW 1404-M	PW14-04	17-Jun-2022	5.1	1330	692	-	-	-	-	-	2.5	2.5
22I0407	8	No	Regular	PW1801-M	PW18-01	29-Aug-2022	5.5	167	68	-	-	-	-	-	6.1	6.1
22I2071	6	No	Regular	PW 1801-M	PW18-01	12-Sep-2022	5.9	161	66	-	-	-	-	-	5.7	5.7
22I0407	9	No	Replicate	PW1801-MR	PW18-01 DUP	29-Aug-2022	5.6	168	68	-	-	-	-	-	6.7	6.7
22H3943	7	No	Regular	PW1802-M	PW18-02	25-Aug-2022	6.4	146	63	-	-	-	-	-	17	17
22I2071	7	No	Regular	PW 1802-M	PW18-02	12-Sep-2022	6.4	139	60	-	-	-	-	-	23	23
22H3943	8	No	Regular	PW1803-M	PW18-03	25-Aug-2022	6.7	162	73	-	-	-	-	-	40	40
22I2071	8	No	Regular	PW 1803-M	PW18-03	12-Sep-2022	6.5	162	69	-	-	-	-	-	38	38
22H3943	9	No	Regular	PW1804-M	PW18-04	25-Aug-2022	6.6	160	72	-	-	-	-	-	38	38
22I2071	9	No	Regular	PW 1804-M	PW18-04	12-Sep-2022	6.6	166	69	-	-	-	-	-	37	37

Station (Monitoring Plan)	Date	Alkalinity, Carbonate (as $CaCO_3$)	Alkalinity, Hydroxide (as $CaCO_3$)	Chloride	Fluoride	Sulphate	Total Nitrogen	Nitrate+ Nitrite	Nitrate (as N)	Nitrite (as N)	Ammonia (as N)	Total Phosphorus	Total Dissolved Phosphorus	TOC	DOC	Al-t	S-t	As-t	B-t	Ba-t
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
PW14-03	18-Mar-2022	-	-	-	-	454	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-03	26-Apr-2022	-	-	-	-	579	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-03	18-May-2022	-	-	-	-	415	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-03	8-Jul-2022	-	-	-	-	534	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-03	5-Sep-2022	-	-	-	-	438	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-03	13-Nov-2022	-	-	-	-	521	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-03 DUP	26-Apr-2022	-	-	-	-	597	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-04	10-Feb-2022	-	-	-	-	973	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-04	18-Mar-2022	-	-	-	-	974	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-04	17-Jun-2022	-	-	-	-	749	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-01	29-Aug-2022	-	-	-	-	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-01	12-Sep-2022	-	-	-	-	71	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-01 DUP	29-Aug-2022	-	-	-	-	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-02	25-Aug-2022	-	-	-	-	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-02	12-Sep-2022	-	-	-	-	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-03	25-Aug-2022	-	-	-	-	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-03	12-Sep-2022	-	-	-	-	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-04	25-Aug-2022	-	-	-	-	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-04	12-Sep-2022	-	-	-	-	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Station (Monitoring Plan)	Date	Be-t	Bi-t	Cd-t	Ca-t	Cr-t	Co-t	Cu-t	Fe-t	P-t	Li-t	Mg-t	Mn-t	Mo-t	Ni-t	Pb-t	K-t	Se-t	Sn-t	Si-t	Ag-t	Na-t	Sr-t
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
PW14-03	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-03	26-Apr-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-03	18-May-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-03	8-Jul-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-03	5-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-03	13-Nov-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-03 DUP	26-Apr-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-04	10-Feb-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-04	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW14-04	17-Jun-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-01	29-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-01	12-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-01 DUP	29-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-02	25-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-02	12-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-03	25-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-03	12-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-04	25-Aug-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PW18-04	12-Sep-2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Station (Monitoring Plan)	Date	Te-t	Tl-t	Th-t	Ti-t	W-t	U-t	V-t	Zn-t	Zr-t	Hg-t	Al-d	S-d	As-d	B-d	Be-d	Bi-d	Ba-d	Cd-d	Ca-d	Cr-d	Co-d	Cu-d	Fe-d
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
PW14-03	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	2.8	157	0.0002	0.01	0.0003	<0.000001	0.02	0.06	132	0.0003	0.01	1.9	0.01
PW14-03	26-Apr-2022	-	-	-	-	-	-	-	-	-	-	3.6	195	0.0002	0.01	0.0003	<0.000001	0.03	0.07	150	0.0002	0.01	2.0	0.009
PW14-03	18-May-2022	-	-	-	-	-	-	-	-	-	-	3.2	178	<0.00007	0.01	0.0003	<0.000005	0.02	0.06	161	<0.0001	0.01	1.9	0.01
PW14-03	8-Jul-2022	-	-	-	-	-	-	-	-	-	-	2.7	174	<0.00005	0.01	0.0003	<0.000001	0.02	0.06	145	0.0002	0.009	1.6	0.008
PW14-03	5-Sep-2022	-	-	-	-	-	-	-	-	-	-	1.9	148	0.0001	0.01	0.0002	<0.000001	0.02	0.04	129	0.0003	0.007	1.3	0.010
PW14-03	13-Nov-2022	-	-	-	-	-	-	-	-	-	-	2.1	170	<0.000028	0.01	0.0003	<0.000001	0.02	0.05	150	0.0004	0.008	1.3	0.01
PW14-03 DUP	26-Apr-2022	-	-	-	-	-	-	-	-	-	-	3.6	196	0.0003	0.01	0.0003	<0.000001	0.03	0.07	153	0.0003	0.01	2.0	0.02
PW14-04	10-Feb-2022	-	-	-	-	-	-	-	-	-	-	6.4	366	0.0006	0.02	0.0004	<0.0000004	0.02	0.05	288	0.0004	0.03	1.3	0.7
PW14-04	18-Mar-2022	-	-	-	-	-	-	-	-	-	-	6.6	320	0.0003	0.01	0.0004	0.00001	0.02	0.06	247	0.0004	0.03	1.5	1.0
PW14-04	17-Jun-2022	-	-	-	-	-	-	-	-	-	-	3.3	253	<0.000056	0.01	0.0003	<0.000001	0.02	0.04	208	0.0003	0.02	0.9	0.3
PW18-01	29-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.5	22	<0.000014	0.004	0.00006	<0.000001	0.01	0.006	21	0.0002	0.001	0.2	<0.0007
PW18-01	12-Sep-2022	-	-	-	-	-	-	-	-	-	-	0.4	20	<0.000014	0.004	0.00005	<0.000001	0.01	0.005	21	0.0002	0.0010	0.2	0.007
PW18-01 DUP	29-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.5	22	<0.000014	0.004	0.00005	<0.000001	0.01	0.005	21	0.0002	0.001	0.2	<0.0007
PW18-02	25-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.04	16	<0.00003	<0.0008	<0.000002	<0.000002	0.010	0.002	20	<0.00004	0.0002	0.06	<0.0008
PW18-02	12-Sep-2022	-	-	-	-	-	-	-	-	-	-	0.04	14	<0.000014	0.004	0.00001	<0.000001	0.01	0.002	19	0.0002	0.0002	0.05	0.005
PW18-03	25-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.02	14	<0.00003	<0.0008	<0.000002	<0.000002	0.01	0.001	24	<0.00004	<0.000002	0.01	<0.0008
PW18-03	12-Sep-2022	-	-	-	-	-	-	-	-	-	-	0.01	14	<0.000014	0.004	<0.000002	<0.000001	0.01	0.001	23	0.0004	0.00002	0.01	0.008
PW18-04	25-Aug-2022	-	-	-	-	-	-	-	-	-	-	0.01	15	<0.00003	<0.0008	<0.000002	<0.000002	0.007	0.001	24	<0.00004	<0.000002	0.01	<0.0008
PW18-04	12-Sep-2022	-	-	-	-	-	-	-	-	-	-	0.008	15	<0.000014	0.004	<0.000002	<0.000001	0.010	0.001	23	0.0003	0.000010	0.008	0.01

Station (Monitoring Plan)	Date	P-d	Li-d	Mg-d	Mn-d	Mo-d	Ni-d	Pb-d	K-d	Sb-t	Se-d	Si-d	Sr-d	Sn-d	Ag-d	Na-d	Sb-d	Te-d	Tl-d	Th-d	Ti-d	W-d	U-d
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
PW14-03	18-Mar-2022	<0.007	0.0001	23	2.5	0.00006	0.03	0.0007	0.8	-	0.0003	8.4	0.2	<0.000014	0.00001	9.4	<0.000019	<0.000034	0.000005	<0.000002	<0.00009	<0.00001	0.00005
PW14-03	26-Apr-2022	<0.007	0.0001	27	3.4	0.00001	0.03	0.0005	1.0	-	0.0003	8.7	0.3	<0.000014	<0.000004	11	<0.000019	<0.000034	0.000004	<0.000002	<0.00009	<0.00001	0.00006
PW14-03	18-May-2022	<0.035	<0.000035	26	3.2	0.00009	0.02	0.0007	1.0	-	<0.0001	8.6	0.3	<0.00007	<0.00002	10	<0.000095	<0.00017	<0.000013	<0.00001	<0.00045	<0.00005	0.00005
PW14-03	8-Jul-2022	<0.007	0.00010	23	3.1	<0.000007	0.02	0.0005	1.0	-	0.0003	8.8	0.3	<0.000014	<0.000004	10	<0.000019	<0.000034	0.000004	<0.000002	<0.00009	<0.00001	0.00005
PW14-03	5-Sep-2022	<0.007	0.0001	18	2.6	0.00007	0.02	0.0007	0.9	-	0.0002	7.6	0.2	<0.000014	0.00001	8.0	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00004
PW14-03	13-Nov-2022	<0.007	0.00008	21	3.3	0.00004	0.02	0.0004	1.1	-	0.0002	8.0	0.3	<0.000014	<0.000004	9.6	0.00005	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00004
PW14-03 DUP	26-Apr-2022	<0.007	0.0001	27	3.4	0.00009	0.03	0.0007	1.1	-	0.0003	8.7	0.3	<0.000014	0.00001	11	<0.000019	<0.000034	0.000004	<0.000002	<0.00009	<0.00001	0.00006
PW14-04	10-Feb-2022	<0.004	0.002	55	7.3	<0.000005	0.05	0.0003	1.3	-	0.0005	15	0.6	<0.000003	0.00002	9.0	<0.000003	0.00005	0.000009	<0.0000003	<0.00002	<0.00001	0.0001
PW14-04	18-Mar-2022	<0.007	0.002	55	6.4	0.00002	0.05	0.0005	1.1	-	0.0004	14	0.5	<0.000014	0.00002	9.4	<0.000019	<0.000034	0.000008	<0.000002	<0.00009	<0.00001	0.0002
PW14-04	17-Jun-2022	<0.007	0.001	42	4.9	<0.000007	0.03	0.0002	1.1	-	0.0004	11	0.4	<0.000014	0.00002	8.7	<0.000019	<0.000034	0.000006	<0.000002	<0.00009	<0.00001	0.00008
PW18-01	29-Aug-2022	<0.007	0.0007	3.6	0.07	<0.000007	0.003	0.0002	0.3	-	0.0001	5.2	0.04	<0.000014	<0.000004	1.5	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
PW18-01	12-Sep-2022	<0.007	0.0007	3.5	0.06	<0.000007	0.003	0.00008	0.3	-	0.0001	4.9	0.04	<0.000014	<0.000004	1.4	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
PW18-01 DUP	29-Aug-2022	<0.007	0.0007	3.6	0.07	<0.000007	0.003	0.0001	0.3	-	0.0001	5.2	0.04	<0.000014	0.00001	1.5	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.00001
PW18-02	25-Aug-2022	<0.008	0.0003	2.9	0.01	<0.00001	0.001	<0.00001	0.3	-	<0.00003	4.3	0.04	<0.00002	<0.000007	1.3	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	<0.000001
PW18-02	12-Sep-2022	<0.007	0.0003	2.8	0.010	<0.000007	0.001	<0.000024	0.3	-	0.0002	4.1	0.04	<0.000014	<0.000004	1.4	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	<0.0000007
PW18-03	25-Aug-2022	<0.008	<0.000008	2.9	0.0006	<0.00001	0.001	<0.00001	0.3	-	<0.00003	4.9	0.05	<0.00002	<0.000007	1.5	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	<0.000001
PW18-03	12-Sep-2022	<0.007	<0.000007	2.9	0.001	<0.000007	0.001	<0.000024	0.3	-	0.0002	4.8	0.05	<0.000014	<0.000004	1.6	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	<0.0000007
PW18-04	25-Aug-2022	<0.008	<0.000008	2.8	0.0004	<0.00001	0.002	<0.00001	0.3	-	<0.00003	5.2	0.05	<0.00002	<0.000007	1.5	<0.00002	<0.00004	<0.000003	<0.000002	<0.0001	<0.0002	<0.000001
PW18-04	12-Sep-2022	<0.007	0.00006	2.8	0.0007	<0.000007	0.002	0.0001	0.3	-	0.0002	5.0	0.05	<0.000014	<0.000004	1.6	<0.000019	<0.000034	<0.0000026	<0.000002	<0.00009	<0.00001	0.000002

Station (Monitoring Plan)	Date	V-d	Zn-d	Zr-d	Hg-d	Silica Reactive	Radium 226	Chlorophyll a	BOD5
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
PW14-03	18-Mar-2022	0.0003	23	0.00006	-	-	-	-	-
PW14-03	26-Apr-2022	<0.00002	25	0.00008	-	-	-	-	-
PW14-03	18-May-2022	<0.0001	23	<0.000015	-	-	-	-	-
PW14-03	8-Jul-2022	<0.00002	20	0.00005	-	-	-	-	-
PW14-03	5-Sep-2022	<0.00002	16	0.00004	-	-	-	-	-
PW14-03	13-Nov-2022	<0.00002	16	0.00005	-	-	-	-	-
PW14-03 DUP	26-Apr-2022	<0.00002	25	0.00007	-	-	-	-	-
PW14-04	10-Feb-2022	<0.0000007	21	<0.000004	-	-	-	-	-
PW14-04	18-Mar-2022	<0.00002	21	<0.000003	-	-	-	-	-
PW14-04	17-Jun-2022	<0.00002	15	<0.000003	-	-	-	-	-
PW18-01	29-Aug-2022	<0.00002	1.6	<0.000003	-	-	-	-	-
PW18-01	12-Sep-2022	<0.00002	1.4	<0.000003	-	-	-	-	-
PW18-01 DUP	29-Aug-2022	<0.00002	1.6	<0.000003	-	-	-	-	-
PW18-02	25-Aug-2022	<0.00005	0.8	<0.000006	-	-	-	-	-
PW18-02	12-Sep-2022	<0.00002	0.7	<0.000003	-	-	-	-	-
PW18-03	25-Aug-2022	<0.00005	0.8	<0.000006	-	-	-	-	-
PW18-03	12-Sep-2022	<0.00002	0.7	<0.000003	-	-	-	-	-
PW18-04	25-Aug-2022	<0.00005	0.8	<0.000006	-	-	-	-	-
PW18-04	12-Sep-2022	<0.00002	0.8	<0.000003	-	-	-	-	-

Appendix E.

2022 IEG Site Inspection Memo

2022 Myra Falls Mine annual reclamation inspection

PREPARED FOR

Nicole Pesonen, Myra Falls Mine Ltd.

PREPARED BY

J. Anderson, M. Iverson & E. Kennedy

Integral Ecology Group

January 10, 2023

Project No. NFMRAS-21

Distribution

Myra Falls Mine Ltd.—e-copy

Integral Ecology Group—e-copy

IEG Integral Ecology Group

1% FOR THE PLANET

Date: January 10, 2023
File: NFMRAS-21

Myra Falls Mine Ltd.
Myra Falls, BC

ATTENTION: NICOLE PESONEN, MYRA FALLS MINE LTD

REFERENCE: 2022 MYRA FALLS ANNUAL RECLAMATION INSPECTION

Dear Nicole:

Please find following our 2022 annual reclamation inspection report for the Myra Falls Mine.

We trust this information meets your requirements at this time and thank you for Integral Ecology Group's continued involvement in the Myra Falls Mine's reclamation programs. Should you have any questions or comments, please do not hesitate to contact me at the email or phone number listed below.

Yours sincerely,

Melissa Iverson, P.Ag.
Integral Ecology Group Ltd.
Soil Scientist, GIS Analyst
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604 353 7832

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GLOSSARY OF TERMS

%	percent
CRAB	Core Rack Area Borrow
CWHmm1	submontane coastal western hemlock moist maritime biogeoclimatic unit variant
IEG	Integral Ecology Group
ha	hectare(s)
kg	kilogram(s)
m	metre(s)
NDVI	normalized difference vegetation index
PSP	permanent sample plot
TDF	tailings disposal facility
TVC	total vegetation cover
UAV	unmanned aerial vehicle

1. INTRODUCTION

Since 2017, Integral Ecology Group (IEG) has been conducting an annual reclamation inspection of reclaimed areas at the Myra Falls Mine, and of areas potentially requiring reclamation or reclamation-related remedial actions. This report provides observations from IEG's 2022 inspection.

2. METHODS

On September 8, 2022, Jeff Anderson, Melissa Iverson, and Mike Newton of IEG conducted a site inspection of the Myra Falls Mine related to reclamation areas and activities. The inspection covered five primary areas/topics:

1. revegetation in the Waste-Rock Dump 2 and 3 area;
2. monitoring ingress of species in the Alder Reach area;
3. revegetation progress at the Core Rack Area Borrow (CRAB);
4. observations of cover materials and cover-crop establishment on the Lynx Tailings Disposal Facility (Lynx TDF) cover trial; and
5. an overview of developing revegetation along the Old Tailings Disposal Facility (Old TDF) seismic berm.

We discuss each of these inspection topics in detail below.

3. RESULTS

3.1. WASTE-ROCK DUMP 2 AND 3 AREA

Myra Falls Mine removed waste rock from the historic Waste-Rock Dump 2 and 3 area in the summer and early fall of 2017. Underlying materials at this location consist of native surficial materials—including soil and other surficial material—onto which the waste rock was dumped. Analysis in 2017 indicated that these materials have the edaphic properties of the 03/western hemlock–western red-cedar site series in the submontane coastal western hemlock moist maritime (CWHmm1) biogeoclimatic variant. Appropriate tree species for early revegetation are Douglas-fir (*Pseudotsuga menziesii*) and red alder (*Alnus rubra*); seedlings of both species were observed in non-mined forest directly above the location.

In 2018, surveys of the Waste-Rock Dump 2 and 3 area found sparse vegetation establishing in the upslope portion directly adjacent to the intact forest above. This vegetation made up approximately 5% of the ground cover in this area. The most common species were fireweed (*Chamaenerion angustifolium*), miner's lettuce (*Claytonia perfoliata*), thimbleberry (*Rubus parviflorus*), and pearly everlasting (*Anaphalis margaritacea*). Other notable native species

present included Douglas-fir, red alder, and red elderberry (*Sambucus racemosa*). Similar observations were made when the area was re-visited in 2019 and 2020, including the establishment of invasive and non-native species (e.g. Himalayan blackberry [*Rubus armeniacus*] and thistle [*Cirsium spp.*]).

The 2022 visit to the Waste-Rock Dump 2 and 3 focussed primarily on the mid to low slope of the dump area. Very limited vegetation was observed establishing on these areas of the slope, with total vegetation cover estimated at less than 0.1% (Figure 1). The sparse vegetation that has established has done so on small patches of finer-textured materials (Figure 2). Five years have passed since the original removal of the waste-rock materials; there has therefore been sufficient time to determine that the area will not revegetate spontaneously and will require concerted revegetation efforts.

Figure 1. Sparse to non-vegetated areas of the Waste-Rock Dump 2 and 3 area.

Figure 2. Pocket of vegetation on the Waste-Rock Dump 2 and 3 area.

At this time, no part of the Waste-Rock Dump 2 and 3 area is ready for revegetation. Most of the area still requires removal of waste rock, and the small section that does not (discussed above) may still be disturbed during relocation operations for the remainder of the waste rock. However, prior to final revegetation activity, interim revegetation using seeding with grasses and red alder can be a low-cost method of conditioning the soil for eventual planting and for preventing invasive-species establishment. It is recommended that the area be helicopter-seeded with either non-propagating agronomic grasses (e.g., oats, rye) or a native grass mix, as well as a component of red alder seed.

When waste-rock removal is complete, we recommend that the area be planted with red alder and Douglas-fir, at approximate stem densities of 2,500 and 2,000 stems per hectare (ha) respectively.

Analysis of element concentrations in this material was performed in 2018 and indicated high concentrations (approximately one to six times the Canadian soil quality guidelines for agricultural/parkland soils[1]) of cadmium, copper, lead, and zinc, as well as more marginally

[1] Canadian Council of Ministers of the Environment, CCME Summary Table.

elevated concentrations of arsenic, barium, and vanadium. Although it is possible that there is some contribution in these concentrations from naturally mineralized materials, it is also very likely that they reflect the effects of either constituent leaching from waste-rock materials or incomplete removal of these materials. The element concentrations in this area may not be so high as to severely limit revegetation of the slope, but any vegetation established on these materials will have to be monitored for element uptake and any risk to wildlife.

3.2. ALDER REACH

There are three distinct areas that make up Alder Reach (Figure 3):

1. Area #1—This area is furthest to the northwest and is characterized by fine-textured materials, coarse woody debris, and adjacent areas with intact forests. All of these factors are supporting rapid ingress of native species (Figure 4). This area is expected to regenerate into an ecosystem resembling the adjacent undisturbed forest.
2. Area #2—This center section of Alder Reach has limited vegetation and contains materials dominated by cobbles ~10 cm in diameter. Due to low water- and nutrient-holding capacities, this material is not currently supporting revegetation, and it is unlikely to support vegetation-community establishment in its current state (Figure 5).
3. Area #3—This area, the smallest of the three, is located closest to the road and contains fine-textured soil. It is primarily dominated by red alder, but with a heavy component of invasive species, most notably Himalayan blackberry. This area should be monitored for invasive species, and if they continue to persist as the alder canopy develops or if they prevent further development of an alder canopy, they will require controls.

Figure 3. Three distinct areas making up the Alder Reach site.

Figure 4. Alder Reach, Area #1—an area with fine-textured materials and natural ingress of native species.

Figure 5. Alder Reach, Area #2 - area with coarse-textured materials and limited vegetation.

3.3. CORE RACK AREA BORROW

The CRAB was hydroseeded in 2016 with the seed mix shown in

Table 1. Surveys conducted in 2017, 2018, and 2019 found that some species from the seed mix were growing in the area, particularly Oregon-grape, fireweed, pearly everlasting, and sedges. Natural ingress of species such as willow (*Salix* spp.), fescue (*Festuca* spp.), and alder from surrounding undisturbed areas was evident. However, germination from the hydroseeding was observed to be poor, and the majority of the area has been unvegetated for each of the three past site inspections.

Table 1. Seed mix used for hydroseeding the CRAB in 2016.

	Common name	Latin name	Percent of seed mix	Number of individual seeds
Shrubs	Dull Oregon-grape	*Mahonia nervosa*	0.13%	32,500
	Red huckleberry	*Vaccinium parvifolium*	2.22%	567,000
	Salal	*Gaultheria shallon*	20.90%	5,332,100
	Sitka mountain-ash	*Sorbus sitchensis*	0.02%	6,160
	Snowberry	*Symphoricarpos albus*	0.01%	3,560
Herbs	Pearly everlasting	*Anaphalis margaratacea*	49.74%	12,687,120
	Fireweed	*Chamaenerion angustifolium*	7.84%	2,000,000
	Goatsbeard	*Aruncus dioicus*	17.29%	4,409,612
	Upland sedges	*Carex* spp.	1.67%	426,000
	Vanilla-leaf	*Achlys triphylla*	0.17%	43,456

In 2022, the CRAB still remains mostly unvegetated, with some patches of natural ingress (Figure 6). As noted in the 2018 reclamation inspection report, signs of significant, active erosion at the CRAB were not evident, but the area should be frequently monitored for signs of active erosion. Hydroseeding at the site has had limited success and is not likely to perform better without a different seed mix. A seed mix comprised of aggressive native grasses would be more successful than the 2016 hydroseed mix, but could risk altering vegetation successional pathways by preventing shrub and tree establishment. Planting red alder is likely to provide the best results, though some areas are steep, and will require safety precautions during planting.

Currently, the best option is to hydroseed the steep slopes with an aggressive native seed mix (

Figure 7) and plant the remaining areas. Roads should be decommissioned and de-compacted prior to planting. Himalayan blackberry is also present at the CRAB, so any revegetation efforts will require controls for this species.

Figure 6. The majority of the CRAB remains unvegetated, with small pockets of establishing vegetation.

Figure 7. Core Rack Area Borrow. Options for reclamation in this area include hydroseeding oversteepened areas with an aggressive native seed mix, followed by planting the headscarp and old road areas with red alder or leaving for natural revegetation (LFN). Photo date: September 2019.

3.4. LYNX TAILINGS DISPOSAL FACILITY COVER TRIAL

Results of erosion monitoring at the Lynx TDF cover trial will be included in the annual report delivered by Wood PLC in spring 2023.

Though a spring material placement and seeding is recommended, the trial design required a fall material placement, so the revegetation plan for the trial called for an early September seed and fertilizer application of common barley (*Hordeum vulgare*) at 150 kg/ha, red alder at 2 kg/ha, and a balanced fertilizer at 150 kg/ha. There were operational delays which prevented placement of materials until late October, so seeding was not possible until November 1st. There has been limited establishment of grass and alder, likely due to the application occurring so late in the growing season. In addition, there has been significant erosion on the panel (Figure 8), much of it resulting from high-rainfall events in early November 2021. The panels were seeded again on September 21, 2022 with hybrid rye (*Secale* spp.) at a rate of 200 kg/ha, and application of a balanced fertilizer at 180 kg/ha.

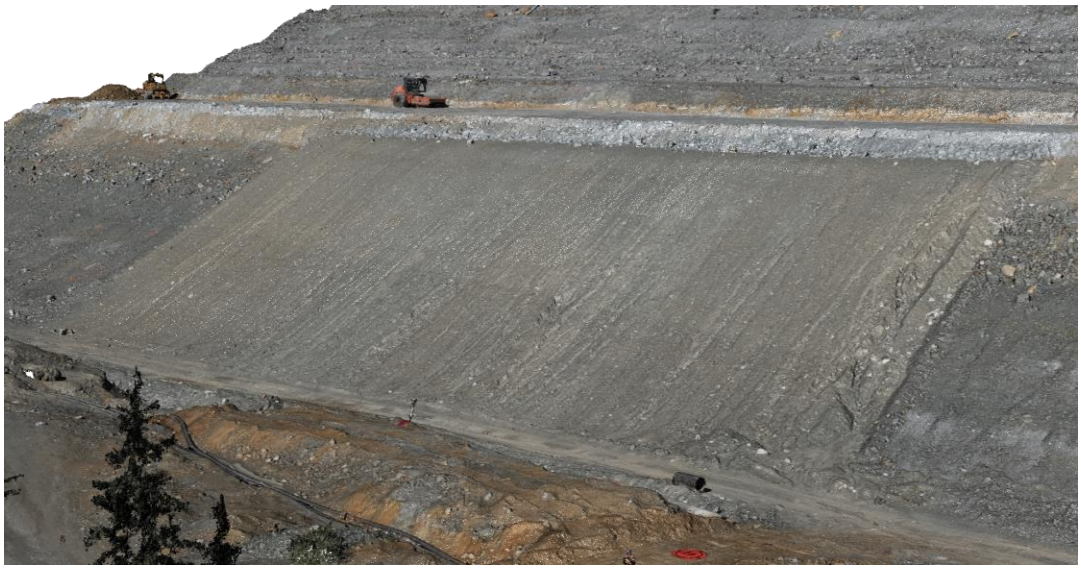

Figure 8. A 3-D rendering of the Lynx TDF cover trial panels based on unmanned aerial vehicle imagery collected in September 2022. Limited vegetation has established on the trial area, and substantial erosion has occurred.

Our recommendation remains that, where possible, materials be placed and seeded in the spring. When later placement is unavoidable, materials should be placed and seeded no later than early September.

3.5. OLD TAILINGS DISPOSAL FACILITY

The 2022 reclamation inspection included a pilot project to assess revegetation on the Old TDF using an unmanned aerial vehicle (UAV) equipped with a multispectral sensor. The purposes of this method are to:

- trial the replacement of leaf-area index (LAI) as a measure of above-ground vegetation with imagery collected via UAV; and
- assess the validity of using UAV-collected imagery to expand plot-level vegetation-cover data to the full site.

Pursuant to these objectives, imagery of the Old TDF area was collected on September 8, 2022 using a DJI M300 UAV equipped with a MicaSense Altum multispectral sensor. The flight plan specified a flying altitude of 100 metres (m) above ground level with 80% front and side overlap. A total of 377 images were collected and processed on "high" accuracy settings using Agisoft Metashape. The resulting orthoimagery was further processed into a heatmap showing the normalized difference vegetation index (NDVI), which is a standard relative measure of vegetation abundance. The true colour and NDVI heatmap, as well as the locations of the permanent sample plots (PSPs) are shown in Figure 9.

The average NDVI for each of the PSPs was compared to the LAI and total vegetation cover[2] (TVC) collected at each PSP during the last monitoring survey in 2020. Despite the temporal separation between the NDVI and these other measures, there is a statistically significant relationship between NDVI and both LAI (Figure 10) and TVC (Figure 11). This indicates that NDVI could replace (in the case of LAI) and augment (in the case of TVC) these measures of vegetation at the Old TDF. The use of NDVI has a major benefit over LAI and TVC assessments in that it collects data for the entirety of the site, rather than sampling a subset of the site within PSPs. This will allow identification of all areas with high (Figure 12) and low (Figure 13) levels of vegetation coverage for the full site, rather than only within PSPs.

We recommend that UAV remote sensing, along with LAI, be included in the next monitoring surveys of the Old TDF. If future results are similar to those presented here, we recommend continuing with the UAV remote-sensing component and discontinuing the LAI component thereafter.

[2] As estimated by ocular assessments.

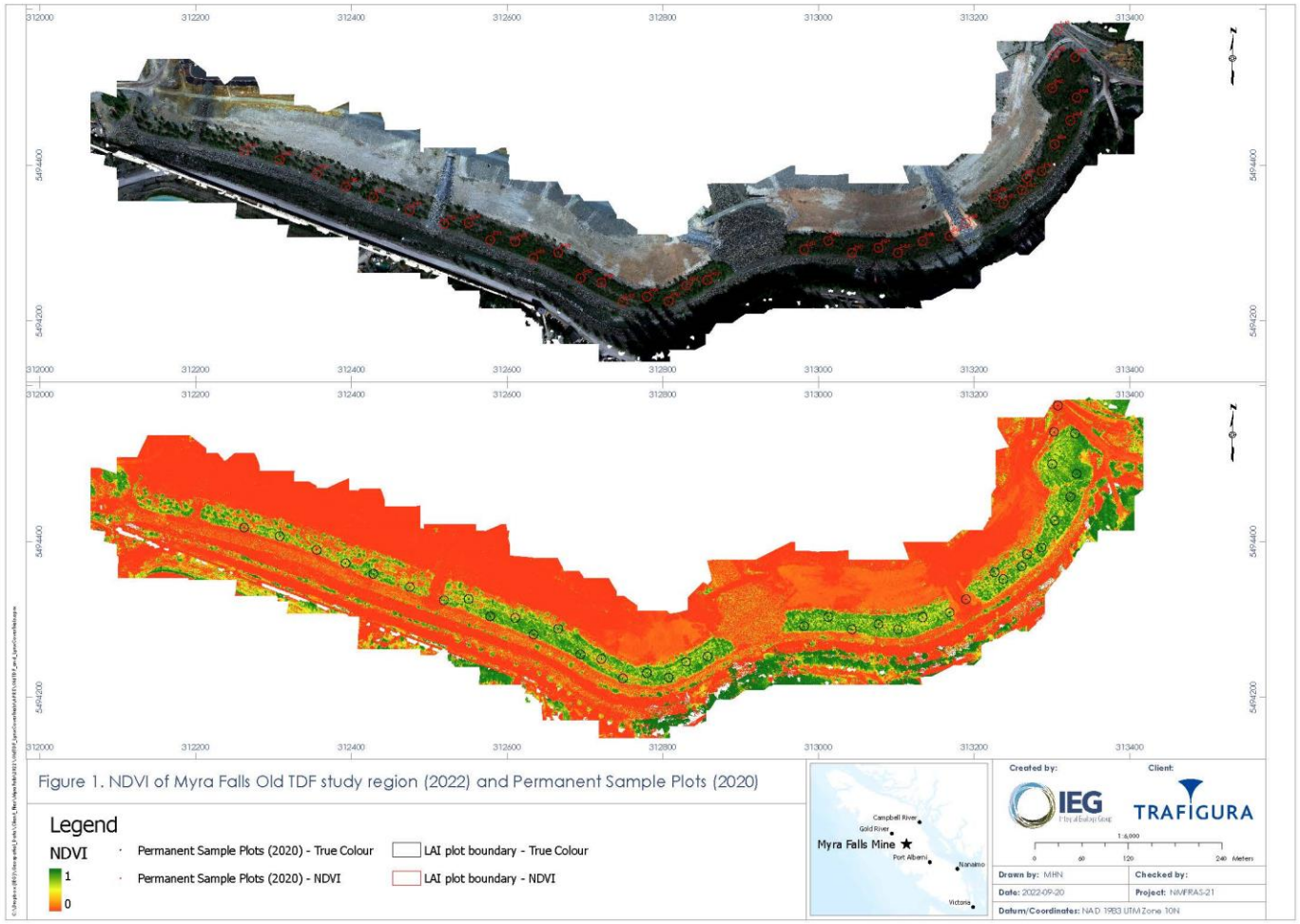

Figure 9. Normalized difference vegetation index of Myra Falls Mine Old TDF study regions (2022) and PSPs (2020).

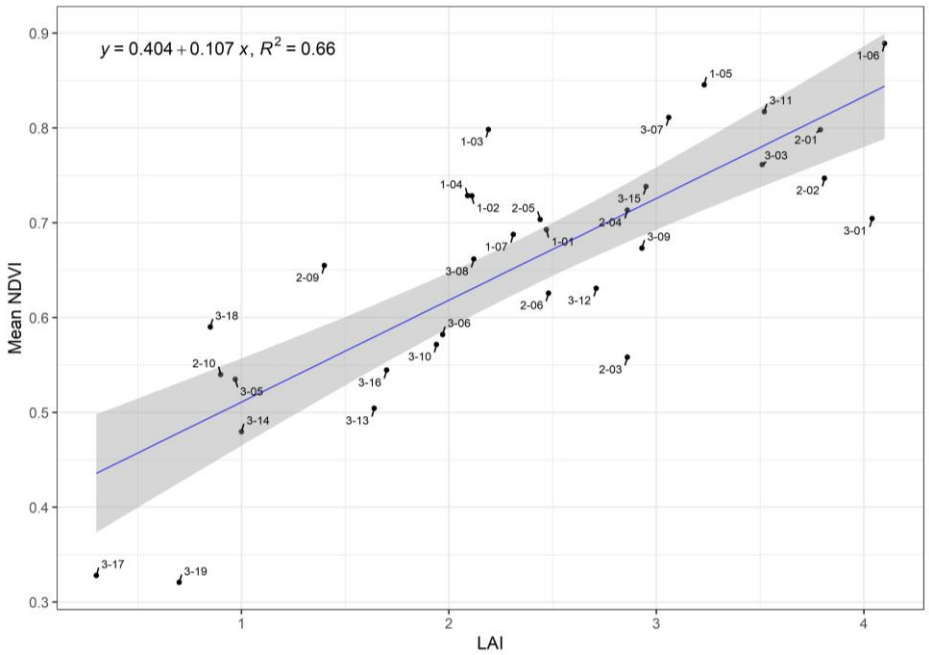

Figure 10. Leaf-area index versus mean NDVI across the Old TDF PSPs at Myra Falls Mine. Permanent sample plots 2-07 and 2-08 were dropped as outliers, due to the creation of a spillway at those PSPs between the recording of the LAI (2020) and the collection of the UAV imagery (2022).

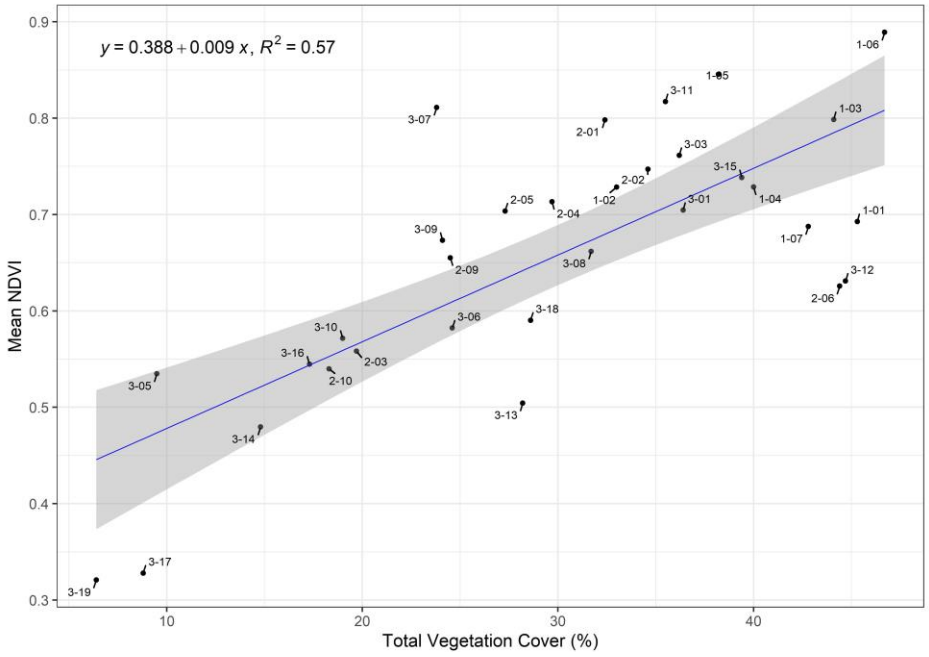

Figure 11. Total vegetation cover versus mean NDVI across the Old TDF PSPs at Myra Falls Mine. Permanent sample plots 2-07 and 2-08 were dropped as outliers, due to the creation of a spillway at those PSPs between the recording of the vegetation cover (2020) and the collection of the UAV imagery (2022).

Figure 12. Example of a high-vegetation area on the Old TDF berm.

Figure 13. Example of a low-vegetation area on the Old TDF berm.

4. CLOSURE

This report has been prepared by the authors and Qualified Professionals listed below. We trust the information provided in this report meets your requirements at this time. Please do not hesitate to contact us if you have any questions or comments.

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