DILLON CONSULTING

NOVA SCOTIA LANDS INC.

Open Hearth Park and Harbourside East 2021 Long Term Maintenance and Monitoring Groundwater Event

Final Report

March 2022 20-2862-2000

March 22, 2022

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Attention: Cory MacPhee, P.Eng.
Project Manager

Open Hearth Park and Harbourside East
2021 Long Term Maintenance and Monitoring Groundwater Event

Dear Mr. MacPhee:

Dillon Consulting Limited is pleased to submit the above referenced report. Should you have any questions or comments, please contact the undersigned at nwambolt@dillon.ca, (902) 562-9880 extension 5206 (office) or (902) 565-8539 (cellular).

Sincerely,

DILLON CONSULTING LIMITED

Nadine J. Wambolt, B.Tech., CET
Project Manager

NJW:kme

Enclosure

Our file: 20-2862-2000

Table of Contents

Figures

Tables

Appendices

References

Executive Summary

Nova Scotia Lands Inc. (NSLI) is a Crown Corporation of the Province of Nova Scotia responsible for the Long Term Maintenance and Monitoring Program (LTMM) implemented at Open Hearth Park (OHP) and Harbourside East (HE). NSLI retained Dillon Consulting Limited (Dillon) to conduct the LTMM program, which consists of an annual groundwater sampling program. The LTMM event completed in 2021 included measurement of hydraulic head levels and sample collection from monitor wells around the shorelines of OHP and across HE.

Analytical data were assessed in comparison to the September 2021 Nova Scotia Contaminated Sites Regulations (NS CSR) Tier I Environmental Quality Standards (EQS) for groundwater. Where Tier I EQS were not available (e.g., for some polycyclic aromatic hydrocarbons (PAHs) and metals in groundwater at non-potable sites), the Ontario Ministry of the Environment, Conservation and Parks (MECP) Groundwater Standards for use under Ontario's Environmental Protection Act were applied.

Groundwater quality trend analysis was performed for select monitor wells within the OHP and HE areas via Mann-Kendall analysis, and included PAH indicator parameters (i.e., anthracene, benzo(a)pyrene, chrysene, indeno (1,2,3-cd)pyrene, and naphthalene) and additional indicator general chemistry and metal parameters (i.e., sulfate, pH, TDS, and selenium). The purpose of the comparison of groundwater data collected during the LTMM monitoring event with post-remediation monitoring events is to identify changes (if any) in groundwater over time. In general, review of trend analysis indicates that the plume is stable, declining, and not migrating though fluctuating concentration trends for the select parameters. An increasing trend for pH in MCES-006-MW and sulphur (SO4) in MCES-201-MWB is indicated. Historical trend analysis indicated a potentially increasing trend for pH in MCES-001-MWB (2018 and 2019) that required further verification, as there was potential that the seal in this monitor well had failed. Monitor well MCES-001-MWB was decommissioned in 2020 and a replacement well (MCES-201-MWB) was installed in a newly drilled borehole. The trend analysis for the replacement well is the combined data of MCES-001-MWB (2019 and prior) and MCES-201-MWB (2020 onward). Review of the combined data indicates an increasing trend for pH.

Analytical results indicate no exceedances of the Tier I EQS or the default MECP standards for the 14 monitor wells sampled on the OHP site.

During the 2021 monitoring event for the HE site, three monitor wells, located in the area of the former Domtar site, had organic parameter concentrations above the Tier I EQS or the default MECP standards (used when no Tier I EQS is available). Specifically, monitor well CODT-201-MWC had a naphthalene concentration that exceeded the Tier I EQS. Monitor wells CODT-201-MWA, CODT-201-MWC, and CODT-203-MWA contained multiple PAH parameter concentrations (i.e., anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene,

dibenzo(a,h)anthracene, and/or indeno(1,2,3-cd)pyrene) above the MECP standards (used when Tier I EQS are not available).

Dense non-aqueous phase liquid (DNAPL) and light non-aqueous phase liquid (LNAPL) were not measured in the OHP and HE LTMM wells during the 2021 program.

This report was prepared by Dillon Consulting Limited for the sole benefit of our client, NSLI. The conclusions reflect Dillon's judgment in light of the information available to it at the time of preparation. Any use which a third party makes of this report or any reliance on or decisions made based on it are the responsibilities of such third parties. Dillon accepts no responsibilities for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

1.0 Introduction

The footprint of the Sydney Tar Ponds and former Coke Ovens Site encompassed approximately 100 hectares of property within the Muggah Creek Watershed in the Cape Breton Regional Municipality of Nova Scotia. Extensive testing identified widespread contamination of soil, groundwater, surface water and sediments due to historical long term industrial use of the property. The remediation project, managed by the Sydney Tar Ponds Agency (STPA), was a complex undertaking, consisting of many design and construction elements completed over several years. An Environmental Effects Monitoring (EEM) and Surface Water Compliance Monitoring Program was established as part of the remediation program to assess performance of construction/remedial measures.

Long term maintenance and monitoring (LTMM) was one of the major components of the proposed remedial strategy designed to be carried out following the completion of the primary remediation project (2009-2014). Nova Scotia Lands Inc. (NSLI) is a Crown Corporation of the Province of Nova Scotia with the responsibility for former lands involved in the Tar Ponds and Coke Ovens cleanup, now known as Open Hearth Park (OHP) and Harbourside East (HE) (Figures 1 and 2). As such, NSLI is responsible for the LTMM, which has been implemented at OHP and HE.

This document details the groundwater monitoring completed at OHP and HE in 2021. Section 1.0 describes the scope of work. Methodologies are detailed in Section 2.0. Findings are presented in Section 3.0 and summarized in Section 4.0. Recommendations are presented in Section 5.0. Data tables and supporting information are found in appendices referenced throughout the document.

1.1 Scope of Work

The annual LTMM groundwater sampling program for OHP and HE consists of low flow groundwater sampling at 40 specific monitor wells located around the shorelines of OHP (i.e., North and South Ponds) and at HE (i.e., the former Coke Ovens site), and the collection of water levels, including product measurement checks, at an additional 23 monitor wells not designated for sampling. In total of 63 monitoring wells (i.e., 40 sampling wells and 23 additional select wells) are included in the program in accordance with the request for proposal (RFP) NSLAND111.

Each of the 40 monitor wells scheduled for sampling, four field duplicate samples, and an equipment blank sample were analyzed for polycyclic aromatic hydrocarbons (PAHs), metals and general inorganic chemistry parameters. One monitor well (i.e., CODT-201-MWC located on the northwest portion of HE at the former Domtar site) was also analyzed for petroleum hydrocarbons.

Nineteen of the 23 additional select monitor wells were checked for water level and product. Monitor well SCU7-002 MWB could not be located, monitor wells SCU27-005-MWA and SCU27-005-MWB were buried and could not be accessed, and monitor well SCU10-002-MW was found blocked above the water table.

Document Path: G:\GIS\141360\NSLI Figures\OHP and HE 2021\Figure 1 Site Location OHP and HE 2021.mxd

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OPEN HEARTH PARK AND HARBOURSIDE EAST
2021 GROUNDWATER MONITORING EVENT

SITE LOCATION
Figure 1

Harbourside East
Open Hearth Park

0 250 500 1,000 1,500 m

SCALE 1:40,000

N
W E
S

MAP DRAWING INFORMATION:
Government of Canada, Natural Resources Canada,
Earth Science Sector, Center for Topographic Information.
Sydney 11 K/1, ESRI Basemap
Information current as of 1994.

Province of Nova Scotia Mapping

MAP CREATED BY: SCM
MAP CHECKED BY: NJW
MAP PROJECTION: NAD 1983 UTM Zone 20N

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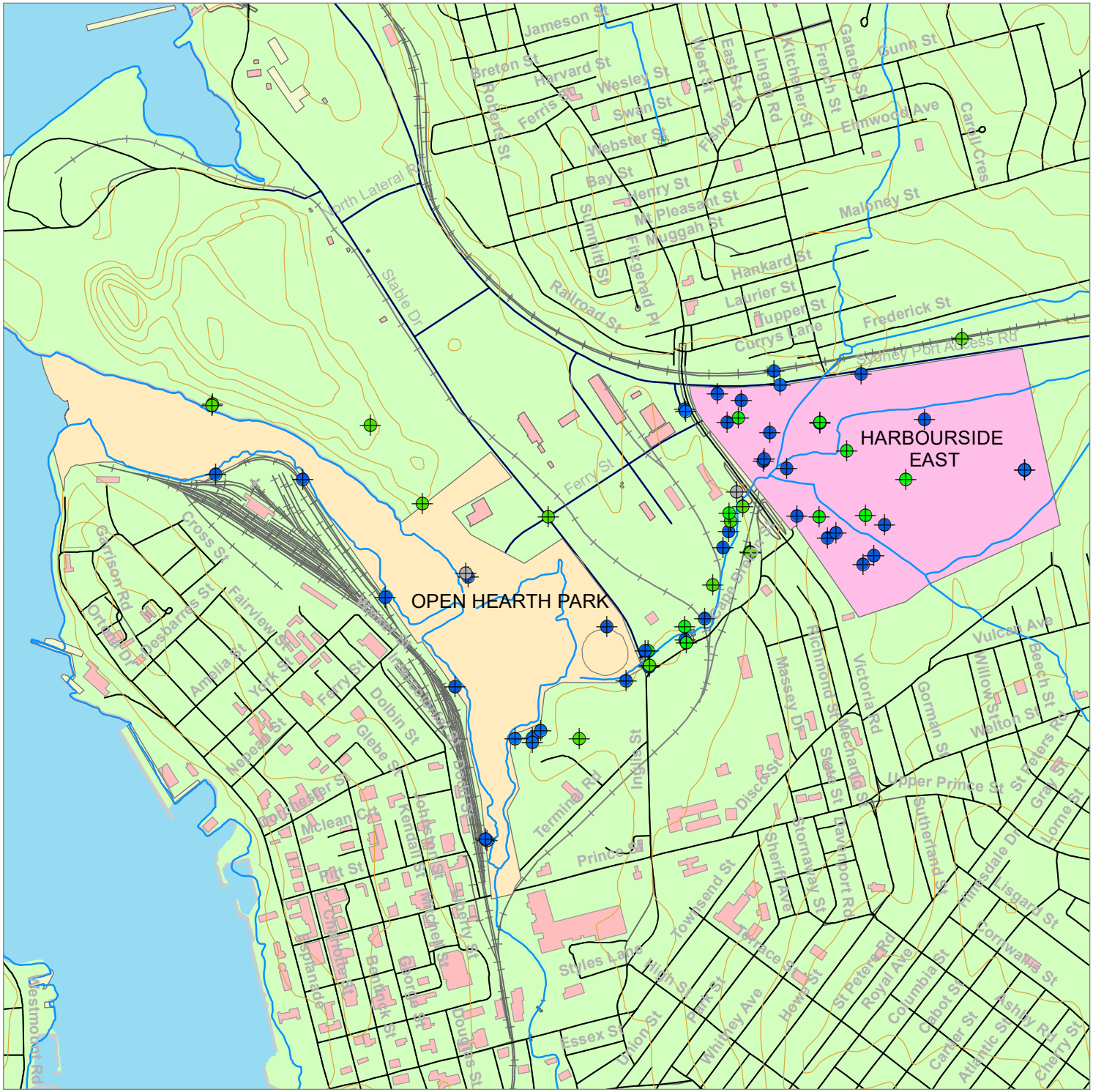
Date: 2022-02-28



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OPEN HEARTH PARK AND
HARBOURSIDE EAST

2021 GROUNDWATER MONITORING EVENT

STUDY AREAS

FIGURE 2

LEGEND

Monitoring Wells

- Active Water Level Only
- Active Sample and Water Level
- Removed From Program, Destroyed and/or Decommissioned

0 50 100 200 300 m

MAP DRAWING INFORMATION:
Province of Nova Scotia Mapping

MAP CREATED BY: SCM
MAP CHECKED BY: NJW
MAP PROJECTION: NAD 1983 UTM Zone 20N

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As part of the 2021 LTMM, monitor well repairs were completed at MSES-012-MWA, CODT-103-MW, COTS-001-MWB, NOCO-014-MWB, MSES-013-MWB and CODT-203-MW. Monitor well SCU10-002-MW was found blocked above the water table. Decommissioning of monitor well SCU10-002-MW was recommended, and following approval from NSLI, was completed. Monitor wells SCU27-005-MWA and SCU27-005-MWB were buried approximately 0.6 meters (m) below grade and will have to be uncovered and brought to grade prior to the 2022 LTMM.

2.0 Project Methodologies

Methodologies are provided in the following sub-sections:

- Section 2.1 Health and Safety Processes
- Section 2.2 Quality Control Processes
- Section 2.3 Groundwater Sampling
- Section 2.4 Data Compilation/Assessment

2.1 Health and Safety Processes

Dillon developed a site-specific health and safety plan (H&S) for groundwater monitoring. Site specific information, such as, local emergency contact information and hospital routes are included in the plan, as well as, but not limited to the following:

- Identification of site activities and potential hazards;
- Completion of utility locates;
- Description of safe work practices and procedures;
- Description of PPE;
- Identification of safety training and first aid requirements;
- Identification of COVID-19 protocols and restrictions; and,
- Identification of emergency response procedures.

The project manager reviewed the H&S with field personnel prior to their mobilizing to the site. Field personnel were responsible for following the H&S, including conducting a job hazard analysis upon arrival at the site (i.e., OHP and HE).

2.2 Quality Control Process

Data Quality Objectives (DQOs) and applicable Standard Operating Procedures (SOPs) were reviewed with the team prior to embarking on field work. Other QC measures included, but were not necessarily limited to the following:

- Assignment of a coordinator to oversee field activities;
- Use of dedicated materials and equipment to reduce/prevent the potential of sample contamination;

- For equipment requiring use at multiple stations, appropriate decontamination prior to and after each deployment;
- Use of laboratory supplied sample bottles/containers;
- Collection of an appropriate number of duplicates and blanks;
- Proper storage of samples on ice in coolers immediately after collection;
- Transport of samples to the laboratory (see below) on a daily basis; and,
- Daily documentation/review of notes.

Duplicate and Blank Collection

Four field duplicate samples, and one equipment blank were collected during the 2021 monitoring event. The LTMM programs include trip blanks accompanying samples being analyzed for volatile organic compounds. Volatile samples were transported together to minimize the number of trip blanks. As only one monitor well (i.e., CODT-201-MWC) from OHP and HE is analysed for BTEX/TPH, it was collected and transported at the same time as the Harbourside Commercial Park (HCP) samples (which include BTEX and TPH analysis), and trip blank.

Laboratory QC

Samples were delivered to Bureau Veritas (BV) Laboratories in Sydney, Nova Scotia for analysis. BV is accredited through the Standard Council of Canada (SCC) and is a member of the Canadian Association for Laboratory Accreditation (CALA). BV also applied internal laboratory QC measures including:

- Laboratory duplicates;
- Matrix Spikes (MS);
- Spike Blanks (Process Recovery %); and,
- Method blanks.

Laboratory DQOs, including MS recoveries, process recoveries, relative percent differences, and holding times, were reviewed to assess the quality of the data.

2.3 Monitor Well Repairs and Decommissioning

As noted above, the 2021 LTMM included the following monitor well repairs and decommissioning:

- MSES-012-MWA - Monitor well required a new well cap and lock. Both were replaced during the 2021 LTMM.
- CODT-103-MW - The monitor well itself was undamaged; however, the flushmount cover was found destroyed. The cover was replaced during the 2021 LTMM.
- COTS-001-MWB - The upper portion of the monitor well was knocked over on its side. It appeared that a rubber coupling and a metal tie (from a previous repair) had come loose. The monitor well was repaired, with additional seal added to the coupling.
- CODT-203-MW - Lock was seized and was subsequently replaced.
- NOCO-014-MWB - The lock was seized and cap damaged. Subsequently the cap and lock were replaced.

- MSES-013-MWB – The key broke off in lock and could not be removed. Lock and cap were replaced.
- SCU10-002-MW - Monitor well blocked at 2.71 m (above the water table). The monitor well was found with no protective flushmount cover or J-plug and the well tubing was partially removed from the well. Decommissioning was recommended and, upon approval from NSLI, completed on December 21, 2021. Review of the monitor well log details for this well indicate that it was screened at an interval similar to other wells in this general area that remain part of the LTMM program. Further, these other nearby wells prove sufficient coverage for this area. Therefore, replacement of SCU10-002-MW is not considered necessary at this time.

Monitor wells SCU27-005-MWA and SCU27-005-MWB were found buried (approximately 0.6 m below grade). It is recommended that both monitor wells be uncovered (a machine will be required) and brought to grade prior to the 2022 LTMM. Following repairs, it is recommended that these two wells be re-surveyed.

2.4 LTMM Groundwater Monitoring Program

Groundwater characteristics within the boundaries of the Muggah Creek Watershed were previously assessed through the installation and testing of a significant number of monitor wells as part of Phase II and III Environmental Site Assessments (ESAs) (JDAC, 2001 and 2002). The wells were terminated within fill, native till, and shallow, intermediate and deeper bedrock units. Analytical data collected in conjunction with the ESAs, as well as in subsequent sampling events, confirmed widespread impacts, particularly PAHs, metals, and inorganic parameters, resulting from long term industrial use of the land. The JDAC data also suggested that the more permeable fractured shallow bedrock (SRx) unit represented the primary pathway for contaminant migration. The sampling wells included in the LTMM plan are specifically located in different areas across the sites in an attempt to monitor and assess the performance of remediation.

The field component of the 2021 groundwater monitoring event was consistent with pre-construction/ baseline and quarterly construction monitoring events and involved the following activities:

- Measurement of hydraulic head levels;
- Low flow groundwater sample collection; and,
- Data compilation/assessment and reporting.

2.4.1 Measurement of Hydraulic Head Levels

The number of monitor wells measured for water levels during the 2021 groundwater monitoring event was 59 (i.e., 40 sampling and 19 water level wells).

Depth to water and the presence of light non-aqueous phase liquid (LNAPL) and/or dense non-aqueous phase liquid (DNAPL) in wells were manually measured using an interface probe. Measurements were taken from established reference points and water level information was recorded on field sampling sheets.

2.4.2 Sample Collection

Using 12V submersible pumps, installed as part of the EEM program for the Sydney Tar Ponds (STP) remediation project, water was purged from each well scheduled for sample collection until select field parameters stabilized, including water level. The rate of flow (0.1 to 0.4 liters/minute) at each well was controlled by an in-line valve. In instances where the dedicated submersible pumps were no longer working, a peristaltic pump was used. The water level was measured at 3-minute intervals and maintained at a constant head; if the water level started to drop, the flow rate was reduced to maintain a constant head. The sample tube was connected to a flow-through cell containing a Horiba U-22 multi-parameter probe. The general stabilization of the following parameters was used as indication that water representative of the groundwater in the aquifer was being collected:

- pH (+/- 0.1 unit);
- Specific conductance (+ / - 3%);
- Temperature (+ / - 3%); and,
- Turbidity (+ / -10% for values greater than 1 NTU).

The time required for sampling generally ranged from 15 to 30 minutes, and typically 6 to 12 liters (L) of water was removed. Similar to the EEM program, stabilization of turbidity provided some challenges for a number of wells. In these cases, additional parameters, including dissolved oxygen (DO) and oxidation reduction potential (ORP), were referenced to confirm stabilized conditions.

2.4.3 Groundwater Analysis

Pursuant to RFP NSLAND111 Groundwater Monitoring Services, groundwater samples were analyzed for PHCs (i.e., CODT-201-MWC sample only), PAHs, metals and general chemistry parameters, as listed in Table 1. PHC and PAH sample bottles were filled with no head space. Metal aliquots were field filtered and preserved with nitric acid in order to maintain constituents in solution. Samples were delivered to the Canadian Association for Laboratory Accreditation (CALA) certified laboratory BV in Sydney, Nova Scotia for analysis.

Table 1 Water Quality Analytical Suite of Parameters

PHC[1]	PAHs	General Chemistry	Metals (dissolved)
Benzene	Acenaphthene	Anion/Cation sums	Aluminum
Toluene	Acenaphthylene	Ion Balance (% Difference)	Antimony
Ethylbenzene	Anthracene	Langelier Index @ 4&20 C	Arsenic
Total Xylenes	Benzo(a)anthracene	Saturation pH @ 4&20 C	Barium
C6-C10 (Less BTEX)	Benzo(a)pyrene	Alkalinity (total as CaCo3)	Beryllium
>C10-C16 Hydrocarbons	Benzo(b)fluoranthene	Sodium	Bismuth
>C16-C21 Hydrocarbons	Benzo(j)fluoranthene	Potassium	Boron
>C21-<C32 Hydrocarbons	Benzo(k)fluoranthene	Calcium	Cadmium
Modified TPH (Tier I)	Benzo(g,h,i)perylene	Magnesium	Chromium
	Chrysene	Chloride	Cobalt
	Dibenz(a,h)anthracene	TDS Colour	Copper
	Fluoranthene	Nitrate	Iron
	Fluorene	Nitrite	Lead
	Indeno(1,2,3-cd)pyrene	Nitrate + Nitrite	Manganese
	Naphthalene	Nitrogen (Ammonic N)	Mercury (Total)
	Perylene	Total Organic Carbon	Molybdenum

PHC[1]	PAHs	General Chemistry	Metals (dissolved)
	Phenanthrene Pyrene 1-methylnaphthalene 2-methylnaphthalene	Orthophosphate pH Silica Sulphate Turbidity Conductivity	Nickel Phosphorus Selenium Silver Strontium Thallium Tin Titanium Uranium Vanadium Zinc

Note:
1. Since 2015, only monitor well CODT-201-MWC has been sampled for PHC.

2.5 Data Compilation/Assessment

BV provided analytical results in a database compatible format, alleviating potential errors associated with manual entry. Data tables generated as part of the 2021 monitoring event also include available post-remediation data. Based on historical data, the following parameters, are used as indicator parameters for OHP and HE:

- PAHs: anthracene, benzo(a)pyrene, chrysene, indeno(1,2,3-cd)pyrene and naphthalene.

Additional general chemistry and metal parameters were also selected for Mann-Kendall analysis at three monitor wells, which are located in the vicinity of the solidification/stabilization (S/S) area in consideration of monitoring the S/S performance over the long term period:

- General chemistry and metals: selenium, sulfate, pH and TDS.

Trend analysis was not completed for PHCs, as only monitor well CODT-201-MWC is sampled for PHCs and detected concentrations have been below the Tier I EQSs.

2.5.1 Regulatory Framework

Pursuant to RFP NSLAND111 Groundwater Monitoring Services, the remedial criteria used for this assessment were the Tier I Environmental Quality Standards (EQS) for groundwater established pursuant to the Nova Scotia Contaminated Sites Regulations (NS CSR), which came into effect in 2013 and were updated in September 2021. The subject property is classified as having commercial receptors, non-potable groundwater usage and coarse-grained soil. Where Tier I EQS are not available (e.g., for most PAHs and metals in groundwater at non-potable sites), the Ontario Ministry of the Environment, Conservation and Parks (MECP) Groundwater Standards for use under Ontario's Environmental Protection Act were used.

2.5.2 Groundwater Quality Trend Analysis – Mann Kendall

Mann-Kendall analysis as a non-parametric statistic test routinely used to assess the stability of solute plume. At least four independent sampling events are required to evaluate groundwater quality trends via Mann-Kendall analysis. The Mann-Kendall test procedure starts by comparing the most recent round

of water quality data with the results of earlier rounds. Non-detect data values are typically assigned a value that is half the laboratory detection limit. The Mann-Kendall test is not designed to account for seasonal variation in data, rather Mann-Kendall identified the trend of concentrations in individual wells for individual parameters (stable, decreasing, or increasing).

Based on a review of the analytical results from the LTMM and available post-remediation data, parameters with concentrations consistently (or historical consistently) above applicable standards were selected for Mann-Kendall analysis. These include PAH indicator parameters anthracene, benzo(a)pyrene, chrysene, indeno(1,2,3-cd)pyrene and naphthalene. Additional indicator general chemistry and metal parameters (i.e., selenium, sulfate, pH, and TDS) were also selected for Mann-Kendall analysis at three monitor wells, which are located in the vicinity of the S/S area in consideration of monitoring the S/S performance over the long term period. Up to four rounds (if available) of post-remediation groundwater analytical data were applied for performing the trend analysis for the indicator parameters.

3.0 Results

Results are presented in the following subsections:

- Section 3.1 Weather Conditions and General Observations
- Section 3.2 Groundwater Flow and Hydraulic Head Levels
- Section 3.3 OHP Findings
- Section 3.4 HE Findings
- Section 3.5 QC Summary

3.1 Weather Conditions and General Observations

The current meteorological station (i.e., Sydney A, Climate ID: 8205700/8205701) is an official in-situ station established by Environment Canada since 1941. Historical precipitation recordings for the Sydney area can be traced back as far as 1870. Comparison of the recordings at the Sydney A station indicates that precipitation of approximately 1695.6 millimeters (mm) was recorded for 2021, which is slightly more than the normal value of yearly precipitation of 1517 mm (i.e., as recorded between 1981 and 2010) (http://climate.weather.gc.ca). The monthly precipitation recorded for November 2021 was 364.0 mm. The total precipitation recorded between November 30, 2021 and December 13, 2021 (the duration of OHP and HE sampling program) was 60.5 mm.

3.2 Groundwater Flow and Hydraulic Head Levels

A survey of the EEM program monitor well elevations across the OHP and HE sites was conducted in December 2011 and May 2014. As part of the 2020 LTMM program, replacement well MCES-201-MWB

(i.e., which replaced MCES-001-MWB) was surveyed. The hydraulic head for the monitor wells at the OHP and HE sites are provided based on these surveys.

The hydraulic head data obtained from the monitoring areas during the 2021 monitoring event were employed to plot the equipotential groundwater contours. The groundwater contours were identified for different media within the unconsolidated till and/or fill unit (Figure 3), the upper fractured shallow bedrock (Figure 4), and the intermediate/deep bedrock (Figure 5).

Review of the available equipotential contour plots for the three media units (i.e., the fill/till, shallow bedrock and intermediate/deep bedrock) indicates that the groundwater flow direction in each of the units is generally consistent between the 2021 event and that observed during the previous LTMM programs and the EEM program associated with the STP remediation project. Based on hydraulic head data, the groundwater flows generally from HE towards the southwest into Sydney Harbour.

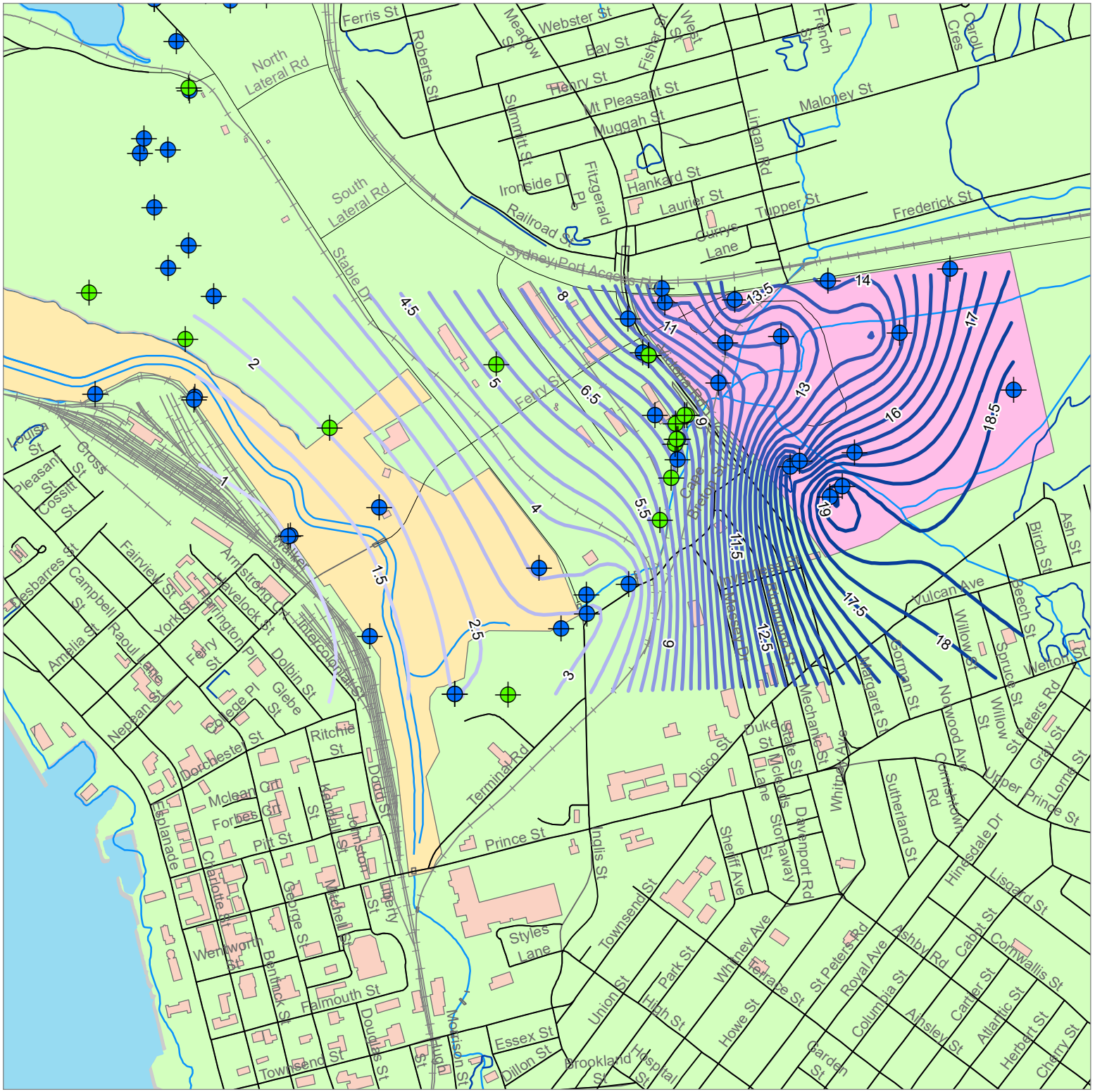
During the 2021 monitoring event, no DNAPL was measured in monitor well CODT-103-MWB (located on the northwest portion of HE in the former Domtar site), which was added to the LTMM program in 2015 for water level/product check only. DNAPL was last observed in CODT-103-MWB in 2016. DNAPL has not been observed in the remaining wells included in the OHP and HE LTMM. No LNAPL was measured in the OHP and HE LTMM wells during the 2021 program.

3.3 OHP Findings

The OHP area (i.e., formerly TP2/TP6/TP7 areas) includes the east, southeast, and western shorelines of the former Tar Ponds, as well as a portion of the former SYSCO property along Inglis Street. This area was remediated as part of the STP project using S/S processes. The LTMM program is used to evaluate groundwater quality post remediation. Results of the 2021 monitoring event are presented and discussed in the following subsections.

Monitor wells used for water level measurements in the OHP area include wells located in the “high dump” area, which is part of the HCP site and is located at the north end of the eastern shoreline. The high dump was used for disposal of blast furnace slag from the former steel plant. Historical in-filling of the southeast shoreline of the OHP used a variety of materials including slag, coal, brick and scrap wood, in addition to a former municipal disposal area on the south shoreline of OHP. The OHP also includes the footprint of a former open cooling pond used to contain steel plant effluents, a number of municipal outfalls, and a rail yard, bulk fuel terminal and a number of other former industrial sites on the west shoreline.

Results of the 2021 monitoring event at OHP indicate no exceedances of the Tier I EQS or the default MECP standards for the 14 monitor wells sampled on the OHP site. Monitor well locations are presented on Figure 6.



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OPEN HEARTH PARK AND HARBOURSIDE EAST
2021 GROUNDWATER MONITORING EVENT

Equipotential Groundwater Contours Fill TIII
FIGURE 3

LEGEND

- Active Water Level Only
- Active Sample and Water Level
- 6m — Groundwater Elevations are measured in meters above sea level (mASL)
- Open Hearth Park
- Harbourside East

0 50 100 200 300 m

N W E S

MAP DRAWING INFORMATION:
Province of Nova Scotia Mapping

MAP CREATED BY: SCM
MAP CHECKED BY: NJW
MAP PROJECTION: NAD 1983 UTM Zone 20N

FILE LOCATION: \\DILLON.CA\DILLON_DFS\SYDNEY\SYDNEYCAD\GIS\141360

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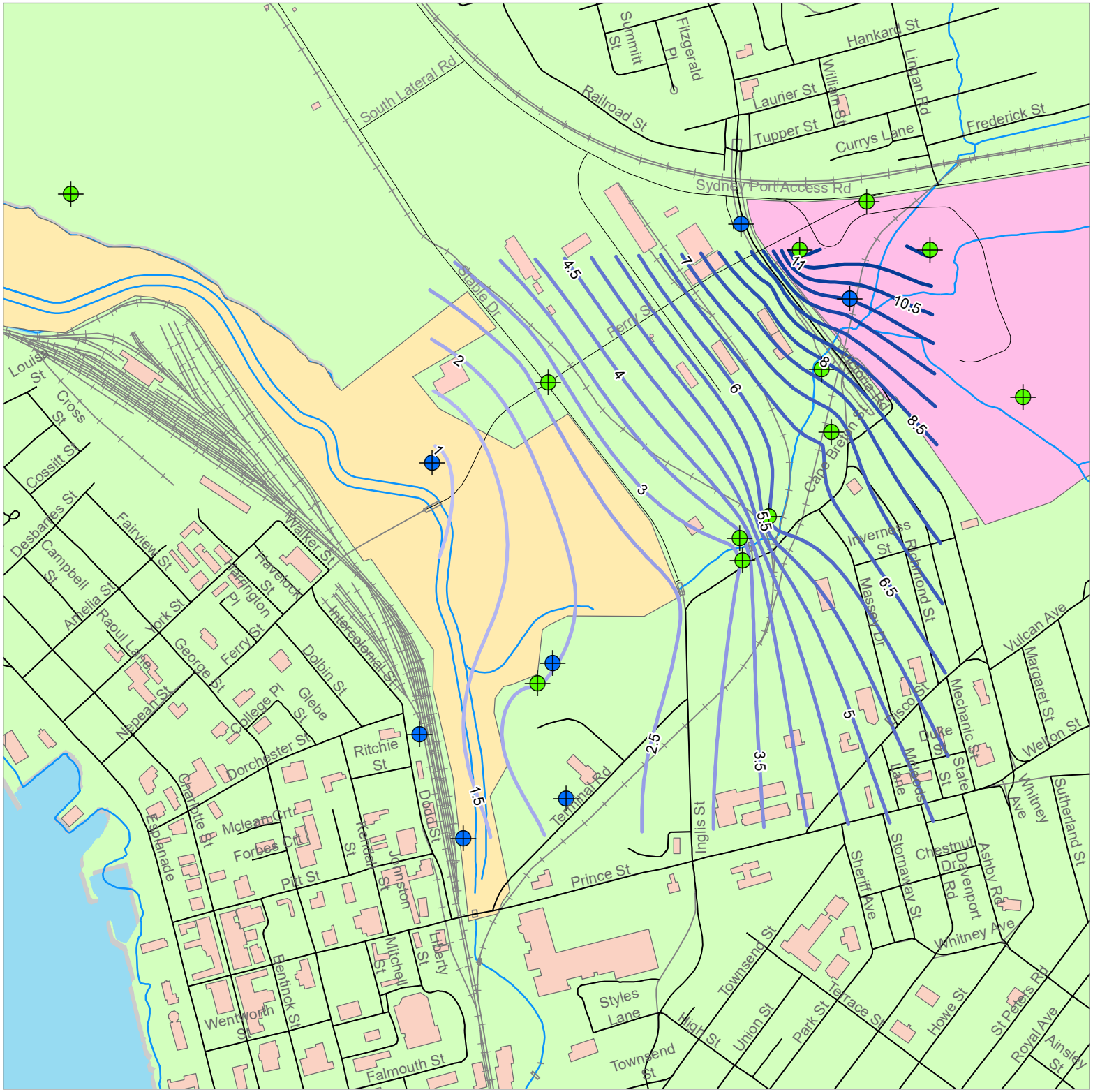
PROJECT: 20-2862
Date: 03/03/22



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OPEN HEARTH PARK AND
HARBOURSIDE EAST
2021 GROUNDWATER MONITORING EVENT

Equipotential Groundwater Contours Bedrock Aquifer
FIGURE 4

LEGEND

Equipotential Groundwater Contours

6m — *Groundwater Elevations are measured in meters above sea level, (mASL)*

Harbourside East

Open Hearth Park

Active Water Level Only

Active Sample and Water Level

0 50 100 200 300 m

N W E S

MAP DRAWING INFORMATION:
Province of Nova Scotia Mapping

MAP CREATED BY: SCM
MAP CHECKED BY: NJW
MAP PROJECTION: NAD 1983 UTM Zone 20N

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PROJECT: 20-2862
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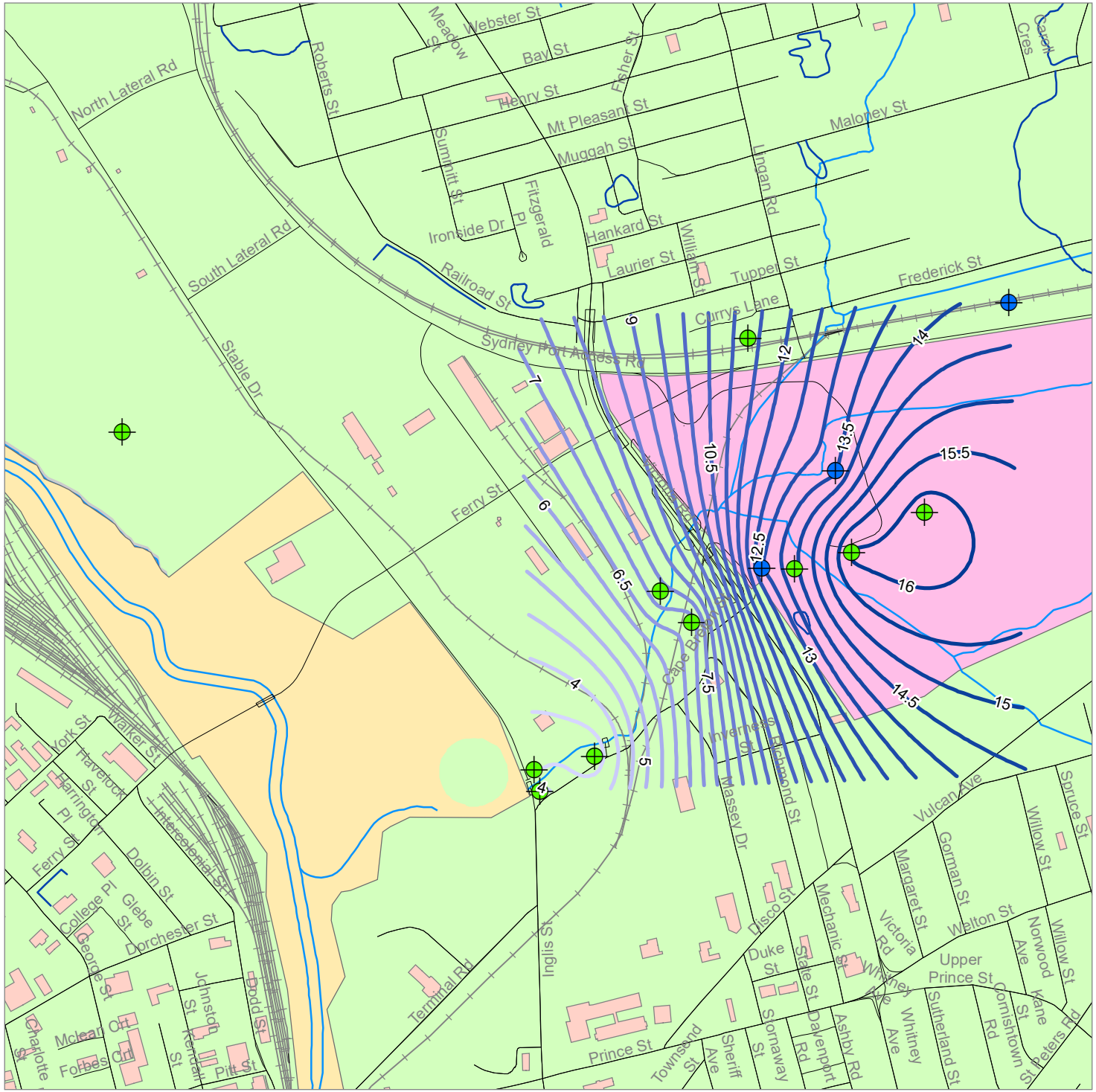

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OPEN HEARTH PARK AND
HARBOURSIDE EAST
2021 GROUNDWATER MONITORING EVENT

Equipotential Groundwater Contours Intermediate/Deep Bedrock Aquifer
FIGURE 5

LEGEND

Equipotential Groundwater Contours

6m *Groundwater Elevations are measured in meters above sea level, (mASL)*

Open Hearth Park

Harbourside East

Active Water Level Only

Active Sample and Water Level

0 50 100 200 300 m

N W E S

MAP DRAWING INFORMATION:
Province of Nova Scotia Mapping

MAP CREATED BY: SCM
MAP CHECKED BY: NJW
MAP PROJECTION: NAD 1983 UTM Zone 20N

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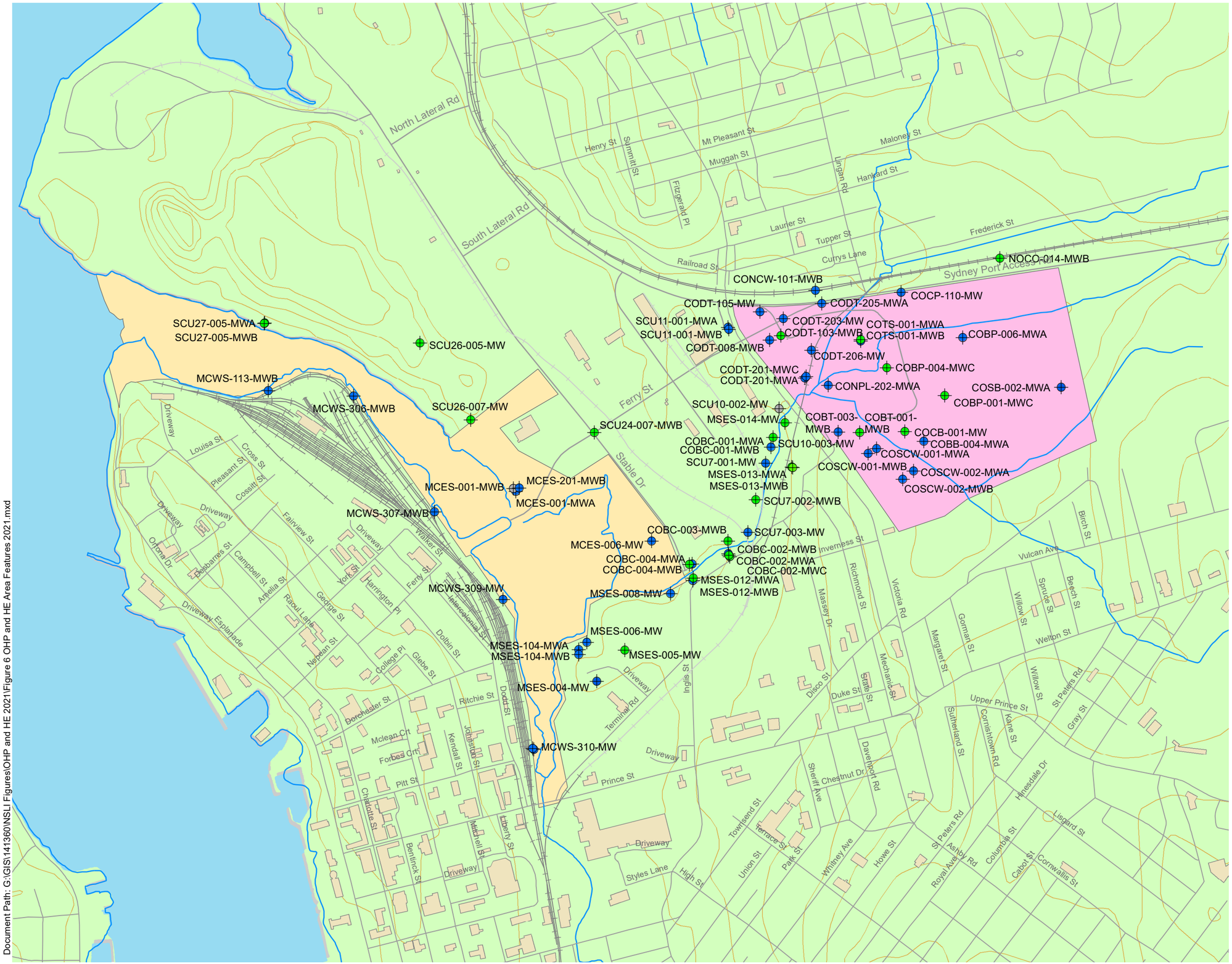

Document Path: G:\GIS\141360\NSLI Figures\OHP and HE 2021\Figure 6 OHP and HE Area Features 2021.mxd

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OPEN HEARTH PARK AND HARBOURSIDE EAST

2021 GROUNDWATER MONITORING EVENT

AREA FEATURES

Figure 6

LEGEND

Monitoring Wells

- Active Sample and Water Level
- Active Water Level Only
- Removed From Program, Destroyed and/or Decommissioned

Harbourside East

Open Hearth Park

NOTE:
MCES-001-MWB decommissioned 2020

0 75 150 300 450 m

MAP DRAWING INFORMATION:
Province of Nova Scotia Mapping

MAP CREATED BY: SCM
MAP CHECKED BY: NJW
MAP PROJECTION: NAD 1983 UTM Zone 20N

N W E S

DILLON CONSULTING

PROJECT: 20-2862

Date: 2022-02-28

3.3.1 OHP Groundwater Quality

Analytical data, including available historical post-remediation data for reference, are presented in Appendix A (Tables A-1 (TPH/BTEX), A-2 (PAHs) and A-3 (general chemistry and metals)). As stated previously, the 2021 LTMM Groundwater Monitoring Program included the collection of samples from 40 locations for analysis, 14 of which were collected from monitor wells located on the OHP site.

As noted above, analytical results indicate no exceedances of the Tier I EQS or the default MECP standards for the 14 monitor wells sampled on the OHP site. Table 2 summarizes indicator parameter concentrations for select monitor wells, which are located in the vicinity of the S/S area in consideration of monitoring the S/S performance over the long term period.

3.3.2 Trend Analysis – OHP

Mann-Kendall analysis was conducted based on available post-remediation data. Statistical analysis of available indicator parameter data indicated that select parameter concentration trends are stable or decreasing, as presented in Table 3.

Table 2 OHP – Trend Analysis Summary

WELL ID	INDICATOR PARAMETER	TREND
MCES-006-MW	Selenium	Stable
	pH	Increasing
	TDS	Decreasing
	SO4	Stable
MCES-001-MWA[1]	Selenium	Stable
	pH	Stable
	TDS	Stable
	SO4	Stable
MCES-201-MWB[2]	pH	Increasing
	TDS	Decreasing
	SO4	Increasing

Notes:
1. Mann-Kendall analysis from 2021 indicates an increasing pH trend in MCES-001-MWA; however, review of the data indicates incremental changes in the data reflective of a stable trend.
2. MCES-001-MWB was decommissioned in November 2020 and replaced with MCES-201-MWB Results in table are from the combined data of MCES-001-MWB (2019 and prior) and MCES-201-MWB (2020 onward).

Table 3 Summary of Indicator Parameter Concentrations

Well ID	Inorganic Parameters				
	Date	Selenium (ug/L)	Sulphur (mg/L)	TDS (mg/L)	pH
MECP Table 3[1]		63	-	-	-
MCES-006-MW	Mar 2013	6.3	34	374	7.50
	Jul 2013	<1.0	28	376	7.57
	Nov 2013	<1.0	34	390	7.61
	Dec 2014	2.9	70	260	8.91
	Dec 2015	3.3	88	260	9.44
	Dec 2016	<1.0	48	220	7.95
	Dec 2017	1.7	35	200	7.86
	Nov 2018	1.5	64	200	9.15
	Dec 2019	2.2	83	220	10.3
	Nov 2020	4.2	62	200	9.02
	Dec 2021	1.6	62	190	9.41
MCES-001-MWA	Mar 2013	1.8	85	631	11.8
	July 2013	1.6	160	542	11.8
	Dec 2014	1.8	120	730	11.9
	Dec 2015	1.5	160	540	11.8
	Nov 2016	1.9	190	730	11.9
	Dec 2017	1.8	160	560	12
	Nov 2018	1.5	110	580	12
	Dec 2019	1.6	130	570	11.9
	Nov 2020	Dry			
	Dec 2021	1.7	130	770	12.1
MCES-001-MWB (Decommissioned in 2020)[5]	Mar 2013	32	29	24,700	7.1
	July 2013	<10	25	21,000	7.42
	Nov 2013	<10	10	22,000	7.32
	Dec 2014	<1.0	6.7	21,000	7.4
	Dec 2015	<10	<2.0	22,000	7.49
	Nov 2016	<10	<2.0	19,000	7.42
	Dec 2017	<10	<2.0	21,000	7.47
	Nov 2018	1.8	94	520	11.9
	Dec 2019	1.6	96	510	12
MCES-201-MWB[5]	Dec 2020	<5	34	8000	7.49
	Dec 2021	1.6	130	720	12.1

Notes:

1. Ontario MECP Table 3 Full Depth Generic Site Condition Standards in a Non-potable Groundwater (Coarse Grained Soil) 2011.
2. There are no NSE Tier I EQS for Groundwater on a site with Coarse-Grained Soil, Non-potable Groundwater and Commercial/Industrial land use (2021) for selenium, sulphur, TDS or pH.
3. BOLD Exceeds the MECP Table 3 standards (when no Tier I EQS is available).
4. "-" Denotes no Tier I EQS or MECP standards available.
5. Due to a suspected monitor well seal failure (supported by 2018 and 2019 data), MCES-001-MWB was decommissioned in 2020 and replaced with MCES-201-MWB.

In general, review of trend analysis indicates general plume stability. An increasing trend for pH in MCES-006-MW and sulphur (SO4) in MCES-201-MWB is indicated. Historical trend analysis indicated a potentially increasing trend for pH in MCES-001-MWB (2018 and 2019) that required further verification, as there was potential that the seal in this monitor well had failed. Monitor well MCES-001-MWB was decommissioned in 2020 and a replacement well (MCES-201-MWB) was installed in a newly drilled borehole. The trend analysis for the replacement well is the combined data of MCES-001-MWB (2019 and prior) and MCES-201-MWB (2020 onward). Review of the combined data indicates an increasing trend for pH.

The groundwater quality trend analysis for the 2021 monitoring event was based on the available analytical results (i.e., a minimum four rounds of data are required) for the parameters with concentrations above (or historically above) the applicable guidelines.

Trend analysis is presented on Figure 7. Mann-Kendall tables are presented in Appendix B.

3.4 HE Area Findings

The HE area includes most of the former Coke Ovens Site; along Coke Ovens Brook from the southern area of the former Domtar site (near Victoria Road) and the mergence of Coke Ovens Brook into the South Pond to the downstream of the Municipal Ash Incinerator Disposal (MAID) area. In particular, the HE area contains part of the former CO1 (Coke Ovens Brook Connector), CO2 (Tar Cell), CO5 (Vertical Cut-Off Walls), CO6 (Surface Cap) and CO7 (Groundwater Collection System).

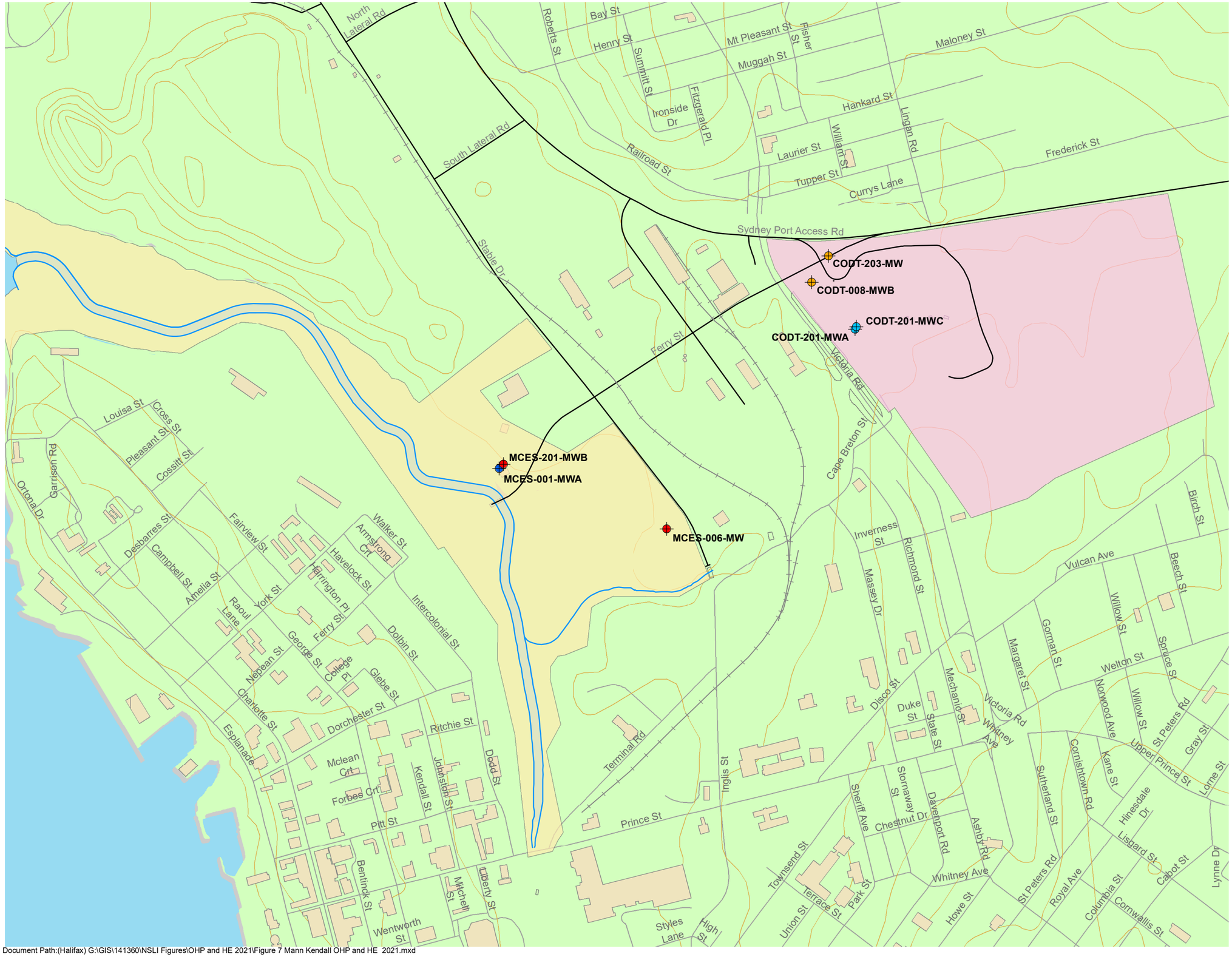
Historical investigations confirmed the presence of contaminated sediments in the Coke Oven Brook and the Domtar Interceptor trench, as well as the in-filling of coal tar, particularly at the former Domtar site. Elevated concentrations of organics (i.e., PHCs and PAHs) and inorganics, such as metals, were present in the groundwater.

Results of the 2021 monitoring event at HE indicate that the concentrations of analyzed parameters at the majority of the sampling wells were below applicable standards. Monitor wells CODT-201-MWA, CODT-201-MWC, and CODT-203-MW, located within HE at the former Domtar site, contained two or more PAH concentrations above the Tier I EQS or the MECP standards (default criteria when Tier I EQS are not available). Monitor well locations are presented on Figure 6.

3.4.1 HE Groundwater Quality

Analytical data, including available post-remediation data for reference, are presented in Appendix A (Tables A-1 (TPH/BTEX), A-2 (PAHs) and A-3 (general chemistry and metals)). As stated previously, the 2021 LTMM Groundwater Monitoring Program included the collection of samples from 40 locations for analysis, 26 of which were collected from monitor wells located on the HE site.

During the 2021 monitoring event, no petroleum hydrocarbon exceedances of the Tier I EQS were identified in monitor well CODT-201-MWC (i.e., the only well in the program sampled for BTEX/TPH).



Document Path:(Halifax) G:\GIS\141360\NSLI Figures\OHP and HE 2021\Figure 7 Mann Kendall OHP and HE 2021.mxd

NS Lands
nova scotia lands

OPEN HEARTH PARK AND HARBOURSIDE EAST

2021 GROUNDWATER MONITORING EVENT

INDICATOR PARAMETER CONCENTRATION TREND

Figure 7

LEGEND

Trend Analysis

- Increasing/Potentially Increasing
- Fluctuating
- Stable
- Decreasing
- Monitoring Well

Open Hearth Park

Harbourside East

0 75 150 300 450 m

MAP DRAWING INFORMATION:
Province of Nova Scotia Mapping

MAP CREATED BY: SCM
MAP CHECKED BY: NJW
MAP PROJECTION: NAD 1983 UTM Zone 20N

N W E S

DILLON CONSULTING

PROJECT: 20-2862
Date: 2022-02-28

Three of the 26 monitor wells sampled on the HE site had organic parameter concentrations above the Tier I EQS or the MECP standards (when no Tier I EQS is available), as follows:

- CODT-201-MWA: Concentrations of benzo(a)pyrene (2.5 ug/L), benzo(b)fluoranthene (1.7 ug/L), benzo(g,h,i)perylene (1.1 ug/L), benzo(k)fluoranthene (1.1 ug/L), chrysene (3.3 ug/L) and indeno(1,2,3-cd)pyrene (1.1 ug/L) exceeded the MECP standards of 0.81 ug/L, 0.75 ug/L, 0.2 ug/L, 0.4 ug/L, 1 ug/L and 0.2 ug/L, respectively. While these exceedances are consistent with historical LTMM data, the PAH concentrations in 2021 are lower than those observed in 2020, which were the highest observed since the LTMM program commenced. Mann-Kendall analysis (see Section 3.2.2) continues to indicate the trends in this well are stable.
- CODT-201-MWC: The anthracene concentration of 5.5 ug/L exceeded the MECP standard of 2.4 ug/L. The naphthalene concentration of 7,300 ug/L exceeded the Tier I EQS of 7,000 ug/L. These exceedances are generally consistent with historical LTMM data. Mann-Kendall analysis (see Section 3.2.2) indicates the trends for anthracene and napthalene in this well are stable.
- CODT-203-MWA: Concentrations of anthracene (3.4 ug/L), benzo(a)anthracene (6.9 ug/L), benzo(a)pyrene (4.8 ug/L), benzo(b)fluoranthene (3.1 ug/L), benzo(g,h,i)perylene (1.8 ug/L), chrysene (6.0 ug/L), dibenzo(a,h)anthracene (0.66 ug/L) and indeno(1,2,3-cd)pyrene (1.9 ug/L) exceeded the MECP standards of 2.4 ug/L, 4.7 ug/L, 0.81 ug/L, 0.75 ug/L, 0.2 ug/L, 1 ug/L, 0.52 ug/L, and 0.2 ug/L, respectively. These exceedances are generally consistent with historical LTMM data. Mann-Kendall analysis (see Section 3.2.2) indicates the trends in this well are fluctuating.

Table 4 summarizes indicator parameter concentrations for select monitor wells exhibiting concentrations above applicable criteria.

Table 4 HE – Summary of Indicator Parameter Concentrations

Well ID	Organic Parameters					
	Date	Anthracene (ug/L)	Benzo(a)pyrene (ug/L)	Chrysene	Indeno(1,2,3-cd) pyrene (ug/L)	Napthalene (ug/L)
NSE Tier I EQS (or defaulted MECP Table 3 Standards (as denoted)		2.42	0.812	12	0.22	70001
CODT-008-MWB	Mar 2013	15	1.7	4.2	0.65	17
	Jul 2013	140	30	57	14	29
	Oct 2013	11	2.6	46	0.64	2.8
	Dec 2014	2.0	0.032	0.058	0.018	<0.20
	Dec 2015	0.13	1.2	0.96	0.31	<0.20
	Nov 2016	43	<5.0	6.0	*<5.0*	4100
	Dec 2017	0.19	0.22	0.29	0.10	<0.20
	Dec 2018	0.13	0.11	0.15	0.052	0.56
	Nov 2019	<0.080	0.037	0.050	0.013	0.20
	Nov 2020	0.086	0.054	0.072	0.027	<0.2
	Dec 2021	0.055	0.050	0.063	<0.030	<0.20

Well ID	Organic Parameters					
	Date	Anthracene (ug/L)	Benzo(a)pyrene (ug/L)	Chrysene	Indeno(1,2,3-cd) pyrene (ug/L)	Napthalene (ug/L)
NSE Tier I EQS (or defaulted MECP Table 3 Standards (as denoted)		2.42	0.812	12	0.22	70001
CODT-201-MWA	Mar 2013	0.45	0.73	0.91	0.33	1.1
	Jul 2013	2.5	3.6	4.8	1.5	0.22
	Oct 2013	1.7	2.5	2.9	1.1	<0.2
	Dec 2014	2.5	3.7	4.5	1.5	46
	Dec 2015	2.3	4.7	5.1	1.9	<0.20
	Nov 2016	0.85	1.8	2.1	0.78	<0.20
	Dec 2017	3.7	6.9	8.6	2.9	<0.20
	Dec 2018	0.49	0.99	1.4	0.49	50
	Nov 2019	1.4	2.9	3.2	0.87	<0.20
	Nov 2020	4.9	9.7	14	3.9	0.32
	Dec 2021	1.7	2.5	3.3	1.1	0.21
CODT-201-MWC	Mar 2013	4.9	<0.01	0.04	<0.01	5100
	Jul 2013	4.5	0.016	0.064	0.014	4900
	Mar 2013	3.3	<0.01	0.032	<0.01	6300
	Dec 2014	5.9	<0.01	0.048	<0.01	7200
	Dec 2015	*<10*	*<10*	*<10*	*<10*	9500
	Nov 2016	3.3	<0.010	0.036	<0.010	7500
	Dec 2017	4.5	<0.010	0.042	<0.010	6200
	Dec 2018	4.2	0.011	0.056	<0.010	7800
	Nov 2019	5.4	<0.010	0.033	<0.010	8300
	Dec 2020	5.0	0.011	0.073	<0.010	4400
	Dec 2021	5.5	<0.02	0.079	<0.010	7300
CODT-203-MW	Mar 2013	2.1	0.64	1.1	0.24	0.62
	Jul 2013	2.6	1.1	1.7	0.38	6.3
	Mar 2013	2.5	0.71	1.2	0.29	1.5
	Dec 2014	0.55	0.69	0.83	0.28	<0.2
	Dec 2015	0.42	0.61	0.73	0.29	<0.20
	Nov 2016	0.79	1.5	1.6	0.64	<0.20
	Dec 2017	0.27	0.24	0.35	0.10	0.52
	Dec 2018	0.27	0.27	0.40	0.11	1.6
	Nov 2019	6.4	9.7	11	3.3	0.39
	Nov 2020	0.54	0.53	0.72	0.19	<0.20
	Dec 2021	3.4	4.8	6.0	1.9	<0.20

Notes:
1 NS Tier I EQS for Groundwater (Coarse Grained Soil, Non-potable Groundwater Commercial/ Industrial Site) 2021.
2 Ontario MECP Table 3 Full Depth Generic Site Condition Standards in a Non-potable Groundwater (Coarse Grained Soil) 2011.
3. Bold exceeds NSE Tier I EQS or default MECP standards when no Tier I EQS is available.
4. Italics denotes detection limit elevated above applicable standards.

3.4.2 Trend Analysis - HE

Mann-Kendall analysis was conducted based on available post-remediation data. Statistical analysis of available indicator parameter data indicated that most select parameter concentration trends are stable, fluctuating or decreasing. Trend analysis is presented on Figure 5. Results of Mann-Kendall trend analysis for HE are presented in Table 5.

Table 5 HE – Trend Analysis Summary

WELL ID	INDICATOR PARAMETER	TREND
CODT-008-MWB	Anthracene	Decreasing
	Benzo(a)pyrene	Decreasing
	Chrysene	Decreasing
	Indeno(1,2,3-cd)pyrene	Decreasing
	Naphthalene	Fluctuating
CODT-201-MWA	Anthracene	Stable
	Benzo(a)pyrene	Stable
	Chrysene	Stable
	Indeno(1,2,3-cd)pyrene	Stable
CODT-201-MWC	Anthracene	Stable
	Chrysene	Stable
	Naphthalene	Stable
CODT-203-MW	Anthracene	Fluctuating
	Benzo(a)pyrene	Fluctuating
	Chrysene	Fluctuating
	Indeno(1,2,3-cd)pyrene	Fluctuating
	Naphthalene	Fluctuating

Note:

1. Trend analysis was not completed for naphthalene in monitor well CODT-201-MWA or for benzo(a)pyrene and indeno(1,2,3-cd)pyrene in monitor well CODT-201-MWC, as the majority of the analytical results for these parameters in these wells are below laboratory detection limits.

The groundwater quality trend analysis for the 2021 monitoring event was based on the available post-remediation analytical results (i.e., a minimum of four rounds of sampling events are required) for the select monitor wells with concentrations above the applicable guidelines. In general, review of trend analysis indicates that the plume is stable, declining, and not migrating though fluctuating concentration trends for the select parameters. Mann-Kendall Tables are presented in Appendix B.

3.5 QC Summary

Supporting QC data are found in Appendix D. The results are discussed in the following five sub-sections:

- Section 3.3.1 Relative Percent Difference (RPD)
- Section 3.3.2 Laboratory Matrix Spikes, Spikes Blank and Method Blanks

- Section 3.3.3 Equipment Blanks
- Section 3.3.4 Holding Times

3.5.1 Relative Percent Difference

Four field duplicates were analyzed and had results suitable for quantitative calculation of Relative Percent Difference (RPD). The RPD was not calculated for those parameters where one or both of the results associated with the original and/or field duplicate sample exhibited concentrations less than five times the RDL. Comparison of the field duplicate data to the original samples indicated the calculated RPDs were within established limits (i.e., less than 40% RPD).

3.5.2 Laboratory Matrix Spikes, Spikes Blank and Method Blanks

The laboratory analytical certificates have been reviewed for quality assurance/quality control purposes. The laboratory completes quality control analysis including duplicates, blanks, spikes, surrogate recoveries and spiked blanks to assess accuracy and precision as well as the potential for bias, contamination and degradation or matrix effects. The laboratory quality control reports have identified the following minor issues:

- Elevated RDLs, due to sample matrix, were reported for total organic carbon in MCWS-309-MW and MCWS-113-MWB, and pH in MCES-001-MWA, MCES-201-MWB, and field duplicate sample FD-16.
- Elevated RDLs, due to sample dilution or matrix/co-extractive interference, were reported for fluorene in MCES-006-MW and MSES-006-MW; 1-methylnaphthalene, 2-methylnaphthalene, acenapththene, benzo(a)pyrene, fluorine, naphthalene and phenanthrene in CODT-201-MWC; benzo(j)fluoranthene and indeno(1,2,3-cd)pyrene in CODT-008-MWB; 1-methylnaphthalene in MSES-104-MWB; and acenapthalyene in CONCW-101-MWB and FD-15.

Overall laboratory data quality is considered acceptable and the results representative with no identification of significant quality issues requiring further investigation or resampling. The QA report is presented with the certificates of analysis in Appendix C.

3.5.3 Trip Blank

The LTMM programs include trip blanks accompanying samples being analyzed for volatile organic compounds. Volatile samples were transported together to minimize the number of trip blanks. As only one monitor well (i.e., CODT-201-MWC) from OHP and HE is analysed for BTEX/TPH, it was collected and transported at the same time as the Harbourside Commercial Park (HCP) samples (which include BTEX and TPH analysis), and trip blank. No petroleum hydrocarbons were detected in the trip blank sample.

3.5.4 Equipment Blanks

One equipment blank (EB-03) was collected associated with OHP and HE. The field equipment used for the equipment blank was a stainless steel interface probe; which is the only piece of field equipment

that interacts with each of the monitor wells (i.e., as each well has a dedicated pump or dedicated low flow tubing). No PAHs or metals were detected in the equipment blank sample.

3.5.5 Holding Times

Although the groundwater samples were submitted to the BV Laboratories on the same day they were collected, mercury was analyzed past hold time in monitor wells MCES-001-MWA, MCES-201-MWB, MCWS-113-MWB, MCWS-306-MWB, MCWS-307-MWB, MCWS-309-MW, MCWS-310-MW, MSES-004-MW, MSES-104-MWA, MSES-104-MWB, COBB-004-MWA, COBC-001-MWA, COBP-006-MWB, CODT-105-MW, CODT-201-MWA, CODT-201-MWC, CODT-203-MW, CODT-205-MWA, CODT-206-MW, CONCW-101-MWB, CONPL-202-MWA, COTS-001-MWB, SCU7-001-MW, SCU7-003-MW, SCU11-001-MWB, and field duplicate samples FD-14, FD-15, and FD-16.

Discussions with the laboratory indicate that the samples were kept in cold storage during receipt and analysis; however, due to several factors such as the level of manual effort in processing the samples into the laboratory, and the instrument used for mercury analysis undergoing repairs at the time of sample submission, the hold time was not met for mercury analysis in submitted samples. BV initiated and conducted a detailed internal investigation and have provided further comment on the hold time exceedance via a letter that has been included in Appendix C of this report.

While the analysis of mercury samples past the recommended hold time could potentially result in a limited low bias, the 2021 analytical results for mercury are generally consistent with previous results, and are considered to be acceptable for the purposes of the monitoring program.

No other hold time issues were encountered.

4.0 Summary

The OHP and HE 2021 monitoring event was conducted in accordance to RFP NSLAND111. Findings were compared to September 2021 NS CSR Tier I EQS for groundwater. Where Tier I EQS were not available, MECP standards were used.

The groundwater elevation and flow direction for the monitored areas during the 2021 monitoring event was generally comparable to historical monitoring events. The groundwater flows generally from HE towards the southwest to Sydney Harbour.

The following observations are made based on the 2021 data.

OHP

Analytical results indicate no exceedances of the Tier I EQS or the default MECP standards for the 14 monitor wells sampled on the OHP site.

In general, review of trend analysis indicates general plume stability. An increasing trend for pH in MCES-006-MW and sulphur (SO4) in MCES-201-MWB is indicated. Historical trend analysis for MCES-001-MWB (decommissioned in 2020), and the replacement well (MCES-201-MWB), indicates an increasing trend for pH.

HE

During the 2021 monitoring event three monitor wells located in the area of the former Domtar site had organic parameter concentrations above the Tier I EQS or the default MECP standards (used when no Tier I EQS is available). Specifically, monitor well CODT-201-MWC had a naphthalene concentration that exceeded the Tier I EQS. Monitor wells CODT-201-MWA, CODT-201-MWC, and CODT-203-MWA, contained multiple PAH parameter concentrations (i.e., anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and/or indeno(1,2,3-cd)pyrene) above the MECP standards (used when Tier I EQS are not available)).

While the exceedances reported for monitor well CODT-201-MWA are consistent with historical LTMM data, the PAH concentrations in 2021 are lower than those observed in 2020, which were the highest observed since the LTMM program commenced. Mann-Kendall analysis continues to indicate the trends in this well are stable. The exceedances reported for CODT-201-MWC and CODT-203-MWA are generally consistent with historical LTMM data. Mann-Kendall analysis for CODT-201-MWC indicates the trends for anthracene and napthalene in this well are stable. Mann-Kendall analysis for CODT-203-MWA indicates the trends in this well are fluctuating.

5.0 Recommendations

Review of the 2021 groundwater sampling results, considered in context of historical data associated with OHP and HE sites, suggests that the fall 2022 groundwater monitoring program could include the following:

- The collection of 62 water levels (assuming that monitor well SCU7-002-MWB can be located, and that monitor wells SCU27-005-MWA and SCU27-005-MWB are accessible);
- The continued inclusion of CODT-103-MWB in the LTMM for water level/product check only. and,
- The sampling of 40 monitor wells.

It is recommended that the groundwater monitoring program continue to include sampling of PHC at CODT-201-MWC only, with the remaining monitor wells scheduled for sampling to include analysis for PAHs, metals (including mercury) and general inorganic chemistry parameters.

It is recommended that monitor wells SCU27-005-MWA and SCU27-005-MWB, which were found buried (approximately 0.6 m below grade) during the 2021 program, be uncovered (a machine will be required)

and brought to grade prior to the 2022 LTMM. Following repairs, it is recommended that these two wells be re-surveyed.

6.0 Disclaimer

This report was prepared exclusively for the purposes, project and site location outlined in the report. The report is based on information provided to, or obtained by Dillon Consulting Limited ("Dillon") as indicated in the report, and applies solely to site conditions existing at the time of the site investigation. Although a reasonable investigation was conducted by Dillon, Dillon's investigation was by no means exhaustive and cannot be construed as a certification of the absence of any contaminants from the site. Rather, Dillon's report represents a reasonable review of available information within an agreed work scope, schedule and budget. It is therefore possible that currently unrecognized contamination or potentially hazardous materials may exist at the site, and that the levels of contamination or hazardous materials may vary across the site. Further review and updating of the report may be required as local and site conditions, and the regulatory and planning frameworks, change over time.

Appendix A

Analytical Tables

TABLE A-1
LTMM GROUNDWATER MONITORING EVENT 2021 OHP AND HE
GROUNDWATER ANALYTICAL RESULTS - BTEX/TPH

Sample Location (Water Level)	Sample Date	BTEX Concentration (mg/L)				Petroleum Hydrocarbons (mg/L)						Reached Baseline at C32
		Benzene	Toluene	E. Benzene	Xylenes	C6 - C10	C10 - C21	C10 - C16	C16-C21	C21 - C32	Modified TPH	
	NS Tier 1 EQS[1]	6.3	20	20	20	-	-	-	-	-	20	-
CODT-201-MWC (3.48 m)	07-05-11	0.073	0.09	0.074	0.26	0.45	7.54	-	-	<0.1	7.9	-
	09/13/11[L]	NM	NM	NM	NM	NM	7.67	-	-	0.2	NM	-
	09-13-11	0.059	0.099	0.065	0.24	0.36	7.55	-	-	0.2	8.1	-
	12-16-11	0.083	0.15	0.091	0.38	0.4	10.34	-	-	0.1	11	-
	03/09/12[L]	NM	NM	NM	NM	NM	13.39	-	-	0.11	NM	-
	03-09-12	0.085	0.18	0.12	0.53	0.76	14.42	-	-	<0.1	15	-
	06-07-12	0.095	0.19	0.13	0.56	0.68	15.44	-	-	0.14	16	-
	09-11-12	0.11	0.23	0.16	0.68	0.92	16.45	-	-	0.13	18	-
	12-11-12	0.099	0.19	0.14	0.56	1	16.58	-	-	0.32	18	-
	03-13-13	0.1	0.22	0.15	0.59	0.9	13.35	-	-	<0.1	15	Yes
	12-15-14	0.1	0.2	0.15	0.61	1.0	-	15	0.49	0.22	17	Yes
	12-09-15	0.11	0.26	0.17	0.71	1.4	-	14	0.38	0.1	16	Yes
	11-28-16	0.072	0.16	0.14	0.57	1.1	-	18	49	<0.01	20	Yes
	12-05-17	0.072	0.13	0.13	0.50	0.87	-	17	0.48	0.1	19	Yes
	12-05-18	0.10	0.20	0.14	0.56	1.2	-	15	<0.50	<1.0	16	Yes
	11-28-19	0.097	0.21	0.13	0.54	0.52	-	17	<1.0	<2.0	18	Yes
	12-02-20	0.062	0.14	0.098	0.38	0.57	-	15	0.43	<0.45	16	Yes
	12-13-21	0.097	0.19	0.14	0.56	0.56	-	13	<0.50	<0.90	14	Yes

NOTES:

FD - Field Duplicate
L - Lab Duplicate
NM - Not measured or not analyzed; lab duplicates do not analyze for all parameters.
mg/L - milligrams per litre
- No applicable guideline criteria.
1 - Nova Scotia Environment (NSE) Tier 1 Environmental Quality Standards (EQS) for Groundwater (Coarse Grained Soil, Non-potable Groundwater Commercial Site) September 2021
2. Bold and Shaded Exceeds NSE Tier I EQS
3 - This summary is to be used in conjunction with, not as a replacement of, the Laboratory Certificates of Analysis, which contain QA/QC information

TABLE A-2
LTMM GROUNDWATER MONITORING EVENT 2021 OHP AND HE
GROUNDWATER ANALYTICAL RESULTS - PAHs

Sample Location (Water Level)	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(j)fluoranthene	Benzo(k)fluoranthene[4]	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Perylene	Phenanthrene	Pyrene
	Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ug/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	NS Tier 1 EQS[1]	600 [2]	7500	2.4 [2]	4.7 [2]	0.81 [2]	0.75 [2]	0.2 [2]	-	0.4 [2]	1 [2]	0.52 [2]	130 [2]	400 [2]	0.2 [2]	1800 [2]	1800 [2]	7000	-	580 [2]	68 [2]
COBB-004-MWA (1.18 m)	03-27-13	0.022	0.029	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	<0.01	0.021	<0.01	0.14	<0.05	0.4	<0.01	0.011	<0.01
	07-26-13	0.025	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.012	0.017	<0.01	0.074	<0.05	0.45	<0.01	0.016	0.012
	11-06-13	0.013	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	<0.01	<0.01
	12-15-14	0.023	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	<0.01	<0.01
	12-09-15	0.04	<0.010	0.014	0.021	0.015	<0.010	<0.010	<0.010	<0.010	0.022	<0.010	0.055	0.01	<0.010	<0.050	<0.050	<0.20	<0.010	0.054	0.038
	12-2-16	0.20	<0.010	0.014	0.017	0.012	0.010	<0.010	<0.010	<0.010	0.015	<0.010	0.033	0.063	<0.010	0.57	0.19	3.9	<0.010	0.06	0.025
	12-8-17	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-3-18	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-28-19	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-23-20[FD]	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-23-20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-1-21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
COBC-001-MWA (1.66 m)	03-15-13	2.0	0.7	0.017	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.078	0.025	<0.01	0.061	<0.05	0.24	<0.01	<0.01	0.054
	07-26-13[FD]	1.4	0.58	0.029	0.03	0.017	0.015	<0.01	0.011	<0.01	0.028	<0.01	0.11	0.048	<0.01	0.06	<0.05	0.3	<0.01	0.045	0.085
	07-26-13	1.9	0.82	0.025	0.019	0.012	0.012	<0.01	<0.01	<0.01	0.017	<0.01	0.091	0.05	<0.01	0.052	<0.05	0.22	<0.01	0.024	0.069
	11-07-13	0.74	0.37	0.022	0.019	0.012	0.012	<0.01	<0.01	<0.01	0.020	<0.01	0.11	0.032	<0.01	<0.05	<0.05	<0.2	<0.01	0.023	0.084
	12-12-14	4.2	1.5	0.020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.075	0.15	<0.01	<0.05	<0.05	<0.2	<0.01	0.011	0.047
	12-10-15	5.8	1.6	0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.095	0.24	<0.010	0.54	0.37	5.4	<0.010	0.049	0.061
	12-2-16	0.42	0.10	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.052	0.061	<0.010	0.36	0.19	4.2	<0.010	0.022	0.052
	12-11-17	6.1	1.40	0.019	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.055	0.17	<0.010	0.065	<0.050	<0.20	<0.010	0.013	0.050
	12-7-18	10	2.4	0.043	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.097	0.53	<0.010	0.75	0.47	6.0	<0.010	0.047	0.065
	12-2-19	9.9	1.7	0.038	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	0.070	0.35	<0.010	0.72	0.53	5.3	<0.010	0.062	0.065
	11-25-20	12	1.2	0.03	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.049	0.29	<0.010	0.47	<0.050	<0.20	<0.010	0.018	0.056
	12-3-21	1.2	0.23	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.019	0.033	<0.010	<0.050	<0.050	<0.20	<0.010	0.022	0.059
COBC-002-MWA (4.0 m)	03-15-13	0.043	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	<0.01	0.022	<0.01	0.1	0.053	0.72	<0.01	0.023	<0.01
	07-18-13	0.066	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.013	0.039	<0.01	0.15	0.1	2.0	<0.01	0.036	<0.01
	11-05-13	0.018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	<0.05	<0.05	<0.2	<0.01	0.011	<0.01
	12-12-14	0.019	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	<0.01	0.011
	12-10-15	0.25	0.013	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.079	<0.010	0.78	0.59	9.7	<0.010	0.048	<0.010
	11-22-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-7-17	0.15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.057	<0.010	0.25	0.14	1.7	<0.010	0.036	<0.010
	12-3-18	0.064	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-2-19	0.31	0.029	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.030[8]	<0.010	<0.010	0.11	0.011	<0.010	0.71	0.57	6.5	<0.010	0.045	<0.010
	11-23-20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-30-21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
COBC-004-MWA (2.9 m)	03-15-13	0.32	0.016	0.05	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.01	0.16	<0.01	0.75	0.44	6.7	<0.01	0.3	<0.01
	07-18-13	0.074	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	<0.01	0.045	<0.01	0.19	0.12	2.1	<0.01	0.029	<0.01
	11-05-13	0.018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.05	<0.05	<0.2	<0.01	0.013	<0.01
	12-12-14	0.015	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	<0.01	0.01
	12-10-15	0.26	0.017	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.084	<0.010	0.84	0.63	11	<0.010	0.053	<0.010
	11-25-16	<0.010	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.012	0.01	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	0.011
	11-25-16[R]	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-7-17	0.20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.076	<0.010	0.36	0.21	2.7	<0.010	0.039	<0.010
	12-3-18	<0.10[8]	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.084	<0.050	<0.20	<0.010	<0.010	<0.010
	12-2-19	0.46	<0.03[8]	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.15	<0.010	1.1	0.87	12	<0.010	0.067	<0.010
	11-23-20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-30-21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
COBP-006-MWA (1.95 m)	03-27-13[FD]	4.8	0.23	0.081	0.07	0.029	0.024	0.013	NM	0.034	0.075	<0.01	0.26	0.19	0.015	0.53	0.055	0.97	<0.01	0.23	0.21
	03-27-13	3.9	0.2	0.15	0.14	0.046	0.029	0.014	NM	0.054	0.13	<0.01	0.51	0.21	0.015	0.48	0.084	0.92	0.012	0.46	0.4
	07-26-13	1.4	0.44	0.019	0.024	0.014	0.012	<0.01	<0.01	<0.01	0.021	<0.01	0.045	0.044	<0.01	0.26	<0.05	0.67	<0.01	0.036	0.048
	11-06-13	0.84	0.041	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.028	<0.01	<0.05	<0.05	<0.20	<0.01	0.02	0.026
	12-15-14	13	0.44	0.034	0.050	0.044	0.033	0.021	0.020	0.020	0.043	<0.01	0.10	0.67	0.020	1.2	<0.05	0.95	0.012	0.067	0.10
	12/9/15[FD]	8.3	0.23	0.013	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.012	<0.010	0.024	0.26	<0.010	0.12	<0.050	0.48	<0.010	0.029	0.027
	12-09-15	8.4	0.25	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.020	0.24	<0.010	0.095	<0.050	0.21	<0.010	0.020	0.024
	11-28-16	14	0.22	0.02	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	0.01	<0.010	0.029	0.83	<0.010	4	0.69	16	<0.010	0.12	0.027
	12-21-17	18	0.21	0.024	0.030	0.025	0.018	0.012	0.013	0.012	0.031	<0.010	0.062	1.0	0.011	6.7	<0.050	18	<0.010	0.094	0.061
	12-3-18[FD]	23	0.29	0.028	0.021	0.019	0.016	0.011	<0.010	<0.010	0.023	<0.010	0.047	1.8	<0.010	14	<0.050	28	<0.010	0.21	0.045
	12-3-18	22	0.28	0.030	0.035	0.029	0.024	0.016	0.016	0.016	0.036	<0.010	0.071	1.8	0.016	13	<0.050	27	<0.010	0.21	0.068
	11-29-19	34	0.40	0.049	0.084	0.081	0.058	0.043	0.039	0.033	0.085	0.015	0.14	2.7	0.039	22	0.95	61 [9]	<0.010	0.37	0.13
	11-23-20	22	0.28	0.057	0.12	0.099	0.074	0.051	0.052	0.048	0.12	0.015	0.2	1.6	0.046	7.2	<0.050	28	0.025	0.17	0.18
	12-01-21	35	0.31	0.040	0.031	0.024	0.017	0.010	0.012	0.011	0.032	<0.010	0.010	2.9	0.011	20	<0.050	53 [9]	<0.010	0.33	0.067

TABLE A-2
LTMM GROUNDWATER MONITORING EVENT 2021 OHP AND HE
GROUNDWATER ANALYTICAL RESULTS - PAHs

Sample Location (Water Level)	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(j)fluoranthene	Benzo(k)fluoranthene[4]	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Perylene	Phenanthrene	Pyrene
	Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ug/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	NS Tier 1 EQS[1]	600 [2]	7500	2.4 [2]	4.7 [2]	0.81 [2]	0.75 [2]	0.2 [2]	-	0.4 [2]	1 [2]	0.52 [2]	130 [2]	400 [2]	0.2 [2]	1800 [2]	1800 [2]	7000	-	580 [2]	68 [2]
COBT-003-MWB (3.85 m)	03-19-13	0.024	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	<0.01	0.017	<0.01	0.063	<0.05	0.38	<0.01	<0.01	<0.01
	07-18-13	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.018	<0.01	0.066	<0.05	0.84	<0.01	0.018	<0.01
	11-07-13	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	<0.01	<0.01
	12-12-14	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	<0.01	<0.01
	12-09-15	0.053	<0.010	0.012	0.020	0.019	0.016	0.012	<0.010	0.010	0.018	<0.010	0.052	0.010	0.010	<0.050	<0.050	<0.20	<0.010	0.044	0.042
	11-28-16	0.41	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.13	<0.010	1.4	0.86	15	<0.010	0.066	<0.010
	12-7-17	0.13	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.20	0.12	1.3	<0.010	0.034	<0.010
	12-3-18	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-29-19[FD]	0.40	0.016	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.16	<0.010	1.2	0.98	12	<0.010	0.073	<0.010
	11-29-19	0.56	0.024	<0.010	<0.010	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.014	0.20	<0.010	1.7	1.4	16	<0.010	0.11	0.014
	11-23-20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11–30–21 [FD]	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-30-21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.013	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	0.011
COCP-110-MW (2.22 m)	03-27-13	0.22	0.021	0.051	0.019	<0.01	<0.01	<0.01	NM	<0.01	0.022	<0.01	0.11	0.081	<0.01	0.32	0.057	0.75	<0.01	0.45	0.14
	07-18-13	0.41	0.047	0.043	0.027	0.016	0.014	0.011	<0.01	<0.01	0.034	<0.01	0.14	0.16	<0.01	0.49	0.093	2.6	<0.01	0.7	0.19
	11-06-13	0.20	0.048	0.10	0.16	0.086	0.081	0.043	0.045	0.046	0.18	0.012	0.37	0.10	0.037	0.20	<0.05	0.23	0.017	0.40	0.50
	12-15-14	0.062	0.021	0.056	0.10	0.071	0.056	0.042	0.035	0.033	0.12	0.012	0.19	0.042	0.035	0.060	<0.05	<0.2	0.017	0.16	0.24
	12-09-15	0.17	0.017	0.041	0.063	0.044	0.037	0.027	0.025	0.023	0.080	<0.010	0.16	0.037	0.022	0.065	<0.050	<0.20	<0.010	0.11	0.21
	11-28-16	0.014	<0.010	0.013	0.026	0.02	0.016	0.015	<0.010	<0.010	0.027	<0.010	0.054	0.011	<0.010	<0.050	<0.050	<0.20	<0.010	0.04	0.05
	12-8-17[FD]	0.023	<0.010	0.015	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	0.017	<0.010	0.034	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.012	0.087
	12-8-17	0.024	<0.010	0.017	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	0.017	<0.010	0.033	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.011	0.096
	12-3-18	0.035	0.015	0.072	0.16	0.11	0.092	0.065	0.053	0.054	0.19	0.018	0.30	0.041	0.057	<0.050	<0.050	<0.20	0.026	0.24	0.32
	11-28-19	0.030	<0.010	0.010	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	0.019	<0.010	0.029	0.014	<0.010	<0.050	<0.050	<0.20	<0.010	0.030	0.076
	11-23-20	0.023	<0.010	0.017	0.017	<0.010	<0.010	<0.010	<0.010	<0.010	0.029	<0.010	0.043	0.01	<0.010	<0.050	<0.050	<0.20	<0.01	0.023	0.092
	12-1-21	0.024	<0.010	0.022	0.02	0.011	<0.010	<0.010	<0.010	<0.010	0.027	<0.010	0.038	0.010	<0.010	<0.050	<0.050	<0.20	<0.01	0.027	0.11
CODT-008-MWB (1.62 m)	03-29-13	16	0.6	**15**	**5.3**	**1.7**	**1.3**	**0.54**	NM	**1.7**	**4.2**	0.15	27	18	**0.65**	10	0.62	17	0.44	40	18
	07-24-13	110	2.8	**140**	**57**	**30**	**33**	**12**	24	**22**	**57**	**5.3**	**310**	90	**14**	35	1.9	29	9.1	260	**210**
	10-23-13	64	3.4	**11**	**5.9**	**2.6**	**1.9**	**0.60**	NM	**1.3**	**4.6**	0.22	29	34	**0.64**	40	0.31	2.8	0.47	6.5	19
	12-15-14	0.12	0.026	2.0	0.029	0.032	0.022	0.020	0.016	0.016	0.058	<0.01	0.11	0.060	0.018	0.15	0.064	<0.20	0.010	0.052	0.11
	12-10-15	0.064	0.047	0.13	1.1	**1.2**	**0.84**	**0.32**	0.71	**0.63**	0.96	0.097	2.4	0.11	**0.31**	0.057	<0.050	<0.20	0.28	0.054	4.1
	11-30-16	410	5.3	**43**	**7.6**	*<5.0*	*<5.0*	*<5.0*	<5.0	*<5.0*	**6.0**	*<5.0*	34	200	*<5.0*	970	1000	4100	<5.0	180	21
	12-7-17	0.076	0.02	0.19	0.26	0.22	0.20	0.13	0.11	0.11	0.29	0.033	0.69	0.083	0.10	<0.050	<0.050	<0.20	0.046	0.35	0.66
	12-5-18[FD]	0.21	0.039	0.15	0.14	0.11	0.098	0.061	0.059	0.059	0.17	0.017	0.41	0.11	0.056	0.43	0.18	0.69	0.028	0.21	0.47
	12-5-18	0.21	0.036	0.13	0.14	0.11	0.091	0.059	0.055	0.055	0.15	0.016	0.39	0.10	0.052	0.41	0.17	0.56	0.026	0.21	0.46
	11-28-19	0.31	0.056	<0.080[8]	0.040	0.037	0.026	0.020	<0.02[8]	0.015	0.050	<0.010	0.17	0.13	0.013	0.91	0.35	0.20	<0.010	<0.030[8]	0.32
	11-24-20[FD]	0.13	0.030	0.083	0.048	0.053	0.043	0.035	<0.03[8]	0.028	0.071	<0.010	0.19	<0.04[8]	0.026	<0.050	<0.050	<0.20	0.013	<0.02[8]	0.39
	11-24-20	0.12	0.030	0.086	0.048	0.054	0.043	0.035	<0.038	0.027	0.072	<0.010	0.19	<0.038	0.027	<0.050	<0.050	<0.2	0.014	<0.028	0.38
	12-2-21	0.29	0.036	0.055	0.046	0.050	0.034	0.032	< 0.030[8]	0.019	0.063	<0.010	0.14	0.049	< 0.030[8]	0.55	0.11	<0.20	0.014	0.039	0.26
CODT-105-MW (2.87 m)	03-13-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-13-13	0.2	0.67	0.081	0.036	0.025	0.019	0.014	NM	0.025	0.034	<0.01	0.17	0.35	0.013	0.69	0.094	0.58	<0.01	0.34	0.12
	07-16-13	0.24	0.27	0.048	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.11	0.32	<0.01	0.61	0.19	13	<0.01	0.25	0.08
	10-23-13[L]	0.17	0.034	0.044	0.049	0.041	0.031	0.025	NM	0.018	0.05	<0.01	0.19	0.17	0.02	0.11	<0.05	<0.2	0.011	0.19	0.17
	10-23-13	0.11	0.029	0.013	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.065	0.10	<0.01	0.065	<0.05	<0.2	<0.01	0.023	0.063
	12-16-14	0.079	<0.01	<0.01	0.015	0.014	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	0.090	0.012	<0.01	<0.05	<0.05	<0.2	<0.01	0.042	0.072
	12-10-15	0.26	0.044	<0.030	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.07	0.21	<0.010	0.62	0.23	0.97	<0.010	0.11	0.058
	11-23-16[FD]	0.017	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.049	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	0.042
	11-23-16	0.018	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.047	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	0.041
	12-7-17	0.24	0.011	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.025	0.10	<0.010	0.41	0.15	2.3	<0.010	0.037	0.027
	12-5-18	0.013	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.028	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.013	0.022
	12-4-19	0.22	0.013	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-24-20	0.053	<0.010	0.024	0.027	0.019	0.015	<0.010	<0.010	<0.010	0.027	<0.010	0.082	0.02	<0.010	<0.050	<0.050	<0.20	<0.010	0.067	0.068
	12-3-21	0.036	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	0.010
CODT-201-MWA (3.28 m)	03-13-13	0.3	0.012	0.45	1.0	0.73	0.5	**0.32**	NM	**0.66**	0.91	0.097	1.8	0.21	**0.33**	0.21	0.1	1.1	0.17	1.5	1.5
	07-16-13	0.98	0.083	**2.5**	**5.0**	**3.6**	**3.1**	**1.6**	1.8	**1.7**	**4.8**	0.49	11	0.98	**1.5**	0.15	0.15	0.22	0.75	8.6	8.7
	10-23-13	0.65	0.053	1.7	3.2	**2.5**	**1.9**	**1.1**	NM	**1.2**	**2.9**	0.34	6.9	0.67	**1.1**	0.087	0.094	<0.2	0.60	6.2	5.6
	12-15-14	1.6	0.16	**2.5**	4.5	**3.7**	**2.9**	**1.6**	1.9	**1.9**	**4.5**	**0.57**	10	1.3	**1.5**	3.3	2.1	46	0.83	8.1	8.1
	12-09-15	0.96	0.078	2.3	**4.9**	**4.7**	**3.5**	**2.0**	2.4	**2.3**	**5.1**	**0.67**	12	0.95	**1.9**	0.12	0.12	<0.20	1.0	9.0	9.3
	11-28-16	0.35	0.033	0.85	2.1	**1.8**	**1.4**	**0.81**	0.88	**0.85**	**2.1**	0.26	4.4	0.38	**0.78**	0.05	0.053	<0.20	0.4	3.2	3.6
	12-5-17	1.2	0.084	**3.7**	**9.5**	**6.9**	**5.9**	**3.1**	3.3	**3.4**	**8.6**	**1.1**	18	1.2	**2.9**	0.12	0.12	<0.20	1.5	12	13
	12-5-18	1.9	0.10	0.49	1.3	**0.99**	**0.83**	**0.51**	0.49	**0.53**	**1.4**	0.16	2.8	0.77	**0.49**	5.1	3.5	50	0.23	2.4	2.2
	11-28-19	4.6	0.048	1.4	3.7	**2.9**	**2.0**	**1.2**	1.4	**1.5**	**3.2**	0.20	6.9	0.44	**0.87**	0.053	0.054	<0.20	0.52	5.1	5.5
	11-23-20	1.8	0.19	**4.9**	**15**	**9.7**	**7.2**	**4.1**	4.7	**4.4**	**14**	**1.3**	28	1.7	**3.9**	0.23	0.17	0.32	2	19	22
	12-2-21	0.71	0.043	1.7	3.5	**2.5**	**1.7**	**1.1**	1.2	**1.1**	**3.3**	0.36	7.3	0.62	**1.1**	0.13	0.084	0.21	0.59	6.2	5.6
CODT-201-MWC (3.48 m)	03-13-13	220	3.8	**4.9**	0.058	<0.01	<0.01	<0.01	NM	<0.01	0.04	<0.01	3.3	90	<0.01	490	310	5100	<0.01	76	1.6
	07-16-13	160	8	**4.5**	0.08	0.016	0.02	0.017	0.01	0.015	0.064	<0.01	2.7	66	0.014	360	300	4900	<0.01	51	1.3
	10-23-13[FD]	190	10	**2.5**	0.036	<0.01	<0.01	<0.01	NM	<0.01	0.029	<0.01	2.2	77	<0.01	450	320	6000	<0.01	57	1.1
	10-23-13	190	10	**3.3**	0.038	<0.01	<0.01	<0.01	NM	<0.01	0.032	<0.01	2.2	78	<0.01	470	330	6300	<0.01	56	1.1
	12-15-14	230	12	**5.9**	0.058	<0.01	<0.01	<0.01	<0.01	<0.01	0.048	<0.01	3.7	110	<0.01	670	450	**7200**	<0.01	76	1.8
	12-9-15	300	18	*<10*	*<10*	*<10*	*<10*	*<10*	<10	*<10*	*<10*	*<10*	<10	120	*<10*	750	610	**9500**	<10	89	<10
	11-28-16	250	11	**3.3**	0.044	<0.010	<0.010	<0.010	<0.010	<0.010	0.036	<0.010	1.9	120	<0.010	660	430	**7500**	<0.010	78	1
	12-5-17	240	11	**4.5**	0.054	<0.010	<0.010	<0.010	<0.010	<0.010	0.042	<0.010	3.5	96	<0.010	560	340	6200	<0.010	74	1.4
	12-5-18	270	10	**4.2**	0.068	0.011	<0.010	<0.010	<0.010	<0.010	0.056	<0.010	4.5	120	<0.010	670	490	**7800**	<0.010	90	2.0
	11-28-19	280	10	**5.4**	0.042	<0.010	<0.010	<0.010	<0.010	<0.010	0.033	<0.010	3.0	120	<0.010	680	600	**8300**	<0.010	88	1.5
	12-2-20	160[9]	8.3	**5**	0.075	0.011	<0.010	<0.010	<0.010	<0.010	0.073	<0.010	3.7	66[9]	<0.010	410[9]	300[9]	4400[9]	<0.010	50 [9]	1.8
	12-13-21	270[9]	8.7	**5.5**	0.10	<0.02[8]	<0.010	<0.010	<0.010	<0.010	0.079	<0.010	4.2	110[9]	<0.010	710 [9]	470 [9]	**7300**[8]	<0.010	75[9]	2.0

TABLE A-2
LTMM GROUNDWATER MONITORING EVENT 2021 OHP AND HE
GROUNDWATER ANALYTICAL RESULTS - PAHs

Sample Location (Water Level)	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(j)fluoranthene	Benzo(k)fluoranthene[4]	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Perylene	Phenanthrene	Pyrene
	Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ug/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	NS Tier 1 EQS[1]	600 [2]	7500	2.4 [2]	4.7 [2]	0.81 [2]	0.75 [2]	0.2 [2]	-	0.4 [2]	1 [2]	0.52 [2]	130 [2]	400 [2]	0.2 [2]	1800 [2]	1800 [2]	7000	-	580 [2]	68 [2]
CODT-203-MW (2.92 m)	03-13-13	4.8	0.083	2.1	1.3	0.64	0.43	0.2	NM	**0.57**	**1.1**	0.064	4	2.2	**0.24**	0.63	0.22	0.62	0.14	5.1	3
	07-16-13[FD]	7.2	0.11	**2.6**	1.8	**1.2**	**0.93**	**0.48**	0.6	**0.58**	**1.6**	0.16	6.2	3.4	**0.4**	1.6	0.57	6.8	0.2	7.5	4.6
	07-16-13	7.0	0.13	**2.6**	1.8	**1.1**	**0.91**	**0.43**	0.53	**0.56**	**1.7**	0.14	6.2	3.3	**0.38**	1.6	0.53	6.3	0.22	7.6	4.6
	10/23/13[L]	10	0.19	**3.2**	1.8	**1.1**	**0.84**	**0.42**	0.59	**0.53**	**1.5**	0.15	6.6	4.8	**0.43**	2.0	0.31	1.6	0.25	9.8	4.6
	10-23-13	10	0.19	**2.5**	1.7	0.71	0.53	**0.27**	0.35	0.33	**1.2**	0.11	5.1	4.4	**0.29**	1.8	0.23	1.5	0.22	7.0	3.6
	12-12-14	0.23	<0.01	0.55	0.81	0.69	0.49	**0.29**	0.35	0.35	0.83	0.10	1.9	0.29	**0.28**	<0.05	<0.05	<0.2	0.14	1.7	1.4
	12-8-15[FD]	3.0	0.094	0.46	0.6	0.46	0.34	0.17	0.21	0.2	0.59	0.063	1.6	0.96	0.17	0.22	<0.050	<0.20	0.089	1.3	1.1
	12-8-15	0.61	0.026	0.42	0.75	0.61	0.42	**0.29**	0.27	0.26	0.73	0.11	1.8	0.24	**0.29**	<0.050	<0.050	<0.20	0.12	1.5	1.3
	11-23-16	0.37	<0.010	0.79	1.7	**1.5**	**1.1**	**0.65**	0.69	**0.67**	**1.6**	0.23	3.4	0.4	**0.64**	0.063	0.06	<0.20	0.31	2.6	2.7
	12-7-17	1.0	0.027	0.27	0.36	0.24	0.20	0.11	0.14	0.13	0.35	0.035	0.93	0.41	0.10	0.12	<0.050	0.52	0.049	0.74	0.65
	12-10-18	0.66	0.031	0.27	0.40	0.27	0.22	0.11	0.13	0.14	0.40	0.033	1.0	0.26	0.11	0.28	<0.050	1.6	0.054	0.79	0.74
	11-28-19	2.6	0.038	**6.4**	**12**	**9.7**	**6.8**	**3.6**	4.1	**4.2**	**11**	**1.0**	22	2.9	**3.3**	0.33	0.38	0.39	1.8	21	17
	11-24-20	1.5	0.039	0.54	0.78	0.53	0.39	0.19	0.28	0.27	0.72	0.1	1.9	0.47	0.2	0.19	<0.05	<0.20	0.11	1.5	1.4
	12-2-21	1.5	0.020	**3.4**	**6.9**	**4.8**	**3.1**	**1.8**	2.2	2.1	**6.0**	**0.66**	14	1.6	**1.9**	0.17	0.16	<0.20	1	13	10
CODT-205-MWA (1.74 m)	03-13-13[FD]	0.016	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.027	0.021	<0.01	<0.05	<0.05	<0.2	<0.01	0.061	0.028
	03-13-13	<0.01	<0.01	<0.01	0.012	<0.01	<0.01	<0.01	NM	0.011	<0.01	<0.01	0.025	0.013	<0.01	<0.05	<0.05	<0.2	<0.01	0.055	0.024
	07-16-13	0.53	1.0	0.041	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.065	0.56	<0.01	0.54	<0.05	0.76	<0.01	0.29	0.041
	10-23-13	1.7	1.5	0.082	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	<0.01	0.13	1.0	<0.01	4.9	2.7	53	<0.01	1.0	0.08
	12-15-14	0.37	0.35	0.030	0.018	0.012	0.012	<0.01	<0.01	<0.01	0.018	<0.01	0.15	0.31	<0.01	0.40	0.16	4.3	<0.01	0.15	0.088
	12-8-15	0.019	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.022	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	0.017
	11-23-16	0.38	0.6	0.033	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.043	0.43	<0.010	0.3	<0.050	<0.20	<0.010	0.1	0.023
	12-5-17	0.26	0.30	0.018	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.031	0.26	<0.010	0.099	<0.050	<0.20	<0.010	0.043	0.020
	11-28-18	0.053	0.079	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.021	0.047	<0.010	<0.050	<0.050	<0.20	<0.010	0.025	0.014
	12-4-19	0.27	0.16	0.015	0.012	0.011	<0.010	<0.010	<0.010	<0.010	0.012	<0.010	0.051	0.15	<0.010	0.35	0.18	2.8	<0.010	0.047	0.038
	11-25-20	0.14	0.14	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.024	0.11	<0.010	<0.050	<0.050	<0.20	<0.010	0.022	0.014
	12-2-21	0.22	0.090	0.013	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.019	0.11	<0.010	0.077	<0.050	<0.20	<0.010	0.029	0.015
CODT-206-MW (2.16 m)	03-13-13	32	1.2	1.6	0.16	0.089	0.08	0.03	NM	0.076	0.13	0.01	3.1	18	0.03	16	3.2	72	0.019	12	1.7
	07-16-13	90	4.4	**4.1**	0.16	0.074	0.068	0.025	0.028	0.035	0.13	<0.01	7.2	56	0.018	43	1.5	140	0.012	54	3.8
	10-23-13	3.6	0.12	0.041	0.048	0.068	0.054	0.03	NM	0.023	0.057	<0.01	0.81	0.073	0.025	<0.05	<0.05	<0.2	0.013	0.095	0.3
	12-15-14	0.89	0.060	0.076	0.083	0.12	0.10	0.057	0.052	0.052	0.16	0.015	0.27	0.36	0.049	0.86	0.38	8.7	0.023	0.31	0.19
	12-8-15	0.034	<0.010	0.023	0.04	0.072	0.05	0.038	0.029	0.028	0.059	0.011	0.089	0.018	0.032	<0.050	<0.050	<0.20	0.015	0.059	0.064
	11-28-16[FD]	0.059	0.015	0.041	0.066	0.095	0.092	0.057	0.042	0.039	0.095	0.014	0.19	0.055	0.045	<0.050	<0.050	<0.20	0.023	0.13	0.14
	11-28-16	0.032	<0.010	0.021	0.038	0.054	0.046	0.034	0.022	0.021	0.058	<0.010	0.11	0.029	0.028	<0.050	<0.050	<0.20	0.016	0.084	0.08
	12-5-17[FD]	63	3	2.4	0.20	0.25	0.23	0.096	0.082	0.095	0.27	0.033	3.1	39	0.096	18	1.1	30	0.043	25	1.5
	12-5-17	46	2.3	1.2	0.11	0.15	0.13	0.076	0.055	0.061	0.13	0.022	1.8	26	0.066	13	1.3	36	0.027	14	0.86
	12-5-18	0.68	0.034	0.016	0.017	0.033	0.029	0.026	0.015	0.014	0.022	<0.010	0.044	0.22	0.021	1.7	1.2	15	0.010	0.085	0.033
	12-4-19	0.014	<0.010	0.025	0.029	0.048	0.036	0.038	0.019	0.019	0.041	<0.010	0.076	0.010	0.027	<0.050	<0.050	<0.20	0.020	0.051	0.061
	11-25-20	<0.010	<0.010	0.02	0.022	0.036	0.032	0.02	0.017	0.015	0.029	<0.010	0.041	<0.010	0.019	<0.050	<0.050	<0.20	0.011	0.029	0.034
	12-2-21	0.051	0.011	0.024	0.033	0.072	0.056	0.05	0.029	0.027	0.051	0.013	0.083	0.016	0.043	<0.050	<0.050	<0.20	0.023	0.056	0.068
CONCW-101-MWB (3.51 m)	03-15-13	0.19	0.03	0.024	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.028	0.095	<0.01	0.42	0.27	3.0	<0.01	0.14	0.021
	07-17-13	0.11	0.034	0.028	0.017	0.013	0.014	<0.01	<0.01	<0.01	0.018	<0.01	0.057	0.079	<0.01	0.21	0.14	2.2	<0.01	0.11	0.042
	10-24-13	0.071	0.026	0.02	0.013	0.013	<0.01	<0.01	NM	<0.01	0.015	<0.01	0.039	0.049	<0.01	0.058	<0.05	0.23	<0.01	0.087	0.034
	12-12-14	0.055	0.043	0.016	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.032	0.035	<0.01	0.060	<0.05	0.20	<0.01	0.066	0.024
	12-8-15	0.064	0.027	0.033	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.08	0.07	<0.010	0.065	0.06	0.29	<0.010	0.21	0.052
	11-23-16	0.059	0.052	0.042	0.062	0.045	0.037	0.03	0.023	0.021	0.053	<0.010	0.15	0.078	0.026	0.091	0.073	0.55	0.011	0.22	0.11
	12-11-17	0.014	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.024	0.024	<0.010	<0.050	<0.050	<0.20	<0.010	0.038	0.020
	11/28/18[FD]	0.021	0.022	0.013	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.026	0.026	<0.010	<0.050	<0.050	<0.20	<0.010	0.068	0.019
	11-28-18	0.024	0.026	0.017	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.033	0.030	<0.010	<0.050	<0.050	<0.20	<0.010	0.078	0.024
	12-4-19	0.28	0.030	0.020	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.022	0.096	<0.010	0.81	0.66	7.1	<0.010	0.085	0.022
	11-24-20	0.068	0.064	0.053	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	0.013	<0.010	0.13	0.097	<0.01	0.1	0.065	0.43	<0.010	0.33	0.088
	12-3-21	0.048	<0.020[g]	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.017	0.020	<0.010	<0.050	<0.050	<0.20	<0.010	0.044	0.015
CONPL-202-MWA (4.98 m)	12-15-14	0.054	0.030	0.031	0.062	0.059	0.045	0.030	0.026	0.027	0.053	<0.01	0.12	0.028	0.027	<0.05	<0.05	<0.2	0.014	0.086	0.096
	12-9-15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-23-16	<0.010	<0.010	<0.010	0.021	0.015	0.011	<0.010	<0.010	<0.010	0.018	<0.010	0.037	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.033	0.028
	12-21-17	0.022	0.016	0.047	0.095	0.071	0.055	0.035	0.041	0.034	0.089	0.011	0.18	0.038	0.034	<0.050	<0.050	<0.20	0.020	0.14	0.14
	11-28-18	0.025	0.035	0.079	0.16	0.12	0.095	0.066	0.063	0.067	0.14	0.021	0.34	0.042	0.062	<0.050	<0.050	<0.20	0.031	0.29	0.27
	11-29-19	<0.010	<0.010	0.011	0.028	0.028	0.019	0.012	0.013	<0.010	0.029	<0.010	0.044	<0.010	0.011	<0.050	<0.050	<0.20	<0.010	0.032	0.038
	11-27-20	<0.010	0.027	0.043	0.11	0.1	0.07	0.051	0.05	0.046	0.1	0.015	0.18	0.019	0.048	<0.050	<0.050	<0.20	0.028	0.11	0.16
	12-1-21	<0.010	0.019	0.039	0.089	0.082	0.054	0.042	0.04	0.036	0.081	0.013	0.15	0.019	0.039	<0.050	<0.050	<0.20	0.023	0.099	0.13

TABLE A-2
LTMM GROUNDWATER MONITORING EVENT 2021 OHP AND HE
GROUNDWATER ANALYTICAL RESULTS - PAHs

Sample Location (Water Level)	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(j)fluoranthene	Benzo(k)fluoranthene[4]	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Perylene	Phenanthrene	Pyrene
	Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ug/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	NS Tier 1 EQS[1]	600 [2]	7500	2.4 [2]	4.7 [2]	0.81 [2]	0.75 [2]	0.2 [2]	-	0.4 [2]	1 [2]	0.52 [2]	130 [2]	400 [2]	0.2 [2]	1800 [2]	1800 [2]	7000	-	580 [2]	68 [2]
COSB-002-MWA (1.22 m)	03/18/13[L]	0.026	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.01	0.014	<0.01	0.056	<0.05	0.42	<0.01	0.018	<0.01
	03-18-13	0.023	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	<0.05	<0.05	0.34	<0.01	0.016	<0.01
	07-26-13	0.2	0.21	0.44	0.53	0.52	0.4	**0.31**	0.25	0.23	0.52	0.073	1.3	0.35	**0.26**	0.17	0.21	0.25	0.13	1.4	1.2
	11-06-13[FD]	0.018	0.021	0.014	0.022	0.013	<0.01	<0.01	<0.01	<0.01	0.018	<0.01	0.055	0.02	<0.01	<0.05	<0.05	<0.2	<0.01	0.033	0.055
	11-06-13	0.022	0.023	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.027	0.019	<0.01	<0.05	<0.05	<0.2	<0.01	0.021	0.039
	12-15-14	0.013	0.018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.015	<0.01	<0.05	<0.05	<0.2	<0.01	0.014	0.012
	12-9-15	0.014	0.019	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.012	<0.010	<0.050	<0.050	<0.20	<0.010	0.010	0.012
	11-28-16	0.74	0.053	0.019	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.02	0.32	<0.010	2.5	1.6	33	<0.010	0.21	0.013
	12-8-17	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.011	<0.010
	11-28-18	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.013	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.015	0.011
	11-29-19	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-27-20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	<0.01	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-1-21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
COSCW-001-MWA (3.32 m)	03-19-13	0.12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	<0.01	0.06	<0.01	0.3	0.2	2.3	<0.01	0.034	<0.01
	07-17-13[L]	<0.01	<0.01	<0.01	0.014	<0.01	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	0.046	0.017	<0.01	<0.05	<0.05	<0.2	<0.01	0.07	0.022
	07-17-13	<0.01	<0.01	0.01	0.014	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	0.049	0.015	<0.01	<0.05	<0.05	<0.2	<0.01	0.068	0.027
	10-24-13	0.043	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.022	<0.01	<0.05	<0.05	<0.2	<0.01	0.016	<0.01
	12-12-14	0.045	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	0.12	0.05	1	<0.01	0.022	<0.01
	12-8-15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.013	0.013	<0.010	<0.050	<0.050	<0.20	<0.010	0.022	0.01
	11-22-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.012	<0.010
	12-8-17	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.014	<0.010
	12-3-18	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.027	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.024	0.014
	12-9-19	0.075	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.028	<0.010	0.20	0.15	1.5	<0.010	0.018	<0.010
	11-24-20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-8-21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
COSCW-001-MWB (1.57 m)	03-19-13	0.012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	<0.01	<0.01
	07-17-13	0.091	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.052	<0.01	0.24	0.16	3.2	<0.01	0.032	<0.01
	10-24-13	0.22	0.017	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.075	<0.01	0.85	0.57	12	<0.01	0.056	<0.01
	12-12-14	0.017	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.010	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	<0.01	<0.01
	12-8-15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.017	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.023	0.015
	11-22-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-8-17	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-3-18	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-29-19	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-24-20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-8-21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
COSCW-002-MWA (4.08 m)	03/26/13[L]	0.074	0.13	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.012	0.071	<0.01	0.25	<0.05	0.49	<0.01	0.053	<0.01
	03-26-13	0.055	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	<0.01	0.052	<0.01	0.19	<0.05	0.39	<0.01	0.034	<0.01
	07-17-13	0.036	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	0.022	<0.01	0.083	0.055	1.0	<0.01	0.025	<0.01
	10-24-13	0.46	0.034	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	<0.01	0.15	<0.01	1.9	1.2	29	<0.01	0.11	<0.01
	12-12-14	0.039	0.020	<0.01	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	0.031	0.028	<0.01	0.057	<0.05	0.22	<0.01	0.042	0.023
	12-8-15	0.015	<0.010	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.01	<0.010	0.03	0.019	<0.010	<0.050	<0.050	<0.20	<0.010	0.046	0.024
	11-22-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.013	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.011	<0.010
	12-8-17	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.024	<0.010
	12-3-18	<0.010	<0.010	<0.010	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	0.013	<0.010	0.034	0.011	<0.010	<0.050	<0.050	<0.20	<0.010	0.034	0.023
	11-29-19	1.1	0.042	0.031	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.026	0.40	<0.010	2.5	2.1	31	<0.010	0.31	0.017
	11-24-20	0.018	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-30-21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
COSCW-002-MWB (1.50 m)	03-19-13	0.023	0.012	<0.01	0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.023	0.022	<0.01	<0.05	<0.05	0.3	<0.01	0.036	0.018
	07-17-13	0.13	<0.01	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.033	0.076	<0.01	0.28	0.15	3.1	<0.01	0.08	0.021
	10-24-13	0.062	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.015	0.031	<0.01	<0.05	<0.05	<0.2	<0.01	0.026	0.014
	12-12-14	0.020	0.010	0.013	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.019	0.011	<0.01	<0.05	<0.05	<0.2	<0.01	0.011	0.011
	12-8-15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.014	<0.010
	11-22-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-8-17	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-3-18	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.019	<0.010
	11-29-19	0.98	0.040	0.017	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	0.38	<0.010	2.9	2.4	29	<0.010	0.21	<0.010
	11-30-20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-30-21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
COTS-001-MWA[3] (3.63 m)	11-15-13	0.052	0.18	0.16	0.28	0.33	0.27	0.17	0.14	0.14	0.25	0.046	0.48	0.12	0.13	0.1	<0.05	0.22	0.062	0.29	0.37
	12-15-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12-08-15	NM	NM	NM	NM	NM	NM	NM	NM	NM		NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

TABLE A-2
LTMM GROUNDWATER MONITORING EVENT 2021 OHP AND HE
GROUNDWATER ANALYTICAL RESULTS - PAHs

Sample Location (Water Level)	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(j)fluoranthene	Benzo(k)fluoranthene[4]	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Perylene	Phenanthrene	Pyrene
	Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ug/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	NS Tier 1 EQS[1]	600 [2]	7500	2.4 [2]	4.7 [2]	0.81 [2]	0.75 [2]	0.2 [2]	-	0.4 [2]	1 [2]	0.52 [2]	130 [2]	400 [2]	0.2 [2]	1800 [2]	1800 [2]	7000	-	580 [2]	68 [2]
COTS-001-MWB[3] (3.90 m)	12-08-15	<0.010	<0.010	<0.010	0.011	0.011	<0.010	<0.010	<0.010	<0.010	0.012	<0.010	0.029	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.023	0.023
	11-28-16	0.19	1.2	0.027	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.013	0.091	<0.010	0.49	<0.050	1.7	<0.010	0.017	<0.010
	12-21-17	<0.010	0.018	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-28-18	<0.010	0.013	0.027	0.015	0.010	<0.010	<0.010	<0.010	<0.010	0.014	<0.010	0.089	0.017	<0.010	<0.050	<0.050	<0.20	<0.010	0.095	0.062
	11-29-19	<0.010	0.018	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.014	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-27-20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-3-21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.019	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.018	0.018
MCES-001-MWA (5.3 m)	03-28-13[FD]	0.21	0.45	0.078	0.071	0.012	0.01	<0.01	NM	0.02	0.06	<0.01	0.38	0.36	<0.01	0.68	0.39	0.82	<0.01	0.39	0.75
	03-28-13	0.22	0.46	0.083	0.08	0.017	0.016	<0.01	NM	0.03	0.07	<0.01	0.41	0.35	<0.01	0.69	0.39	0.79	<0.01	0.41	0.81
	07-24-13	0.23	0.43	0.1	0.15	0.047	0.057	0.03	0.037	0.04	0.14	0.01	0.46	0.39	0.028	0.67	0.39	1.0	0.018	0.46	0.98
	12-10-14	0.069	0.098	0.023	0.039	0.021	0.022	0.014	0.014	0.014	0.044	<0.01	0.19	0.099	0.015	0.18	<0.05	<0.2	<0.01	0.068	0.25
	12-2-15	0.1	0.16	0.07	0.048	<0.010	<0.010	<0.010	<0.010	<0.010	0.046	<0.010	0.44	0.18	<0.010	0.28	0.1	<0.20	<0.010	0.21	0.7
	11-25-16	0.059	0.098	0.019	0.021	<0.010	<0.010	<0.010	<0.010	<0.010	0.025	<0.010	0.13	0.1	<0.010	0.18	0.05	<0.20	<0.010	0.04	0.16
	12-12-17[FD]	0.048	0.067	0.013	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	0.09	0.074	<0.010	0.12	<0.050	<0.20	<0.010	0.034	0.13
	12-12-17	0.052	0.073	0.021	0.021	<0.010	<0.010	<0.010	<0.010	<0.010	0.024	<0.010	0.22	0.076	<0.010	0.13	<0.050	<0.20	<0.010	0.041	0.13
	11-28-18	0.059	0.083	0.024	0.018	<0.010	<0.010	<0.010	<0.010	<0.010	0.018	<0.010	0.11	0.094	<0.010	0.13	<0.050	<0.20	<0.010	0.055	0.20
	12-2-19	0.047	0.062	0.022	0.016	<0.010	<0.010	<0.010	<0.010	<0.010	<0.030[8]	<0.010	0.082	0.086	<0.010	0.11	<0.050	<0.20	<0.010	0.051	0.19
	11-27-20	Dry																			
	12-7-21	0.032	0.047	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	0.068	0.050	<0.010	0.081	<0.050	<0.20	<0.010	0.026	0.13
MCES-001-MWB *(Decommissioned in 2020 and Replaced by MCES-201-MWB)*	03-28-13	0.022	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.031	0.015	<0.01	0.064	<0.05	0.5	<0.01	0.019	0.05
	07-25-13	0.021	0.013	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.019	0.018	<0.01	0.064	<0.05	0.44	<0.01	0.023	0.031
	11-14-13	0.012	<0.01	<0.01	0.012	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.026	0.01	<0.01	<0.05	<0.05	<0.2	<0.01	0.013	0.037
	12-10-14	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	0.015	<0.01
	12-02-15	<0.010	<0.010	<0.010	0.02	0.012	0.01	<0.010	<0.010	<0.010	0.019	<0.010	0.045	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.036	0.037
	11-25-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-15-17	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-28-18[10]	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.020 [8]	<0.010
	12-2-19	<0.010	<0.010	<0.020[8]	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.020 [8]	<0.010
MCES-201-MWB (6.23 m)	12-10-20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	2021-12-07[FD]	0.011	0.018	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.038	0.011	<0.010	<0.050	<0.050	<0.20	<0.010	0.016	0.077
	12-7-21	0.012	0.019	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.039	0.011	<0.010	<0.050	<0.050	<0.20	<0.010	0.017	0.078
MCES-006-MW (2.8 m)	03-28-13	52	0.79	1.1	0.16	0.019	0.021	<0.01	NM	0.02	0.14	<0.01	1.7	12	<0.01	34	7.0	34	<0.01	3.1	1.3
	07-26-13	62	1.1	0.84	0.3	0.11	0.11	0.02	0.051	0.06	0.29	<0.01	2.4	11	0.021	46	4.7	15	0.018	3.2	1.8
	11-05-13	60	1.4	0.69	0.15	0.035	0.037	<0.01	0.012	0.02	0.17	<0.01	2.1	13	<0.01	55	10	83	<0.01	2.9	1.7
	12-10-14	11	0.26	0.15	0.017	<0.01	<0.01	<0.01	<0.01	<0.01	0.024	<0.01	0.25	3.3	<0.01	8.7	2.5	63	<0.01	1.1	0.22
	12-3-15	1.7	0.031	0.027	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	0.059	0.061	<0.010	<0.050	<0.050	<0.20	<0.010	0.029	0.048
	12-2-16	22	0.24	0.30	0.016	<0.010	<0.010	<0.010	<0.010	<0.010	0.016	<0.010	0.42	7.4	<0.010	17	0.53	<0.20	<0.010	2.6	0.30
	12-13-17	<0.010	0.014	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	0.091
	11-28-18	4.1	0.096	0.12	0.088	0.034	0.029	0.017	0.015	0.018	0.083	<0.010	0.37	1.1	0.013	4.1	2.0	36	<0.010	0.68	0.27
	12-2-19	9.6	0.16	0.14	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.13	2.4	<0.010	3.1	<0.050	<0.20	<0.010	0.97	0.086
	11-26-20	5.1	0.12	0.11	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.1	1.5	<0.010	5.5	2.1	40[9]	<0.010	0.72	0.072
	12-8-21	4.0	0.10	0.13	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.15	<0.70[8]	<0.010	<0.050	<0.050	<0.20	<0.010	0.27	0.097

TABLE A-2
LTMM GROUNDWATER MONITORING EVENT 2021 OHP AND HE
GROUNDWATER ANALYTICAL RESULTS - PAHs

Sample Location (Water Level)	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(j)fluoranthene	Benzo(k)fluoranthene[4]	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Perylene	Phenanthrene	Pyrene
	Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ug/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	NS Tier 1 EQS[1]	600 [2]	7500	2.4 [2]	4.7 [2]	0.81 [2]	0.75 [2]	0.2 [2]	-	0.4 [2]	1 [2]	0.52 [2]	130 [2]	400 [2]	0.2 [2]	1800 [2]	1800 [2]	7000	-	580 [2]	68 [2]
MCWS-113-MWB (1.63 m)	03-27-13	0.86	0.035	0.082	0.034	0.016	0.011	<0.01	NM	0.02	0.03	<0.01	0.18	0.54	<0.01	9.2	0.14	2.4	<0.01	0.19	0.12
	07-24-13	1.0	0.043	0.11	0.12	0.11	0.087	0.06	0.05	0.05	0.11	0.02	0.27	0.65	0.058	16	0.55	8.2	0.028	0.49	0.21
	11-15-13	1.2	0.06	0.23	0.18	0.16	0.12	0.10	0.075	0.07	0.17	0.023	0.44	0.89	0.072	19	0.59	11	0.036	0.64	0.31
	12-9-14	0.74	0.042	0.097	0.042	0.032	0.022	0.019	0.013	0.015	0.044	<0.01	0.15	0.44	0.018	8.7	0.72	0.39	<0.01	0.26	0.12
	12-2-15	0.97	0.035	0.12	0.031	<0.010	0.012	<0.010	<0.010	<0.010	0.033	<0.010	0.24	0.52	<0.010	19	3.5	0.33	<0.010	0.35	0.14
	11-30-16	<0.010	0.013	0.03	0.024	0.038	0.034	0.025	0.033	0.028	0.044	<0.010	0.067	0.011	0.016	<0.050	<0.050	<0.20	<0.010	0.023	0.16
	12-12-17	<0.010	<0.010	<0.010	0.012	0.021	0.021	0.013	0.010	0.012	0.022	<0.010	0.014	<0.010	0.011	<0.050	<0.050	<0.20	<0.010	<0.010	0.13
	12-7-18	<0.010	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	0.16
	12-4-19[FD]	<0.020[8]	<0.020[8]	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.030[8]	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	0.18
	12-4-19	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	0.14
	11-27-20[FD]	0.83	<0.06[8]	0.17	0.03	<0.010	<0.010	<0.010	<0.010	<0.010	0.03	<0.010	0.3	0.57	<0.010	6.5	0.11	<0.20	<0.010	0.37	0.19
	11-27-20	1.1	<0.08[8]	0.21	0.03	<0.010	<0.010	<0.010	<0.010	<0.010	0.036	<0.010	0.3	0.61	<0.010	25	5.2	<0.20	<0.010	0.7	0.2
	12-8-21	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.070	<0.070	<0.25	<0.020	<0.020	0.11
MCWS-306-MWB (0.47 m)	03-27-13	0.028	<0.01	0.02	0.028	0.013	0.011	<0.01	NM	0.02	0.03	<0.01	0.087	0.018	<0.01	0.072	<0.05	0.6	<0.01	0.068	0.07
	07-24-13	0.011	<0.01	0.016	0.027	0.022	0.023	0.02	0.013	0.01	0.03	<0.01	0.052	0.016	0.016	<0.05	<0.05	0.22	<0.01	0.06	0.043
	11-15-13	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.022	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	0.015	0.017
	12-9-14	<0.01	<0.01	0.011	0.018	0.019	0.016	0.011	<0.01	<0.01	0.018	<0.01	0.037	<0.01	0.01	<0.05	<0.05	<0.2	<0.01	0.033	0.034
	12-2-15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.023	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.021	0.021
	11-30-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-12-17	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-7-18	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-4-19	0.088	0.043	<0.020[8]	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.047	<0.020[8]	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	0.032
	11-27-20	0.59	0.39	<0.14[8]	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	0.018	<0.010	0.66	0.19	<0.010	<0.050	<0.050	<0.20	<0.010	<0.02[8]	0.4
	12-7-21	0.34	0.27	0.05	0.014	<0.010	<0.010	<0.010	<0.010	<0.010	0.019	<0.010	0.54	0.14	<0.010	<0.050	<0.050	<0.20	<0.010	0.025	0.35
MCWS-307-MWB (0.61 m)	03-27-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-27-13	0.017	0.017	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	0.055	<0.05	0.25	<0.01	0.011	<0.01
	07-24-13	0.014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.078	<0.05	0.42	<0.01	<0.01	<0.01
	11-14-13	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	<0.01	<0.01
	12-9-14	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.017	0.01	<0.01	<0.05	<0.05	<0.2	<0.01	0.030	0.013
	12-2-15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-2-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-12-17	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-7-18	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-4-19	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-27-20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-7-21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
MCWS-309-MW (0.8 m)	07-26-13	0.041	0.067	0.074	0.16	0.17	0.13	0.11	0.078	0.08	0.16	0.025	0.35	0.056	0.089	<0.05	<0.05	<0.2	0.05	0.25	0.29
	11-14-13	0.09	0.049	0.033	0.029	0.027	0.024	0.02	0.013	0.01	0.03	<0.01	0.14	0.075	<0.01	0.13	0.06	1.3	<0.01	0.077	0.11
	12-9-14	0.028	0.13	0.22	0.51	0.50	0.37	**0.28**	0.24	0.24	0.48	0.084	1.0	0.13	0.28	<0.05	0.062	<0.2	0.13	0.60	0.79
	12-3-15	0.049	0.15	0.18	0.44	0.36	0.26	**0.22**	0.18	0.16	0.41	0.061	1.0	0.13	0.20	0.099	<0.050	<0.20	0.096	0.56	0.79
	12-2-16	<0.010	0.013	0.019	0.029	0.033	0.027	0.02	0.018	0.016	0.031	<0.010	0.093	0.014	0.018	<0.050	<0.050	<0.20	<0.010	0.052	0.080
	12-12-17	<0.010	0.021	0.039	0.10	0.09	0.13	0.064	0.051	0.053	0.11	0.019	0.29	0.024	0.059	<0.050	<0.050	<0.20	0.028	0.11	0.22
	12-7-18	<0.010	0.012	0.020	0.045	0.043	0.035	0.026	0.022	0.024	0.045	<0.010	0.14	0.016	0.024	<0.050	<0.050	<0.20	0.013	0.059	0.11
	12-5-19	0.010	0.055	0.10	0.23	0.17	0.12	0.092	0.097	0.096	0.22	0.013	0.65	0.061	0.065	<0.050	<0.050	<0.20	0.043	0.30	0.49
	11-27-20	0.011	0.048	0.069	0.19	0.19	0.15	0.11	0.097	<0.1[8]	0.19	0.03	0.52	0.044	0.096	<0.050	<0.050	<0.20	0.05	0.2	0.38
	12-7-21	0.015	0.076	0.13	0.31	0.31	0.23	0.18	0.16	0.15	0.34	0.052	0.87	0.090	0.17	<0.050	<0.050	<0.20	0.088	0.44	0.68
MCWS-310-MW (0.61 m)	03-29-13	0.014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	0.32	<0.01	<0.01	<0.01
	07-26-13[L]	0.029	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.021	<0.01	0.076	<0.05	0.59	<0.01	<0.01	<0.01
	07-26-13	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.014	<0.01	0.056	<0.05	0.38	<0.01	<0.01	<0.01
	11-14-13[L]	0.11	0.047	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	0.051	<0.01	0.43	0.22	4.5	<0.01	0.061	<0.01
	11-14-13	0.069	0.028	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.038	<0.01	0.26	0.13	2.3	<0.01	0.041	<0.01
	12-9-14	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	0.016	<0.01
	12-10-15[FD]	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-10-15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-2-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.013	<0.010
	12-12-17	0.037	0.032	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.021	0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	0.014
	12-7-18	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-5-19	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-26-20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-8-21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010

TABLE A-2
LTMM GROUNDWATER MONITORING EVENT 2021 OHP AND HE
GROUNDWATER ANALYTICAL RESULTS - PAHs

Sample Location (Water Level)	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(j)fluoranthene	Benzo(k)fluoranthene[4]	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Perylene	Phenanthrene	Pyrene
	Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ug/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	NS Tier 1 EQS[1]	600 [2]	7500	2.4 [2]	4.7 [2]	0.81 [2]	0.75 [2]	0.2 [2]	-	0.4 [2]	1 [2]	0.52 [2]	130 [2]	400 [2]	0.2 [2]	1800 [2]	1800 [2]	7000	-	580 [2]	68 [2]
MSES-004-MW (7.34 m)	03-26-13	0.033	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.015	0.019	<0.01	0.087	0.053	0.63	<0.01	0.018	0.012
	07-26-13	0.039	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.019	<0.01	0.08	<0.05	0.57	<0.01	0.011	<0.01
	11-15-13	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	<0.01	0.011
	12-10-14	0.038	0.069	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.014	0.023	<0.01	0.11	<0.05	<0.2	<0.01	0.017	0.011
	12-3-15	<0.010	<0.010	0.024	0.046	0.034	0.025	0.019	0.017	0.016	0.053	<0.010	0.12	0.015	0.015	<0.050	<0.050	<0.20	<0.010	0.10	0.10
	11-25-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11/25/16[R]	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.012	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-13-17 FD	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	0.010
	12-13-17	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-10-18	0.18	0.039	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.014	0.074	<0.010	0.47	0.31	3.2	<0.010	0.035	0.013
	12-5-19	0.13	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.046	<0.010	0.34	0.28	2.9	<0.010	0.024	<0.010
	11-26-20	0.021	<0.010	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-8-21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.014	<0.010
MSES-006-MW (3.53 m)	03-26-13	0.73	1.1	0.013	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.1	0.36	<0.01	0.46	<0.05	0.74	<0.01	0.048	0.062
	07-24-13	0.46	0.79	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.06	0.22	<0.01	0.37	<0.05	0.67	<0.01	0.033	0.041
	11-05-13[L]	0.43	0.88	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.064	0.16	<0.01	0.22	<0.05	0.57	<0.01	0.02	0.042
	11-05-13	0.2	0.36	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.044	0.077	<0.01	0.073	<0.05	0.24	<0.01	0.017	0.03
	12-10-14	0.75	1.4	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.015	0.23	<0.01	0.52	<0.05	1.5	<0.01	0.015	<0.01
	12-3-15	0.89	1.2	0.015	0.013	<0.010	<0.010	<0.010	<0.010	<0.010	0.013	<0.010	0.046	0.27	<0.010	0.82	<0.050	1.4	<0.010	0.049	0.035
	11-25-16	0.66	0.94	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.035	0.16	<0.010	0.21	<0.050	<0.20	<0.010	<0.010	0.02
	11-25-16[R]	0.65	0.96	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.031	0.16	<0.010	0.2	<0.050	<0.20	<0.010	<0.010	0.02
	12-13-17	0.44	0.69	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.12	<0.010	0.25	<0.050	0.33	<0.010	<0.010	<0.010
	12-10-18	0.93	1.2	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.039	0.23	<0.010	0.54	<0.050	<0.20	<0.010	0.015	0.023
	12-2-19	0.35	0.62	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.098	<0.010	0.14	<0.050	<0.20	<0.010	<0.010	<0.010
	11-26-20	0.49	0.84	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.14	<0.010	0.24	<0.050	<0.20	<0.010	<0.010	<0.010
	12-8-21	0.82	0.92	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.030	0.14	<0.010	0.35	<0.050	<0.20	<0.010	<0.030[R]	0.020
MSES-008-MW (3.8 m)	03-26-13	2.3	4.2	0.37	0.096	0.011	<0.01	<0.01	NM	0.02	0.06	<0.01	1.7	5.2	<0.01	1.8	<0.05	0.88	<0.01	4.2	1.2
	07-26-13	2.5	3.2	0.29	0.078	<0.01	<0.01	<0.01	<0.01	<0.01	0.06	<0.01	1.4	4.7	<0.01	1.4	<0.05	0.36	<0.01	2.9	1.0
	11-15-13	3.1	4.1	0.53	0.10	0.011	0.012	<0.01	<0.01	<0.01	0.08	<0.01	1.9	5.7	<0.01	2.0	<0.05	0.23	<0.01	3.8	1.3
	12-10-14	1.9	2.7	0.21	0.070	<0.01	<0.01	<0.01	<0.01	<0.01	0.049	<0.01	1.2	3.6	<0.01	0.94	<0.05	<0.2	<0.01	1.9	0.94
	12-3-15[FD]	2.1	2.5	0.23	0.07	<0.010	<0.010	<0.010	<0.010	<0.010	0.05	<0.010	1.5	3.8	<0.010	0.7	<0.050	<0.20	<0.010	1.7	1.1
	12-3-15	2.1	2.4	0.23	0.065	<0.010	<0.010	<0.010	<0.010	<0.010	0.051	<0.010	1.4	3.8	<0.010	0.69	<0.050	<0.20	<0.010	1.6	1.0
	11-25-16[FD]	1.4	1.8	0.16	0.049	<0.010	<0.010	<0.010	<0.010	<0.010	0.04	<0.010	1	3.1	<0.010	0.42	<0.050	<0.20	<0.010	0.8	0.77
	11-25-16[FDR]	1.6	2	0.15	0.063	<0.010	<0.010	<0.010	<0.010	<0.010	0.047	<0.010	1.3	3.6	<0.010	0.45	<0.050	<0.20	<0.010	0.88	0.92
	11-25-16	1.4	1.7	0.15	0.054	<0.010	<0.010	<0.010	<0.010	<0.010	0.045	<0.010	1	3.1	<0.010	0.4	<0.050	<0.20	<0.010	0.84	0.79
	11-25-16[R]	1.4	1.7	0.13	0.049	<0.010	<0.010	<0.010	<0.010	<0.010	0.036	<0.010	0.96	3.1	<0.010	0.39	<0.050	<0.20	<0.010	0.68	0.70
	12-13-17	1.6	1.9	0.13	0.062	<0.010	<0.010	<0.010	<0.010	<0.010	0.050	<0.010	1.3	2.9	<0.010	0.34	<0.050	<0.20	<0.010	0.83	0.88
	12-10-18	1.7	2.3	0.16	0.065	<0.010	<0.010	<0.010	<0.010	<0.010	0.053	<0.010	1.3	3.6	<0.010	0.58	0.24	2.1	<0.010	0.58	0.99
	12-2-19	2.0	2.5	0.14	0.061	<0.010	<0.010	<0.010	<0.010	<0.010	0.044	<0.010	1.2	3.6	<0.010	0.94	0.62	7.7	<0.010	0.36	0.92
	11-26-20	1.4	1.9	0.12	0.049	<0.010	<0.010	<0.010	<0.010	<0.010	0.046	<0.010	0.99	3.1	<0.010	0.15	<0.050	<0.20	<0.010	0.21	0.76
	11-30-21	1.3	1.4	0.088	0.043	<0.010	<0.010	<0.010	<0.010	<0.010	0.039	<0.010	0.87	2.3	<0.010	0.082	<0.050	<0.20	<0.010	0.11	0.67
MSES-012-MWA (3.18 m)	03-15-13	0.19	0.021	0.071	0.024	0.022	0.011	<0.01	NM	0.03	0.05	<0.01	0.14	0.3	0.01	0.37	0.19	2.6	<0.01	0.19	0.099
	07-25-13[FD]	0.026	0.015	0.023	0.029	0.02	0.013	<0.01	<0.01	0.01	0.03	<0.01	0.084	0.061	<0.01	<0.05	<0.05	0.26	<0.01	0.066	0.063
	07-25-13	0.038	0.034	0.1	0.16	0.11	0.075	0.04	0.052	0.04	0.13	0.017	0.31	0.11	0.044	0.053	<0.05	0.32	0.027	0.27	0.23
	11-05-13	0.12	0.029	0.085	0.051	0.032	0.023	0.01	0.016	0.01	0.05	<0.01	0.23	0.19	0.013	0.19	0.094	2.5	<0.01	0.14	0.16
	12-16-14	0.15	0.033	0.17	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.059	0.12	<0.01	0.43	0.19	4.0	<0.01	0.036	0.039
	12-3-15	0.014	0.017	0.014	0.018	0.010	<0.010	<0.010	<0.010	<0.010	0.015	<0.010	0.059	0.033	<0.010	<0.050	<0.050	<0.20	<0.010	0.037	0.042
	11-22-16	<0.010	<0.010	0.015	0.023	0.018	0.014	<0.010	<0.010	<0.010	0.028	<0.010	0.057	0.018	<0.010	<0.050	<0.050	<0.20	<0.010	0.034	0.041
	12-13-17	0.019	0.020	0.060	0.13	0.083	0.067	0.037	0.052	0.046	0.12	0.013	0.31	0.048	0.035	<0.050	<0.050	<0.20	0.021	0.16	0.22
	12-10-18	0.15	0.021	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	<0.010	0.029	0.080	<0.010	0.35	0.26	2.2	<0.010	0.037	0.018
	12-5-19	0.17	0.063	0.20	0.33	0.21	0.12	0.061	0.11	0.11	0.27	0.011	0.78	0.15	0.047	0.37	0.27	2.9	0.041	0.48	0.58
	11-25-20	0.02	0.013	0.04	0.057	0.044	0.031	0.019	<0.038	0.02	0.06	<0.010	0.13	0.03	0.02	<0.050	<0.050	<0.20	<0.028	0.087	0.1
	11-30-21	0.026	0.034	0.18	0.27	0.21	0.14	0.077	0.10	0.091	0.23	0.030	0.63	0.090	0.086	<0.050	<0.050	<0.20	0.050	0.48	0.46

TABLE A-2
LTMM GROUNDWATER MONITORING EVENT 2021 OHP AND HE
GROUNDWATER ANALYTICAL RESULTS - PAHs

Sample Location (Water Level)	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(j)fluoranthene	Benzo(k)fluoranthene[4]	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Perylene	Phenanthrene	Pyrene
	Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	ug/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	NS Tier 1 EQS[1]	600 [2]	7500	2.4 [2]	4.7 [2]	0.81 [2]	0.75 [2]	0.2 [2]	-	0.4 [2]	1 [2]	0.52 [2]	130 [2]	400 [2]	0.2 [2]	1800 [2]	1800 [2]	7000	-	580 [2]	68 [2]
MSES-104-MWA (1.73 m)	03-28-13	9.5	6.9	**2.8**	**5.8**	**2.7**	**2.0**	**1.10**	NM	**2.40**	**4.80**	0.28	29	2.2	**1.3**	0.69	0.52	2.4	0.6	3.1	18
	12-10-14	5.4	5.6	0.38	0.20	0.079	0.060	0.031	0.040	0.036	0.16	0.011	2.3	1.1	0.034	0.51	0.21	3.7	0.015	0.29	1.4
	12-3-15	8.1	7.5	0.70	0.24	0.035	0.028	<0.010	0.023	0.018	0.20	<0.010	4.2	1.6	<0.010	0.73	0.29	4.6	<0.010	0.55	2.6
	11-25-16	6.8	6.2	0.55	0.26	0.12	0.085	0.055	0.057	0.054	0.23	0.018	3.1	1.3	0.051	1.1	0.35	6.5	0.023	0.44	1.9
	11-25-16[R]	6.7	6.4	0.41	0.26	0.12	0.081	0.051	0.053	0.053	0.23	0.018	2.8	1.2	0.053	0.99	0.32	6	0.024	0.44	1.8
	12-13-17	7.3	6.3	0.53	0.20	0.028	0.026	<0.010	0.021	0.016	0.17	<0.010	3.4	1.9	<0.010	1.2	0.36	6.5	<0.010	0.60	2.0
	12-10-18	6.7	6.5	0.50	0.18	0.021	0.020	<0.010	0.016	0.013	0.15	<0.010	3.1	2.1	<0.010	1.5	0.48	8.7	<0.010	0.68	1.8
	12-2-19[FD]	5.7	5.7	0.45	0.16	<0.050[8]	<0.050[8]	0.020	<0.030[8]	<0.030[8]	0.14	<0.010	2.3	1.8	<0.020[8]	1.2	0.36	8.2	<0.010	0.52	1.5
	12-2-19	6.1	5.9	0.52	0.17	0.057	0.044	0.023	0.037	0.031	0.15	<0.010	2.4	1.8	0.018	1.2	0.37	8.5	<0.020[8]	0.56	1.5
	11-26-2020[FD]	8.2	8.7	0.76	0.19	<0.03[8]	0.023	<0.010	<0.03[8]	0.017	0.17	<0.010	3.4	3.4	<0.010	2.6	0.57	13	<0.010	0.95	2.1
	11-26-20	8.4	9	0.79	0.19	<0.03[8]	0.025	<0.010	<0.03[8]	0.019	0.17	<0.010	3.3	3.5	<0.010	2.7	0.59	13	<0.010	1.00	2.1
	12-1-21	9.5	8.7	0.85	0.23	0.034	0.025	<0.010	<0.030[9]	0.017	0.20	<0.010	4.0	3.9	<0.010	2.7	0.80	15	<0.010	1.3	2.4
MSES-104-MWB (2.26 m)	03-26-13	17	30	1.7	0.11	0.014	0.012	<0.01	NM	0.02	0.08	<0.01	1.4	13	<0.01	53	0.17	47	<0.01	11	0.86
	07-24-13	21	36	2.0	0.16	0.044	0.039	0.01	0.032	0.03	0.11	<0.01	1.4	16	0.013	58	0.12	37	0.015	12	0.96
	11-05-13[FD]	19	30	1.6	0.081	<0.01	<0.01	<0.01	<0.01	<0.01	0.06	<0.01	1.2	15	<0.01	55	0.19	26	<0.01	10	0.79
	11-05-13	20	32	1.7	0.11	0.018	0.012	<0.01	0.012	0.01	0.080	<0.01	1.3	15	<0.01	63	0.20	28	<0.01	11	0.84
	12-10-14	18	33	1.4	0.10	0.018	0.012	<0.01	0.013	0.011	0.074	<0.01	1.1	14	<0.01	45	0.12	17	<0.01	9.7	0.72
	12-3-15	18	31	1.4	0.038	<0.010	<0.010	<0.010	<0.010	<0.010	0.024	<0.010	0.83	13	<0.010	52	<0.050	9.1	<0.010	8.6	0.47
	11-25-16	25	39	1.4	0.034	<0.010	<0.010	<0.010	<0.010	<0.010	0.024	<0.010	0.8	18	<0.010	64	0.08	12	<0.010	2.9	0.45
	11-25-16[R]	24	45	1.1	0.032	<0.010	<0.010	<0.010	<0.010	<0.010	0.018	<0.010	0.71	17	<0.010	66	0.079	11	<0.010	3	0.39
	12-13-17	16	28	1.1	0.031	<0.010	<0.010	<0.010	<0.010	<0.010	0.024	<0.010	0.71	11	<0.010	39	<0.050	3.3	<0.010	6.9	0.38
	12-10-18[FD]	13	24	0.98	0.028	<0.010	<0.010	<0.010	<0.010	<0.010	0.019	<0.010	0.65	11	<0.010	33	<0.050	4.4	<0.010	7.4	0.36
	12-10-18	13	24	1.0	0.029	<0.010	<0.010	<0.010	<0.010	<0.010	0.020	<0.010	0.64	11	<0.010	33	<0.050	4.5	<0.010	7.4	0.38
	12-2-19	20	379	1.2	0.027	<0.010	<0.010	<0.010	<0.010	<0.010	0.017	<0.010	0.64	14	<0.010	529	0.051	5.2	<0.010	9.3	0.34
	11-26-20	17	32	1.0	0.024	<0.010	<0.010	<0.010	<0.010	<0.010	0.018	<0.010	0.59	11	<0.010	31[9]	<0.050	3	<0.010	7.7	0.32
	2021-12-01[FD]	12	25	0.76	0.02	<0.010	<0.010	<0.010	<0.010	<0.010	0.014	<0.010	0.45	8.5	<0.010	33	<0.050	3.6	<0.010	6.5	0.25
	12-1-21	16	31	1.1	0.025	<0.010	<0.010	<0.010	<0.010	<0.010	0.017	<0.010	0.55	11	<0.010	39[9]	0.055	4.5	<0.010	8.1	0.31
SCU11-001-MWA (1.94 m)	03-29-13	0.097	<0.01	0.18	0.041	0.012	<0.01	<0.01	NM	0.013	0.04	<0.01	0.21	0.21	<0.01	<0.05	<0.05	<0.2	<0.01	0.49	0.17
	07-17-13	0.076	0.013	0.23	0.14	0.081	0.072	0.039	0.048	0.043	0.13	0.011	0.43	0.13	0.035	<0.05	<0.05	<0.2	0.016	0.47	0.36
	10-24-13	0.074	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	0.018	<0.01	<0.01	0.012	0.025	<0.01	0.18	<0.05	0.58	0.087	0.059	0.011
	12-15-14	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	0.015	<0.01
	12-11-15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.012	0.01	<0.010	<0.050	<0.050	<0.20	<0.010	0.016	<0.010
	11-23-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.016	<0.010
	12-13-17	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-10-18	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.024	<0.010
	12-5-19	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.013	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.019	<0.010
	11-25-20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.048	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.02	<0.010
	12-2-21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.012	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.031	<0.010
SCU11-001-MWB (1.97 m)	03-29-13	0.79	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	<0.01	0.071	<0.01	1.8	<0.05	3.2	<0.01	0.033	<0.01
	07-17-13	0.55	0.017	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.021	0.06	<0.01	0.7	<0.05	1.1	<0.01	0.024	0.015
	10-24-13	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	<0.01	<0.01
	12-15-14[FD]	0.019	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.012	0.014	<0.01	<0.05	<0.05	<0.2	<0.01	0.021	0.012
	12-15-14	0.019	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	0.013	<0.01	<0.05	<0.05	<0.2	<0.01	0.019	0.012
	12-11-15	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.014	0.011	<0.010	<0.050	<0.050	<0.20	<0.010	0.015	0.012
	11-23-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-13-17	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-5-18	0.016	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.013	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.024	<0.010
	12-5-19[FD]	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-5-19	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-25-20	0.012	<0.010	0.014	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.016	<0.010
	12-2-21	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.012	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.022	0.010

TABLE A-2
LTMM GROUNDWATER MONITORING EVENT 2021 OHP AND HE
GROUNDWATER ANALYTICAL RESULTS - PAHs

Sample Location (Water Level)	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(j)fluoranthene	Benzo(k)fluoranthene[4]	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Perylene	Phenanthrene	Pyrene
	Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	NS Tier 1 EQS[1]	600 [2]	7500	2.4 [2]	4.7 [2]	0.81 [2]	0.75 [2]	0.2 [2]	-	0.4 [2]	1 [2]	0.52 [2]	130 [2]	400 [2]	0.2 [2]	1800 [2]	1800 [2]	7000	-	580 [2]	68 [2]
SCU7-001-MW (1.75 m)	12-12-14	0.029	0.045	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.010	<0.01	0.030	0.024	<0.01	<0.05	<0.05	<0.2	<0.01	0.026	0.019
	12-10-15	<0.010	0.011	0.017	0.026	0.025	0.015	0.017	0.013	0.013	0.031	<0.010	0.064	0.012	0.013	<0.050	<0.050	<0.20	<0.010	0.056	0.053
	12-2-16	0.012	0.054	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.014	0.028	<0.010	<0.050	<0.050	<0.20	<0.010	0.014	0.011
	12-15-17	<0.010	0.013	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.012	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	0.011
	12-7-18	0.29	0.051	0.035	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.024	0.26	<0.010	0.095	0.12	<0.20	<0.010	0.22	0.017
	12-5-19	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-25-20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-2-21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
SCU7-003-MW (1.02 m)	03-29-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-29-13	0.016	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.014	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	0.011	0.013
	07-17-13	0.097	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.031	0.059	<0.01	0.18	0.11	2.5	<0.01	0.13	0.026
	11-07-13	0.013	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	<0.01	<0.01	<0.05	<0.05	<0.2	<0.01	<0.01	0.012
	12-12-14	0.060	0.011	0.026	0.044	0.025	0.022	0.012	0.013	0.013	0.047	<0.01	0.19	0.047	<0.01	<0.05	<0.05	<0.2	<0.01	0.10	0.11
	12-10-15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.015	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.014	0.018
	11-30-16	0.096	0.013	0.027	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.035	0.087	<0.010	0.11	0.19	0.68	<0.010	0.1	0.022
	12-15-17	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-11-18	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.022	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.034	0.016
	12-5-19	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	11-25-20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12-3-21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010

NOTES:
FD - Field Duplicate
L - Lab Duplicate
R - Sample analysis repeated due to a laboratory error.
FDR - Field duplicate sample analysis repeated due to a laboratory error.
NM - Not measured or not analyzed; lab duplicates do not analyze for all parameters.
µg/L - micrograms per litre
- No applicable guideline criteria.
1 - Nova Scotia Environment (NSE) Tier I Environmental Quality Standards (EQS) for Groundwater (Coarse Grained Soil, Non-potable Groundwater Commercial/Industrial Site) September 2021
2 - Ontario Ministry of Environment, Conservation and Parks Table 3 Full Depth Generic Site Condition Standards in a Non-potable Groundwater 2011
3 - COTS-001-MWA could not be sampled during the December 2014 event due to insufficient water. COTS-001-MWB added to the LTMM in 2015 in place of COTS-001-MWA.
4 - Benzo(j)fluoranthene was historically not included in PAH analysis.
5 - Bold and Shaded Exceeds NSE Tier I EQS or default MOE Table 3 standards when no Tier I EQS is available.
6 - *Italics indicates laboratory detection limit elevated above criteria*
7 - This summary is to be used in conjunction with, not as a replacement of, the Laboratory Certificates of Analysis, which contain QA/QC information
8 - Elevated PAH RDL(s) due to matrix / co-extractive interference.
9 - Elevated PAH RDL(s) due to sample dilution.
10 - A possible seal failure is suspected was suspected in MCES-001-MWB.

TABLE B-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021
OHP AND HE GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Water Level)	Sample Date	Na	K	Ca	Mg	ALK	SO4	Cl	SiO2	OPO4 (ORTHOPHOSPHATE)	P	NO3	NO2	NO2-NO3	NH3	Colour	TOC	TURBIDITY	CONDUCTIVITY	pH	HARDNESS	BICARB ALK	CARB ALK	TDS	Anion Sum	Ion Bal_	Langelier Ind_ (@20C)	Langelier Ind_ (@4C)	Sat_ pH (@20C)	Sat_ pH (@4C)
Units		µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	TCU	mg/L	NTU	µS/cm	pH	mg/L	mg/L	mg/L	mg/L	me/L	%	unitless	unitless	unitless	unitless
NS Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MECP Table 3[2]		2300000	-	-	-	-	-	2300000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COBB-004-MWA (1.18 m)	03-27-13	7800	<3000	100000	4300	90	200	18	19	0.014	<500	0.19	<0.01	0.19	<0.05	<5	2.3	0.5	600	7.8	270	89	<1	402	6.38	4.76	0.314	0.065	7.49	7.74
	07-26-13	8990	3460	119000	5010	120	190	19	27	0.021	<100	<0.05	<0.01	<0.05	<0.05	<5	4.1	1.7	670	7.8	320	120	<1	444	6.84	0.07	0.489	0.241	7.31	7.56
	11-06-13	6800	3100	76000	2500	62	130	14	27	0.029	<100	<0.05	<0.01	<0.05	<0.05	15	6.7	1	430	7.65	200	62	<1	300	4.36	0	-0.096	-0.345	7.75	8
	12-15-14	8000	3500	130000	4800	100	210	16	27	0.022	<100	0.16	<0.01	0.16	<50	10	7.4	1.8	680	7.56	340	100	<1	460	6.9	3.02	0.212	-0.036	7.35	7.59
	12-9-15	8000	3700	140000	5900	160	210	14	24	0.02	<100	<0.050	<0.010	<0.050	0.094	5	NM	2.2	720	7.72	370	150	<1.0	500	7.86	0.32	0.583	0.335	7.14	7.39
	12-02-16	8900	4200	170000	6900	140	300	20	26	0.023	<100	<0.050	<0.010	<0.050	0.052	10	5.6	3.8	830	7.52	460	140	<1.0	630	9.72	0.26	0.424	0.177	7.09	7.34
	12-08-17	11000	4600	210000	9200	210	310	22	27	0.015	<100	0.076	<0.010	0.076	0.51	5.3	7.0	4.5	1100	7.69	560	210	<1.0	730	11.4	1.93	0.829	0.582	6.86	7.11
	12-03-18	10000	4200	220000	7700	180	380	18	27	0.013	<100	<0.050	<0.010	<0.050	0.060	5.5	7.6	0.71	1000	7.68	580	180	<1.0	770	12.0	0.540	0.769	0.523	6.92	7.16
	11-28-19	8500	3600	160000	6900	210	210	18	22	0.017	<100	<0.050	<0.010	<0.050	0.13	5.8	8.2	0.62	760	8.00	420	210	1.9	550	8.96	0.060	1.04	0.789	6.97	7.21
	11-23-2020[FD]	10000	3700	160000	8100	240	180	16	24	0.017	<100	<0.05	<0.01	<0.05	0.15	8.7	6.3	1.8	840	7.80	440	230	1.4	550	8.95	2.290	0.903	0.655	6.9	7.14
	11-23-20	10000	3600	160000	7900	230	200	16	24	0.017	<100	<0.05	<0.01	<0.05	0.15	8.9	6.2	1.8	840	7.82	430	230	1.4	560	9.12	0.650	0.905	0.658	6.91	7.16
	12-01-21	12000	3600	150000	7200	160	240	27	23	0.018	<100	<0.05	<0.01	<0.05	0.21	7.6	6.5	0.72	830	7.81	410	160	<1.0	570	9.00	0.840	0.726	0.478	7.08	7.33
COBC-001-MWA (1.66 m)	03-15-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	770	7.4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-15-13	29000	2000	110000	5700	170	140	64	8.5	<0.01	<100	<0.05	<0.01	<0.05	0.47	65	3	32	770	7.4	300	170	<1	470	8.17	4.08	0.22	-0.028	7.18	7.43
	07-26-13[LFD]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	720	7.26	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-26-13[FD]	34400	2300	98800	5930	150	120	73	11	0.013	212	<0.05	<0.01	<0.05	0.9	<5	4	96	720	7.27	270	150	<1	446	7.46	0	-0.024	-0.272	7.29	7.54
	07-26-13	34000	2260	107000	6110	120	120	73	11	<0.01	193	<0.05	<0.01	<0.05	0.9	<5	3.4	110	740	7.33	290	150	<1	454	7.56	1.69	0.086	-0.162	7.24	7.49
	11-07-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1200	7.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11-07-13	41000	2300	190000	12000	150	350	67	8.6	<0.01	140	<0.05	<0.01	<0.05	0.4	5.2	2.5	40	1200	7.24	520	150	<1	770	12.2	0.85	0.183	-0.063	7.06	7.3
	12-12-14	39000	2400	130000	7200	160	170	78	11	<10	<100	0.1	0.017	0.12	0.69	6.5	3.8	49	860	7.1	350	160	<1	550	9.12	1.22	-0.06	-0.308	7.16	7.41
	12-10-15	40000	2600	130000	7700	200	170	77	10	<0.010	160	<0.050	<0.010	<0.050	0.7	6	NM	57	880	7.32	360	200	<1.0	570	9.69	2.76	0.249	0.002	7.08	7.32
	12-02-16	45000	2600	270000	16000	170	560	68	8.6	0.012	<100	<0.050	0.013	<0.050	0.66	<5.0	3.1	31	1400	7.3	730	170	<1.0	1100	16.9	0.21	0.402	0.157	6.9	7.15
	12-11-17	42000	2600	170000	9900	160	430	76	9	<0.010	<100	<0.05	<0.010	<0.050	1.1	<5.0	4.3	42	1300	7.55	460	160	<1.0	840	14.4	12.1	0.455	0.208	7.10	7.34
	12-07-18	42000	2400	130000	7800	160	220	83	11	<0.010	150	<0.050	0.010	<0.050	0.78	5.7	4.1	61	920	7.23	360	160	<1.0	600	10.1	3.90	0.0650	-0.182	7.17	7.41
	12-02-19	42000	2500	160000	10000	170	280	68	9.2	<0.010	<100	<0.10	0.010	<0.10	0.62	8.0	3.8	56	1000	7.46	450	170	<1.0	690	11.3	0.810	0.408	0.161	7.05	7.30
	11-25-20	45000	2500	210000	13000	160	380	73	9.2	<0.010	<100	<0.05	<0.01	<0.05	0.91	6.9	3.6	44	1100	7.27	580	160	<1	840	13.2	2.450	0.274	0.028	6.99	7.24
	12-03-21	46000	2600	170000	10000	140	630	64	8.5	<0.010	<100	<0.050	<0.010	<0.050	0.51	<5.0	2.9	60	1500	7.30	460	140	<1.0	1000	17.7	21.3	0.132	-0.114	7.17	7.41
COBC-002-MWA (4.0 m)	03-15-13	160000	2500	170000	15000	48	270	320	3.3	<0.01	<100	0.23	<0.01	0.23	<0.05	<5	1.2	2.2	1600	6.3	500	48	<1	971	15.6	3.68	-1.33	-1.57	7.63	7.87
	07-18-13	115000	2440	129000	13900	51	170	230	4.6	<0.01	<100	0.35	<0.01	0.35	<0.05	<5	1.5	1.3	1400	6.19	380	51	<1	696	11	6.96	-1.5	-1.75	7.69	7.94
	11-05-13	150000	2800	150000	16000	50	250	310	4.9	<0.01	<100	0.25	<0.01	0.25	<0.05	<5	1.4	4.1	1600	5.98	450	50	<1	920	14.9	2.43	-1.68	-1.92	7.66	7.90
	12-12-14	110000	2200	130000	13000	61	300	190	4.4	<10	<100	0.15	<0.01	0.15	0.057	<5	1.5	1.4	1300	5.99	380	61	<1	790	12.8	1.38	-1.64	-1.88	7.62	7.87
	12-10-15	120000	2500	140000	16000	48	180	320	3.2	<0.010	<100	0.27	<0.010	0.27	0.056	<5.0	NM	4.1	1500	6.25	410	48	<1.0	820	13.9	0.62	-1.45	-1.7	7.7	7.94
	11-22-16	160000	2600	150000	16000	58	230	340	3.8	0.011	<100	0.5	<0.010	0.5	0.056	<5.0	1.4	7.1	1600	6.29	430	58	<1.0	930	15.4	0.19	-1.32	-1.57	7.62	7.86
	11-22-16	160000	2600	150000	16000	58	230	340	3.8	0.011	<100	0.5	<0.010	0.5	0.056	<5.0	1.4	7.1	1600	6.29	430	58	<1.0	930	15.4	0.19	-1.32	-1.57	7.62	7.86
	12-02-17	210000	3300	190000	22000	53	190	590	2.9	<0.010	<100	0.21	<0.010	0.21	<0.050	<5.0	1.8	1.8	2300	6.37	570	53	<1.0	1300	21.9	2.53	-1.20	-1.44	7.57	7.82
	12-03-18	260000	3300	190000	20000	66	200	620	2.8	<0.010	<100	0.17	<0.010	0.17	<0.050	<5.0	1.8	2.7	2400	6.44	550	66	<1.0	1300	23.0	1.35	-1.06	-1.31	7.50	7.74
	12-02-19	260000	3100	190000	21000	55	180	690	2.7	<0.010	<100	0.48	<0.01	0.48	<0.050	<5.0	1.6	2.0	2500	6.25	550	55	<1.0	1400	24.3	3.79	-1.34	-1.58	7.59	7.83
	11-23-20	410000	3600	200000	23000	77	230	740	3.1	<0.010	<100	0.22	0.01	0.23	<0.05	<5	<59	1.7	3200	6.42	610	77	<1	1700	27.3	4.58	-1.00	-1.25	7.42	7.67
	11-30-21	340000	3100	170000	17000	84	320	500	3.9	<0.010	<100	0.10	<0.010	0.10	<0.050	<5.0	2.7	4.1	2700	6.57	490	84	<1.0	1,400	22.4	5.07	-0.878	-1.12	7.45	7.69
COBC-004-MWA (2.9 m)	03-15-13	100000	5000	320000	28000	220	710	170	17	0.07	<100	<0.05	0.013	<0.05	<0.05	<5	1.2	<0.1	1900	7.6	920	210	<1.0	1480	23.9	2.09	0.837	0.593	6.76	7.01
	07-18-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1600	7.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-18-13	86300	5180	221000	35800	190	360	160	18	0.066	117	0.21	<0.01	0.21	0.18	<5	1.5	0.24	1700	7.8	700	190	1.1	999	15.7	6.45	0.88	0.634	6.92	7.17
	11-05-13	43000	4100	83000	14000	120	110	52	22	0.092	200	0.44	<0.01	0.44	<0.05	5.3	0.87	4.3	610	7.89	270	120	<1.0	410	6.26	7.74	0.449	0.201	7.44	7.69
	12-12-14	29000	2200	34000	5100	99	20	41	13	0.086	140	0.18	<0.01	0.18	<50	<5	0.53	3	350	7.83	110	98	<1	210	3.59	1.84	-0.035	-0.285	7.86	8.11
	12-10-15	32000	2300	34000	4800	100	18	49	13	0.13	210	0.079	<0.010	0.079	0.05	<5.0	NM	1.1	370	7.92	110	100	<1.0	220	3.85	3.77	0.072	-0.178	7.84	8.09
	11-25-16	34000	4100	120000	18000	130	240	54	21	0.19	200	0.53	<0.010	0.53	0.069	<5.0	1.5	8	780	7.81	360	130	<1.0	570	9.13	1.5	0.519	0.272	7.3	7.54
	12-07-17	90000	4800	150000	21000	160	280	140	21	0.16	180	0.053	<0.010	0.053	0.068	<5.0	1.9	2.0	1300	7.93	460	160	1.3	810	13.1	0.340	0.792	0.545	7.14	7.39
	12-03-18	50000	4100	140000	24000	180	290	76	24	0.16	200	1.5	<0.010	1.5	<0.050	<5.0	1.4	1.3	1100	7.94	460	180	1.5	730	12.0	2.13	0.836	0.589	7.1	7.35
	12-02-19	90000	4500	150000	26000	220	300	140	22	0.19	220	0.54	0.074	0.62	0.067	<5.0	1.3	1.6	1300	8.03	490	220	2.2	870	14.7	3.20	1.03	0.779	7.01	7.26
	11-23-20	210000	6700	250000	44000	180	450	390	21	0.16	200	0.07	<0.01	0.07	0.17	<5	1	2.8	2500	7.98	820	180	1.6	1500	24.0	3.09	1.04	0.795	6.94	7.18
	11-30-21	70000	4700	150000	28000	170	340	91	23	0.15	170	1.4	<0.010	1.4	<0.050	<5.0	1.5	0.14	1200	7.91	500	160	1.3	810	13.0	0.770	0.791	0.544	7.12	7.37
COBP-006-MWA (1.95 m)	03-27-13[FDL]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	6	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-27-13[FD]	14000	3900	150000	17000	220	300	25	14	<0.01	<500	<0.05	<0.01	<0.05	1.00	370	6.4	250	940	6.9	440	220	<1	683	11.2	3.41	-0.094	-0.341	6.99	7.24
	03-27-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1.00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-27-13	14000	3900	150000	18000	220	300	25	14	<0.01	<500	<0.05	<0.01	<0.05	0.99	310	7.4	270	940	6.9	460	220	<1	690	11.2	1.81	-0.077	-0.324	6.98	7.22
	07-26-13	15300	4090	169000	21000	210	320	25	15	<0.01	<100	<0.05	<0.01	<0.05	0.89	37	6.7	190	1000	7.16	510	210	<1	723	11.5	1.25	0.192	-0.054	6.97	7.21
	11-06-13	14000	4300	170000	21000	200	330	24	14	<0.01	110	<0.05	<0.01	<0.05	0.92	48	5.1	170	1000	7.01	520	200	<1	740	11.6	0.94	0.046	-0.200	6.96	7.21
	12-15-14	21000	4000	130000	17000	250	150	34	16	<10	130	<0.05	<0.01	<0.05	1.2	17	7.8	170	820	6.95	400	250	<1	550	8.98	4.42	-0.007	-0.254	6.96	7.2
	12-9-15[FD]	19000	3900	130000	15000	250	140	36	16	0.012	120	<0.050	<0.010	<0.050	1.1	<5.0	NM	240	800	7.11	380	250	<1.0	530	8.85	1.88	0.122	-0.126	6.99	7.23
	12-9-15	19000	3800	120000	15000	260	120	35	16	0.013	120	<0.050	<0.010	<0.050	1.1	11	NM	270	790	7.13	370	260	<1.0	510	8.65	2.7	0.166	-0.082	6.97	7.22
	11-28-16	21000	4200	110000	15000	280	98	38	16	0.016	<100	<0.050	<0.010	<0.050	1.4	5.6	12	280	720	7.06	350	280	<1.0	500	8.78	0.8	0.104	-0.144	6.96	7.2
	12-21-17	21000	4000	110000	14000	270	81	40	16	<0.01	110	<0.050	<0.010	<0.050	1.3	6.8	11	170	770	7.29	340	270	<1.0	470	8.30	0.42	0.316	0.068	6.98	7.23
	12-3-18[FD]	24000	4000	110000	14000	270	77	44	15	<0.010	110	<0.050	<0.010	<0.050	1.2	16	8.5	170	730	7.33	340	270	<1.0	470	8.22	1.26	0.340	0.092	6.99	7.24
	12-3-18	24000	4000	110000	14000	270	79	45	15	<0.010	130	<0.050	<0.010	<0.050	1.2	80	8.8	160	760	7.73	330	260	1.3	470	8.21	0.610	0.735	0.487	7.00	7.25
	11-29-19	22000	3900	110000	14000	260	74	46	15	<0.010	<100	<0.050	<0.010	<0.050	1.5	<5.0	9.6	150	750	7.22	330	260	<1.0	460	8.12	0.370	0.21	-0.038	7.01	7.26
	11-23-20	21000	3900	110000	14000	270	63	44	16	<0.010	120	<0.05	<0.01	<0.05	1.4	5.9	7.99	200	740	7.19	330	270	<1	450	7.94	1.550	0.193	-0.055	6.99	7.24
	12-01-21	24000	4200	110000	14000	280	68	46	15	<0.010	100	<0.050	<0.010	<0.050	1.4	<5.0	9.4	98	740	7.28	330	280	<1.0	460	8.25	0.24	0.923	0.045	6.99	7.24

TABLE B-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021
OHP AND HE GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Water Level)	Sample Date	Al	Sb	As	Ba	Be	Bi	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	Sr	Tl	Sn	Ti	U	V	Zn
Units		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NS Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MECP Table 3[2]		-	20000	1900	29000	67	-	45000	2.7	810	66	87	-	25	-	0.29	9200	490	63	1.5	-	510	-	-	420	250	1100
COBB-004-MWA (1.18 m)	03-27-13	<25	<5	<3	44	<2.5	<10	<500	0.12	<5	<5	<10	<500	<5	<20	0.013	<20	<15	<5	<0.5	430	<4	<100	<15	1.8	<10	26
	07-26-13	12.9	<1	3.3	56.1	<1	<2	75	0.096	<1	<0.4	<2	77	<0.5	972	NM	19	2.2	<1	<0.1	481	<0.1	<2	<2	2.03	<2	16
	11-06-13	10	<1	3.3	37	<1	<2	59	0.1	<1	<0.4	4.4	<50	<0.5	390	NM	7.8	2.5	<1	<0.1	360	<0.1	<2	<2	0.6	<2	12
	12-15-14	27	<1	2.2	57	<1	<2	55	0.46	<1	<0.4	5.7	<50	<0.5	41	<0.013	3.2	<2	1.5	<0.1	600	<0.1	<2	<2	1.6	<2	20
	12-9-15	23	<1.0	3	76	<1.0	<2.0	65	0.058	<1.0	1.1	<2.0	360	<0.50	2300	<0.013	13	3.5	<1.0	<0.10	600	<0.10	<2.0	<2.0	2.7	<2.0	12
	12-02-16	10	<1.0	3.2	87	<1.0	<2.0	66	0.03	<1.0	0.76	2.3	320	<0.50	1700	<0.013	11	2.5	<1.0	<0.10	740	<0.10	<2.0	<2.0	3.2	<2.0	48
	12-08-17	5.5	<1.0	2.9	94	<1.0	<2.0	82	0.069	<1.0	0.60	<2.0	280	<0.50	2300	<0.013	12	<2.0	<1.0	<0.10	880	<0.10	<2.0	<2.0	8.2	<2.0	<5.0
	12-03-18	<5.0	<1.0	2.3	89	<1.0	<2.0	85	0.12	<1.0	0.60	<2.0	170	<0.50	1300	<0.013	13	2.2	<1.0	<0.10	880	<0.10	<2.0	<2.0	8.0	<2.0	<5.0
	11-28-19	7.1	<1.0	2.5	60	<1.0	<2.0	90	0.019	<1.0	0.43	<0.50	130	<0.50	1500	<0.013	15	<2.0	<0.50	<0.10	590	<0.10	<2.0	<2.0	7.2	<2.0	<5.0
	11-23-2020[FD]	<5.0	<1.0	2.9	60	<1.0	<2.0	94	0.036	<1.0	0.53	0.67	160	<0.50	2000	<0.013	17	<2.0	<0.50	<0.10	590	<0.10	<2.0	<2.0	7.9	<2.0	<5.0
	11-23-20	6.2	<1.0	2.8	59	<1.0	<2.0	89	0.056	<1.0	0.51	0.66	160	<0.50	2000	<0.013	17	<2.0	<0.50	<0.10	580	<0.10	<2.0	<2.0	7.9	<2.0	<5.0
	12-01-21	22	<1.0	2.9	57	<1.0	<2.0	83	0.044	<1.0	0.49	0.82	130	<0.50	2000	<0.013[13]	17	2.1	<0.50	<0.10	570	<0.10	<2.0	<2.0	5.5	<2.0	<5.0
COBC-001-MWA (1.66 m)	03-15-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	<0.013	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-15-13	16	<1	1.6	33	<0.5	<2.0	<100	0.056	<1.0	<1.0	<2.0	2600	<1.0	950	<0.013	<4	<3	<1.0	<0.1	3500	<0.8	<20	<3	<0.15	<2.0	37
	07-26-13[LFD]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-26-13[FD]	293	<1.0	3.9	43.9	<1.0	<2.0	<50	0.028	<1.0	0.53	<2.0	11900	<0.5	1060	NM	<2.0	<2.0	<1.0	<0.1	2380	<0.1	<2.0	<2.0	0.15	2.1	35.5
	07-26-13	23.3	<1.0	3.8	42.2	<1.0	<2.0	<50	<0.017	<1.0	0.48	<2.0	11100	<0.5	1080	NM	<2.0	<2.0	<1.0	<0.1	2550	<0.1	<2.0	<2.0	<0.1	<2.0	19.2
	11-07-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11-07-13	21	<1.0	2.7	34	<1.0	<2.0	<50	<0.01	<1.0	0.61	<2.0	4400	<0.5	1600	NM	<2.0	<2.0	<1.0	<0.1	7300	<0.1	<2.0	<2.0	0.17	<2.0	36
	12-12-14	10	<1	2	50	<1	<2	<50	0.058	<1	0.44	<2	3900	<0.5	1200	<0.013	<2	<2	<1	<0.1	3600	<0.1	<2	<2	<0.1	<2	20
	12-10-15	29	<1.0	2.1	58	<1.0	<2.0	<50	0.095	<1.0	0.48	<2.0	4400	<0.50	1300	<0.013	<2.0	<2.0	<1.0	<0.10	3800	<0.10	<2.0	<2.0	0.12	<2.0	21
	12-02-16	7.7	<1.0	2.1	42	<1.0	<2.0	<50	0.058	<1.0	0.86	<2.0	3800	1.3	2500	<0.013	<2.0	<2.0	<1.0	<0.10	10000	<0.10	<2.0	<2.0	0.17	<2.0	61
	12-11-17	<5.0	<1.0	1.8	71	<1.0	<2.0	50	0.054	<1.0	0.42	<2.0	3300	<0.50	1700	<0.013	<2.0	<2.0	<1.0	<0.10	5000	<0.10	<2.0	<2.0	0.11	<2.0	11
	12-07-18	<5.0	<1.0	2.3	76	<1.0	<2.0	<50	<0.010	<1.0	0.47	<2.0	4900	<0.50	1400	<0.013	<2.0	<2.0	<1.0	<0.10	3700	<0.10	<2.0	<2.0	<0.10	<2.0	29
	12-02-19	8.7	<1.0	1.9	81	<1.0	<2.0	<50	0.024	<1.0	0.44	<0.50	4000	<0.50	1700	<0.013	<2.0	<2.0	<0.5	<0.10	5100	<0.10	<2.0	<2.0	<0.10	<2.0	13
	11-25-20	8.1	<1.0	2.5	83	<1.0	<2.0	<50	<0.010	<1.0	0.49	0.7	5400	<0.50	2200	<0.013	<2.0	<2.0	<0.50	<0.10	7200	<0.10	<2.0	<2.0	0.1	<2.0	67
	12-03-21	6.5	<1.0	1.7	76	<0.10	<2.0	<50	0.044	<1.0	0.62	<0.50	3100	<0.50	1900	<0.013[13]	<2.0	<2.0	<0.50	<0.10	5000	<0.10	<2.0	<2.0	<0.10	<2.0	22
COBC-002-MWA (4.0 m)	03-15-13	47	<1	<0.6	15	<0.5	<2	<100	0.6	<1	<1	30	<100	<1	67	<0.013	<4	6.2	10	<0.1	730	<0.8	<20	<3	<0.15	<2	370
	07-18-13	40.2	<1	<1	12.7	<1	<2	82	0.203	<1	0.46	40.4	84	0.93	56.1	NM	<2	2.2	8.4	<0.1	547	<0.1	<2	<2	<0.1	<2	189
	11-05-13	95	<1	<1	14	<1	<2	87	0.26	<1	0.85	46	<50	0.92	80	NM	<2	5.3	7.6	<0.1	610	<0.1	<2	<2	<0.1	<2	240
	12-12-14	60	<1	<1	11	<1	<2	79	0.47	<1	0.41	7.2	<50	0.57	51	<0.013	<2	<2	8.3	<0.1	500	<0.1	<2	<2	<0.1	<2	110
	12-10-15	36	<1.0	<1.0	17	<1.0	<2.0	77	0.17	<1.0	<0.40	5.9	57	0.63	62	<0.013	<2.0	<2.0	5.8	<0.10	600	<0.10	<2.0	<2.0	<0.10	<2.0	84
	11-22-16	66	<1.0	<1.0	15	<1.0	<2.0	79	0.21	<1.0	0.75	44	<50	0.61	98	<0.013	<2.0	2.5	6.9	<0.10	650	<0.10	<2.0	<2.0	<0.10	<2.0	160
	11-22-16	66	<1.0	<1.0	15	<1.0	<2.0	79	0.21	<1.0	0.75	44	<50	0.61	98	<0.013	<2.0	2.5	6.9	<0.10	650	<0.10	<2.0	<2.0	<0.10	<2.0	160
	12-02-17	27	<1.0	<1.0	21	<1.0	<2.0	75	0.21	<1.0	<0.40	9.6	<50	<0.50	59	<0.013	<2.0	<2.0	5.6	<0.10	950	<0.10	<2.0	<2.0	<0.10	<2.0	140
	12-03-18	20	<1.0	<1.0	21	<1.0	<2.0	69	0.21	<1.0	<0.40	8.8	<50	<0.50	53	<0.013	<2.0	<2.0	5.1	<0.10	850	<0.10	<2.0	<2.0	<0.10	<2.0	120
	12-02-19	32	<1.0	<1.0	20	<1.0	<2.0	71	0.2	<1.0	0.49	11	<50	1.1	100	<0.013	<2.0	3.5	4.7	<0.10	890	<0.10	<2.0	<2.0	<0.10	<2.0	62
	11-23-20	42	<1.0	<1.0	22	<1.0	<2.0	68	0.25	<1.0	<0.40	23	<50	<0.50	59	<0.013	<2.0	<2.0	5.9	<0.10	1000	<0.10	<2.0	<2.0	<0.1	<2.0	110
	11-30-21	35	<1.0	<1.0	16	<0.10	<2.0	69	0.18	<1.0	0.42	15	67	2.7	79	<0.013	<2.0	5.4	4.9	<0.10	800	<0.10	<2.0	<2.0	<0.10	<2.0	250
COBC-004-MWA (2.9 m)	03-15-13	6.4	1.9	4.1	20	<0.5	<2.0	<100	0.064	<1.0	<1.0	<2.0	<100	<1.0	270	<0.013	4.1	4.3	1.2	<0.10	710	<0.80	<20	<3.0	1	13	23
	07-18-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-18-13	8.4	1.5	3.6	15.3	<1.0	<2.0	93	0.054	<1.0	<0.4	4.2	72	<0.5	908	NM	7.5	<2.0	1.2	<0.10	682	<0.10	<2.0	<2.0	0.6	10.6	24.7
	11-05-13	16	5.0	5.4	8.5	<1.0	<2.0	67	0.043	<1.0	<0.4	<2.0	370	<0.5	310	NM	4.2	2.4	1.7	<0.10	200	<0.10	<2.0	<2.0	0.21	9.2	41
	12-12-14	11	1.5	4.6	3.9	<1	<2	<50	0.12	<1	<0.4	2.9	<50	<0.5	7.6	<0.013	<2	<2	<1	<0.1	210	<0.1	<2	<2	0.14	8.6	18
	12-10-15	7.7	<1.0	3.9	5.1	<1.0	<2.0	<50	0.037	<1.0	<0.40	2.6	<50	<0.50	<2.0	<0.013	<2.0	<2.0	<1.0	<0.10	300	<0.10	<2.0	<2.0	0.17	7.3	17
	11-25-16	9.4	2.5	4.6	41	<1.0	<2.0	80	0.023	<1.0	<0.40	6.6	<50	<0.50	35	<0.013	3.8	<2.0	1.7	<0.10	400	<0.10	<2.0	<2.0	0.59	13	41
	12-07-17	19	1.0	5.2	25	<1.0	<2.0	86	0.036	<1.0	<0.40	2.4	<50	<0.50	160	<0.013	7.3	<2.0	<1.0	<0.10	510	<0.10	<2.0	<2.0	0.64	15	20
	12-03-18	340	2.5	4.9	30	<1.0	<2.0	80	0.096	1.0	<0.40	3.6	<50	<0.50	21	<0.013	3.8	<2.0	8.7	<0.10	400	<0.10	<2.0	<2.0	0.68	11	20
	12-02-19	5.7	1.8	6.1	25	<1.0	<2.0	85	0.029	<1.0	<0.40	2.8	<50	<0.50	180	<0.013	7.3	<2.0	3.3	<0.10	410	<0.10	<2.0	<2.0	0.74	15	19
	11-23-20	7.2	1.6	4.9	46	<1.0	<2.0	100	0.046	<1.0	<0.4	3.8	<50	<0.50	1400	<0.013	5.8	<2.0	0.86	<0.10	790	<0.10	<2.0	<2.0	0.85	12	13
	11-30-21	9.5	2.7	5.3	29	<0.10	<2.0	88	0.020	1.0	<0.40	3.0	<50	0.81	18	<0.013	4.3	<2.0	9.9	<0.10	380	<0.10	<2.0	<2.0	0.81	13	26
COBP-006-MWA (1.95 m)	03-27-13[FDL]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-27-13[FD]	31	<5	3.1	30	<2.5	<10	<500	<0.085	<5	<5	<10	23000	<5	8400	0.022	<20	<15	<5	1	500	<4	<100	<15	<0.75	<10	34
	03-27-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-27-13	<25	<5	<3	31	<2.5	<10	<500	<0.085	<5	<5	<10	23000	<5	8400	<0.013	<20	<15	<5	<0.5	510	<4	<100	<15	<0.75	<10	32
	07-26-13	33.9	<1	2.7	32.8	<1	<2	71	0.06	<1	1.53	<2	20700	0.74	10500	NM	<2	<2	<1	<0.1	501	<0.1	<2	<2	0.26	<2	35
	11-06-13	15	<1.0	3.4	30.0	<1.0	<2.0	64	<0.01	<1	0.93	<2	20000	<0.50	10000	NM	<2	<2	<1	<0.1	550	<0.1	<2	<2	0.18	<2	35
	12-15-14	26	<1	1.4	37	<1	<2	61	0.18	<1	<0.40	<2	19000	<0.5	6200	<0.013	<2	<2	<1	<0.1	480	<0.1	<2	<2	<0.1	<2	29
	12-9-15[FD]	<5.0	<1.0	<1.0	37	<1.0	<2.0	59	0.012	<1.0	<0.40	<2.0	19000	<0.50	5800	<0.013	<2.0	<2.0	<1.0	<0.10	440	<0.10	<2.0	<2.0	<0.10	<2.0	27
	12-9-15	6.6	<1.0	<1.0	36	<1.0	<2.0	61	0.016	<1.0	<0.40	<2.0	19000	<0.50	5800	<0.013	<2.0	<2.0	<1.0	<0.10	440	<0.10	<2.0	<2.0	<0.10	<2.0	28
	11-28-16	9	<1.0	<1.0	58	<1.0	<2.0	62	<0.010	<1.0	<0.40	<2.0	16000	<0.50	5300	<0.013	<2.0	<2.0	<1.0	<0.10	450	<0.10	<2.0	<2.0	<0.10	<2.0	47
	12-21-17	9.1	<1.0	<1.0	75	<1.0	<2.0	57	0.067	<1.0	<0.40	<2.0	15000	<0.50	5000	<0.013	<2.0	<2.0	<1.0	<0.10	450	<0.10	<2.0	<2.0	<0.10	<2.0	56
	12-3-18[FD]	10	<1.0	<1.0	110	<1.0	<2.0	60	0.15	<1.0	<0.40	<2.0	13000	<0.50	4900	<0.013	<2.0	<2.0	<1.0	<0.10	470	<0.10	<2.0	<2.0	<0.10	<2.0	52
	12-3-18	9.8	<1.0	<1.0	110	<1.0	<2.0	59	0.086	<1.0	<0.40	<2.0	13000	<0.50	4800	<0.013	<2.0	<2.0	<1.0	<0.10	460	<0.10	<2.0	<2.0	<0.10	<2.0	52
	11-29-19	50	<1.0	<1.0	110	<1.0	<2.0	59	0.02	<1.0	<0.40	<0.5	13000	<0.50	4700	<0.013	<2.0	<2.0	<0.5	<0.10	450	<0.10	<2.0	<2.0	<0.10	<2.0	13
	11-23-20	8.5	<1.0	<1.0	89	<1.0	<2.0	58	0.21	<1.0	<0.40	0.64	14000	<0.50	4600	<0.013	<2.0	<2.0	<0.50	<0.10	440	<0.10	<2.0	<2.0	<0.10	<2.0	59
	12-01-21	18	<1.0	<1.0	130	<0.10	<2.0	60	0.037	<1.0	<0.40	<0.50	11,000	<0.50	4500	<0.013[13]	<2.0	<2.0	<0.50	<0.10	470	<0.10	<2.0	<2.0	<0.10	<2.0	52

TABLE B-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021
OHP AND HE GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Water Level)	Sample Date	Na	K	Ca	Mg	ALK	SO4	Cl	SiO2	OPO4 (ORTHOPHOSPHATE)	P	NO3	NO2	NO2-NO3	NH3	Colour	TOC	TURBIDITY	CONDUCTIVITY	pH	HARDNESS	BICARB ALK	CARB ALK	TDS	Anion Sum	Ion Bal_	Langelier Ind_ (@20C)	Langelier Ind_ (@4C)	Sat_ pH (@20C)	Sat_ pH (@4C)
Units		µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	TCU	mg/L	NTU	µS/cm	pH	mg/L	mg/L	mg/L	mg/L	me/L	%	unitless	unitless	unitless	unitless
NS Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MECP Table 3[2]		2300000	-	-	-	-	-	2300000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COBT-003-MWB (3.85 m)	12-20-11	110000	2700	100000	13000	210	91	210	14	0.02	<100	<0.05	<0.01	<0.05	<0.05	6	1.1	1.8	1100	7.5	300	207	<1	664	12	5.37	0.321	0.074	7.18	7.43
	03-13-12[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	0.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-13-12[FD]	99000	2700	100000	11000	210	81	180	13	<0.01	<100	<0.05	<0.01	<0.05	<0.05	7.9	0.94	1	1100	7.7	300	210	1	621	11.1	3.73	0.535	0.288	7.17	7.41
	03-13-12	100000	2700	100000	12000	210	81	180	13	0.014	<100	<0.05	<0.01	<0.05	<0.05	9	<0.5	1.4	1100	7.7	300	210	1	620	11	2.89	0.535	0.288	7.17	7.41
	06-07-12	120000	3400	99000	12000	210	89	210	13	<0.01	<100	<0.05	<0.01	<0.05	0.064	<5	<0.5	0.96	1100	7.6	300	210	<1	677	11.9	2.36	0.408	0.161	7.19	7.44
	09-12-12[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1.2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09-12-12	130000	3300	100000	12000	210	87	230	12	<0.01	<100	<0.05	<0.01	<0.05	0.061	<5	0.55	1.3	1200	7.6	300	210	<1	695	12.4	3.3	0.409	0.162	7.19	7.44
	12-12-12[L]	NM	2900	110000	NM	NM	NM	NM	13	NM	<100	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12-12-12	110000	3000	100000	12000	210	85	220	13	<0.01	<100	<0.05	<0.01	<0.05	<0.05	12	<0.5	0.37	1200	7.7	310	210	1	674	12.1	4.79	0.538	0.291	7.16	7.41
	03-19-13	130000	3200	120000	12000	210	89	220	12	<0.01	<100	<0.05	<0.01	<0.05	0.06	<5	<0.5	0.8	1200	7.7	340	210	1	717	12.4	1.12	0.578	0.331	7.12	7.37
	07-18-13	111000	2910	104000	11900	210	80	180	13	<0.01	<100	0.052	<0.01	0.052	0.058	<5	0.54	0.43	1200	7.41	310	210	<1	638	11.2	0.41	0.26	0.013	7.15	7.4
	11-07-13	110000	3100	110000	13000	210	80	200	13	<0.01	<100	<0.05	<0.01	<0.05	<0.05	<5	<0.5	0.86	1200	7.31	330	210	<1	670	11.7	0.56	0.177	-0.07	7.13	7.38
	12-12-14	120000	3100	110000	13000	220	78	220	13	<10	<100	0.14	<0.01	0.14	0.074	<5	<0.5	1.3	1200	7.32	340	220	<1	700	12.2	0.62	0.222	-0.025	7.1	7.35
	12-9-15	110000	2800	110000	12000	230	76	200	13	0.012	<100	<0.050	<0.010	<0.050	0.14	<5.0	NM	1.3	1200	7.64	320	230	<1.0	670	11.9	2.11	0.549	0.302	7.09	7.34
	11-28-16	110000	3100	110000	12000	220	74	210	13	0.015	<100	0.052	<0.010	0.052	0.073	9.1	0.72	1.6	1100	7.55	320	220	<1.0	670	11.9	2.33	0.43	0.183	7.12	7.37
	12-07-17	100000	2900	110000	12000	210	69	200	13	<0.010	<100	<0.050	<0.010	<0.050	<0.050	<5.0	1.3	0.51	1200	7.64	320	210	<1.0	640	11.3	1.57	0.516	0.269	7.13	7.37
	12-03-18	97000	2700	110000	12000	220	74	190	14	<0.010	<100	<0.050	<0.010	<0.050	0.058	<5.0	1.1	0.53	1100	7.86	320	220	1.5	630	11.3	2.92	0.726	0.478	7.13	7.38
	11-29-19[FD]	92000	2600	100000	11000	220	72	190	12	<0.010	<100	<0.050	<0.010	<0.050	0.097	<5.0	0.78	0.47	1000	7.49	300	220	<1.0	620	11.3	5.24	0.351	0.104	7.14	7.38
	11-29-19	93000	2600	100000	11000	220	73	170	13	<0.010	<100	0.089	<0.010	0.089	0.065	<5.0	0.77	0.42	1100	7.54	310	220	<1.0	600	10.7	2.05	0.407	0.160	7.14	7.39
	11-23-20	95000	2700	110000	12000	210	68	140	13	<0.010	<100	<0.05	0.01	<0.05	0.06	<5	<0.5	3.4	1100	7.57	320	210	<1	570	9.64	4.27	0.431	0.183	7.14	7.38
	11-30-21[FD]	96000	2600	110000	12000	220	75	170	14	<0.010	<100	<0.050	<0.010	<0.050	0.086	<5.0	0.73	0.66	1100	7.56	320	220	<1.0	610	10.7	0.420	0.445	0.198	7.12	7.36
	11-30-21	94000	2600	110000	12000	220	73	170	14	<0.010	<100	<0.050	<0.010	<0.050	0.054	<5.0	0.77	0.55	1100	7.51	320	220	<1.0	610	10.8	1.03	0.390	0.142	7.12	7.37
COCP-110-MW (2.22 m)	03-27-13[L]	NM	NM	NM	NM	NM	NM	NM	25	NM	<500	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-27-13	14000	6900	110000	7600	140	130	59	25	<0.01	<500	0.11	<0.01	0.11	1.3	5.8	1.8	56	680	7.5	320	140	<1	449	7.18	1.37	0.235	-0.013	7.27	7.51
	07-18-13	17900	8680	139000	7800	170	130	62	37	<0.01	159	0.055	<0.01	0.055	2.3	7.9	3	79	860	7.44	380	170	<1	513	7.91	5.72	0.352	0.105	7.09	7.34
	11-06-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	85	1000	7.4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11-06-13	15000	9600	160000	10000	210	260	58	40	<0.01	240	0.076	0.012	0.088	2.5	17	5.5	85	1000	7.35	450	210	<1	690	11.3	4.87	0.392	0.145	6.96	7.21
	12-15-14	20000	10000	150000	11000	210	190	35	35	<10	170	0.15	0.012	0.16	1.2	9.2	5	73	880	7.48	430	210	<1	590	9.15	4.34	0.501	0.254	6.98	7.23
	12-9-15	29000	11000	150000	10000	190	220	61	34	0.019	<100	0.17	0.011	0.18	2.3	7.4	NM	70	980	7.5	410	190	<1.0	640	10.2	0.39	0.45	0.202	7.05	7.29
	11-28-16	24000	11000	120000	11000	180	150	55	35	0.041	140	0.18	<0.010	0.18	0.22	10	3	23	720	7.82	340	180	1.1	520	8.44	2.18	0.677	0.429	7.14	7.39
	12-8-17 [FD]	33000	12000	150000	13000	210	210	75	35	<0.01	310	0.16	<0.010	0.16	1.3	6	4.1	86	1000	7.69	430	210	<1.0	660	10.6	0.38	0.68	0.433	7.01	7.26
	12-8-17	33000	12000	150000	13000	210	200	75	34	<0.010	290	0.20	<0.010	0.20	1.4	5.7	4.1	69	990	7.67	420	210	<1.0	640	10.4	0.14	0.654	0.406	7.02	7.26
	12-3-18	28000	11000	140000	13000	200	210	62	31	<0.010	200	<0.050	<0.010	<0.050	1.0	6.3	6.1	68	930	7.80	410	200	1.2	620	10.0	1.16	0.750	0.502	7.05	7.30
	11-28-19	34000	11000	130000	11000	180	200	54	29	<0.010	250	<0.050	<0.010	<0.050	1.5	7.6	3.3	43	850	8.00	380	180	1.6	590	9.30	1.43	0.880	0.632	7.12	7.37
	11-23-20	32000	13000	150000	14000	220	230	69	31	<0.010	340	0.05	0.01	0.06	1.8	9.3	<59	65	1000	7.75	430	220	1.2	670	11.1	2.97	0.769	0.522	6.99	7.23
	12-01-21	28000	11000	140000	12000	190	220	39	30	<0.010	220	0.11	<0.010	0.11	0.88	7.4	3.3	38	890	7.77	400	190	1.1	600	9.45	0.790	0.707	0.46	7.06	7.31
CODT-008-MWB (1.62 m)	03-29-13	27000	5500	56000	1700	95	31	75	20	0.042	<100	0.56	0.087	0.65	0.1	23	4.9	36	420	9.1	150	84	10	275	4.71	5.49	1.36	1.11	7.74	7.99
	07-16-13	30400	10200	76500	1390	120	85	61	18	0.074	141	<0.05	0.015	0.056	0.79	52	12	120	570	8.53	200	110	3.6	354	5.82	2.11	1.03	0.781	7.5	7.75
	10-23-13	8700	5200	79000	1600	87	130	6.8	26	<0.01	<100	0.53	0.11	0.63	0.12	33	12	>1000	450	7.56	200	86	<1.0	310	4.63	0.43	-0.029	-0.278	7.59	7.84
	12-15-14	18000	7800	69000	330	80	58	31	23	<10	<100	0.23	0.15	0.39	0.31	20	3.6	1.8	460	10.9	170	38	5.5	260	3.73	8.91	2.04	1.79	8.83	9.08
	12-10-15	13000	8500	60000	190	74	97	17	18	0.03	110	0.24	0.37	0.61	0.37	46	NM	12	400	9.75	150	47	25	260	4.02	2.29	1.79	1.54	7.96	8.21
	11-30-16	40000	2300	38000	3500	100	12	87	6.1	0.067	<100	<0.050	0.011	<0.050	0.5	37	<5.0	16	470	7.55	110	100	<1.0	250	4.76	8.18	-0.267	-0.517	7.82	8.07
	12-07-17	13000	5200	75000	700	67	130	14	23	0.011	<100	0.81	0.19	1.0	<0.050	19	6.0	6.3	450	10.1	190	28	33	300	4.44	0.670	2.00	1.75	8.10	8.35
	12-05-18[FD]	45000	5200	83000	310	110	73	84	19	0.014	<100	0.096	0.20	0.29	0.37	17	<5.0 [9]	3.4	800	11.3 [8]	210	<1.0	2.0	370	6.02	2.11	0.812	0.564	10.50	10.7
	12-05-18	46000	5200	83000	310	110	71	87	19	0.014	<100	0.064	0.19	0.25	0.36	17	3.8	3.3	770	11.0 [8]	210	4.7	48	380	6.10	1.77	2.19	1.94	8.85	9.09
	11-28-19	41000	4500	74000	450	100	86	62	20	<0.010	<100	0.11	0.18	0.30	0.37	17	5.2	1.2	640	11.0 [8]	190	4.0	41	350	5.58	0.710	2.08	1.83	8.96	9.21
	11-24-20[FD]	33000	5900	85000	900	53	190	17	24	<0.010	<100	0.52	0.45	0.97	0.08	29	6.3	1.7	550	9.94	220	27.0	22	390	5.48	3.860	1.86	1.61	8.08	8.33
	11-24-20	33000	6000	85000	910	52	170	16	25	<0.010	<100	0.54	0.45	0.99	0.07	30	6.3	2.6	540	9.97	220	25.0	22	380	5.19	6.400	1.86	1.61	8.11	8.36
	12-02-21	34000	3500	67000	520	92	77	48	25	<0.010	<100	0.11	0.16	0.27	0.29	21	4.2	2.1	530	10.7[8]	170	11	55	310	4.81	2.04	2.17	1.92	8.54	8.79
CODT-105-MW (2.87 m)	01-15-13	26000	13000	96000	13000	150	140	39	12	<0.01	<100	0.58	0.093	0.67	0.066	<5	2.3	1.5	640	8	290	150	1.4	433	7.12	1.73	0.714	0.466	7.29	7.53
	03-13-13	250000	17000	99000	400	78	110	460	11	<0.01	<100	0.094	0.46	0.55	0.27	8	2.3	8.2	1900	10.7	250	43	9.2	995	16.8	1.69	2.11	1.86	8.59	8.84
	07-16-13	56000	11500	74200	4980	42	140	91	10	<0.01	<100	0.22	0.065	0.29	0.39	9	3.1	1.6	660	8.89	210	39	2.8	413	6.3	4.33	0.902	0.654	7.99	8.24
	10-23-13	41000	14000	77000	4700	81	140	62	10	0.017	<100	0.5	0.31	0.8	0.32	11	3.5	1.8	640	9.10	210	72	8.5	410	6.42	0.39	1.40	1.15	7.70	7.95
	12-16-14	14000	7200	130000	18000	180	110	230	17	0.018	<100	0.53	0.037	1.1	<50	11	3.3	0.56	780	7.79	390	300	1.7	500	8.84	1.14	0.902	0.654	6.89	7.13
	12-10-15	36000	9300	69000	6200	62	140	32	13	0.013	<100	0.55	0.18	0.74	0.17	<5.0	NM	0.65	510	8.64	200	60	2.5	350	5.09	6.43	0.825	0.577	7.82	8.07
	11-23-16[FD]	41000	21000	110000	17000	230	140	36	15	0.025	<100	0.74	0.23	0.97	0.095	<5.0	2.9	1.4	760	7.87	330	230	1.6	520	8.59	2.22	0.781	0.533	7.09	7.34
	11-23-16	42000	21000	110000	17000	220	140	36	14	0.026	<100	0.76	0.22	0.98	0.08	<5.0	2.9	1.3	750	7.91	340	220	1.7	520	8.51	3.13	0.811	0.563	7.1	7.35
	12-07-17	64000	9900	56000	2600	61	130	81	16	0.010	<100	1.4	0.45	1.9	0.092	6.6	4.3	0.38	650	8.28	150	59	1.1	400	6.24	1.22	0.358	0.109	7.92	8.17
	12-05-18	15000	5400	160000	24000	370	160	13	18	0.029	<100	2.1	<0.010	2.1	<0.050	<5.0	3.1	0.39	940	7.87	510	370	2.6	630	11.2	1.45	1.16	0.914	6.71	6.96
	12-04-19	13000	5400	160000	23000	390	140	16	18	0.021	<100	2.2	<0.010	2.2	<0.050	<5.0	2.8	0.36	940	7.83	490	390	2.5	620	11.3	3.24	1.14	0.888	6.69	6.94
	11-24-20	76000	7200	46000	1500	66	120	72	18	0.014	<100	1.4	0.27	1.7	0.05	8.1	2.9	1.1	650	8.63	120	63	2.6	390	5.99	0.42	0.659	0.41	7.98	8.23
	12-03-21	15000	5200	170000	25000	380	160	12	20	0.026	<100	2.8	<0.010	2.8	<0.050	<5.0	2.9	2.0	990	7.82	530	380	2.4	650	11.5	0.570	1.14	0.892	6.68	6.93
CODT-201-MWA (3.28 m)	03-13-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1.9	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-13-13	16000	2300	87000	8200	200	53	22	13	<0.01	<100	1.1	<0.01	1.1	<0.05	5.8	1.8	15	530	7.5	250	200	<1	327	5.83	0.43	0.316	0.067	7.18	7.43
	07-16-13	15700	2690	89300	9070	220	51	20	14	0.015	<100	1	<0.01	1	<0.05	<5	<5	140	560	7.44	260	220	<1	339	6.11	1.33	0.302	0.053	7.14	7.39
	10-23-13	14000	2100	75000	7300	190	42	9	11	0.012	<100	3.3	<0.01	3.3	<0.05	13	5.9	110	460	7.71	220	180	<1	290	5.08	0.990	0.434	0.185	7.28	7.53
	12-15-14	9900	2800	100000	11000	220	67	12	14	0.019	<100	3.2	<0.01	3.2	<50	6.5	3.8	240	570	7.57	290	220	<1	360	6.3	0.47	0.472	0.223	7.1	7.35
	12-9-15	9800	2900	120000	12000	280	79	11	15	0.022	<100	7.0	<0.010	7	0.11	<5.0	NM	160	680	7.54	350	280	<1.0	450	7.96	3.11	0.601	0.353	6.94	7.18
	11-28-16	8200	3200	100000	11000	250	58	11	15	0.027	<100	3.7	<0.010	3.7	<0.050	6.3	3.8	75	560	7.61	310	250	<1.0	380	6.8	1.64	0.588	0.339	7.02	7.27
	12-05-17	9400	3100	94000	10000	230	53	9.4	15	0.021	<100	4.2	<0.010	4.2	<0.050	<5.0	<5.0	160	580	7.68	280	230	1.1	350	6.36	2.66	0.591	0.343	7.09	7.34
	12-05-18	7400	2900	100000	9900	210	79	16	15	0.020	<100	1.3	<0.010	1.3	<0.050	<5.0	3.4	7.7	580	7.86	300	200	1.4	360	6.32	0.240	0.748	0.499	7.12	7.37
	11-28-19	7500	3000	110000	11000	230	85	14	14	0.017	<100	2.0	<0.010	2.0	<0.050	<5.0	3.4	20	590	7.89	320	230	1.7	400	6.99	0.940	0.858	0.610	7.03	7.28
	11-23-20	11000	2600	80000	7300	200	39	15	13	0.014	<100	0.8	<0.01	0.8	<0.05	5.1	<59	260	480	7.76	230	200	1.1	290	5.33	1.720	0.543	0.294	7.21	7.46
	12-02-21	7100	2900	100000	9600	210	64	9.5	16	0.020	<100	1.4	<0.010	1.4	<0.050	<5.0	2.7	12	570	7.76	290	210	1.1	340	5.91	2.48	0.653	0.405	7.11	7.36

TABLE B-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021
OHP AND HE GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Water Level)	Sample Date	Al	Sb	As	Ba	Be	Bi	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	Sr	Tl	Sn	Ti	U	V	Zn
Units		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NS Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MECP Table 3[2]		-	20000	1900	29000	67	-	45000	2.7	810	66	87	-	25	-	0.29	9200	490	63	1.5	-	510	-	-	420	250	1100
COBT-003-MWB (3.85 m)	12-20-11	6.1	<0.4	4.4	46	<0.5	<2	<100	<0.017	<1	<1	<2	250	<1	3100	<0.013	<4	<3	<1	<0.1	1200	<0.8	<20	<3	0.55	<2	11
	03-13-12[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-13-12[FD]	<5	0.51	3.4	42	<0.5	<2	<100	<0.017	<1	<1	<2	210	<1	2600	<0.013	<4	<3	<1	<0.1	1300	<0.8	<20	<3	0.45	<2	6.7
	03-13-12	23	<0.4	3.5	43	<0.5	<2	<100	<0.017	<1	<1	<2	220	<1	2700	<0.013	<4	<3	<1	<0.1	1300	<0.8	<20	<3	0.45	<2	7.3
	06-07-12	<5	<1	4.2	70	<0.5	<2	<100	<0.017	<1	<1	<2	170	<1	2000	<0.013	<4	<3	1.2	<0.1	1500	<0.8	<20	<3	0.22	<2	29
	09-12-12[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	09-12-12	<5	<1	3.7	67	<0.5	<2	<100	0.055	<1	<1	<2	170	<1	2000	<0.013	<4	<3	<1	<0.1	1500	<0.8	<20	<3	0.24	<2	16
	12-12-12[L]	13	<1	3.5	42	<0.5	<2	<100	0.034	<1	<1	<2	110	<1	2300	NM	<4	<3	<1	<0.1	1400	<0.8	<20	<3	0.28	<2	7.9
	12-12-12	14	<1	3.5	42	<0.5	<2	<100	0.034	<1	<1	<2	110	<1	2300	<0.013	<4	<3	<1	<0.1	1500	<0.8	<20	<3	0.29	<2	8.1
	03-19-13	<5	<1	3	57	<0.5	<2	<100	0.02	<1	<1	<2	140	<1	2100	<0.013	<4	<3	<1	<0.1	1700	<0.8	<20	<3	0.3	<2	20
	07-18-13	5.4	<1	3.7	42.4	<1	<2	62	0.018	<1	0.44	<2	159	<0.5	2170	NM	<2	<2	<1	<0.1	1500	<0.1	<2	<2	0.22	<2	21.4
	11-07-13	20	<1	3.8	43	<1	<2	61	0.02	<1	0.53	<2	190	<0.5	2200	NM	<2	<2	<1	<0.1	1400	<0.1	<2	<2	0.27	<2	22
	12-12-14	20	<1	3.4	56	<1	<2	64	1.7	<1	0.42	<2	240	<0.5	2300	<0.013	<2	<2	<1	<0.1	1500	<0.1	<2	<2	0.26	<2	20
	12-9-15	<5.0	<1.0	3	43	<1.0	<2.0	64	0.039	<1.0	0.41	<2.0	200	<0.50	2400	<0.013	<2.0	<2.0	<1.0	<0.10	1400	<0.10	<2.0	<2.0	0.28	<2.0	15
	11-28-16	5.9	<1.0	2.5	46	<1.0	<2.0	65	<0.010	<1.0	<0.40	<2.0	220	<0.50	2200	<0.013	<2.0	<2.0	<1.0	<0.10	1400	<0.10	<2.0	<2.0	0.25	<2.0	21
	12-07-17	<5.0	<1.0	2.8	44	<1.0	<2.0	63	0.010	<1.0	0.48	<2.0	220	<0.50	2300	<0.013	<2.0	<2.0	<1.0	<0.10	1300	<0.10	<2.0	<2.0	0.44	<2.0	21
	12-03-18	<5.0	<1.0	2.4	48	<1.0	<2.0	57	0.016	<1.0	0.44	<2.0	220	<0.50	2200	<0.013	<2.0	<2.0	<1.0	<0.10	1300	<0.10	<2.0	<2.0	0.49	<2.0	41
	11-29-19[FD]	11	<1.0	2.0	41	<1.0	<2.0	56	0.040	<1.0	0.56	0.60	130	<0.50	2400	<0.013	<2.0	<2.0	<0.50	<0.10	1200	<0.10	<2.0	<2.0	0.29	<2.0	9.2
	11-29-19	11	<1.0	2.0	42	<1.0	<2.0	57	0.026	<1.0	0.58	0.78	120	<0.50	2400	<0.013	<2.0	<2.0	<0.50	<0.10	1200	<0.10	<2.0	<2.0	0.29	<2.0	8.0
	11-23-20	<5.0	<1.0	2.7	41	<1.0	<2.0	62	0.032	<1.0	0.53	0.73	180	<0.50	2500	<0.013	<2.0	<2.0	<0.50	<0.10	1300	<0.1	<2.0	<2.0	0.22	<2.0	26.0
	11-30-21 [FD]	<5.0	<1.0	2.3	41	<0.10	<2.0	61	0.015	<1.0	0.57	0.61	140	<0.50	2400	<0.013	<2.0	<2.0	<0.50	<0.10	1100	<0.10	<2.0	<2.0	0.35	<2.0	24.0
	11-30-21	6.9	<1.0	2.3	42	<0.10	<2.0	61	0.057	<1.0	0.54	0.65	150	<0.50	2400	<0.013	<2.0	<2.0	<0.50	<0.10	1200	<0.10	<2.0	<2.0	0.37	<2.0	23
COCP-110-MW (2.22 m)	03-27-13[L]	<25	<5	14	60	<2.5	<10	<500	0.1	<5	<5	<10	4200	<5	320	NM	<20	<15	<5	<0.5	410	<4	<100	<15	0.92	<10	28
	03-27-13	<25	<5	14	61	<2.5	<10	<500	0.11	<5	<5	<10	4300	<5	330	<0.013	<20	<15	<5	<0.5	420	<4	<100	<15	0.92	<10	29
	07-18-13	7.8	<1	18.5	60.3	<1	<2	64	<0.017	<1	<0.4	<2	3880	<0.5	493	NM	4.1	<2	<1	<0.1	464	<0.1	<2	<2	0.54	<2	7.4
	11-06-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11-06-13	14	1.8	19	81	<1	<2	82	0.011	<1	<0.4	<2	3300	<0.5	380	NM	5.7	<2	1.9	<0.1	660	<0.1	<2	<2	2.6	4.9	12
	12-15-14	13	2.5	13	77	<1	<2	76	0.18	<1	<0.4	<2	4400	<0.5	390	0.017	6.6	<2	1.3	<0.1	610	<0.1	<2	<2	3	5.1	9.8
	12-9-15	15	1.6	17	56	<1.0	<2.0	70	0.067	<1.0	<0.40	<2.0	6600	<0.50	550	<0.013	6.9	<2.0	<1.0	<0.10	490	<0.10	<2.0	<2.0	1	<2.0	55
	11-28-16	10	2.1	13	96	<1.0	<2.0	68	0.05	<1.0	<0.40	<2.0	800	<0.50	110	<0.013	4	<2.0	1.7	<0.10	500	<0.10	<2.0	<2.0	3	4.7	<5.0
	12-8-17 [FD]	<5.0	1.4	28	85	<1.0	<2.0	77	0.021	<1.0	<0.40	<2.0	4600	<0.50	390	0.015	7.9	<2.0	<1.0	<0.10	580	<0.10	<2.0	<2.0	2.5	3.4	<5.0
	12-8-17	<5.0	1.6	27	86	<1.0	<2.0	75	0.018	<1.0	<0.40	<2.0	4000	<0.50	370	<0.013	8.0	<2.0	1.1	<0.10	580	<0.10	<2.0	<2.0	2.4	3.6	<5.0
	12-3-18	6.3	2.6	18	75	<1.0	<2.0	72	0.13	<1.0	<0.40	<2.0	2200	<0.50	260	0.017	7.2	<2.0	1.0	<0.10	580	<0.10	<2.0	<2.0	2.6	7.0	5.5
	11-28-19	17	1.1	27	63	<1.0	<2.0	75	0.011	<1.0	<0.40	0.97	4700	<0.50	350	<0.013	7.1	<2.0	<0.50	<0.10	500	<0.10	<2.0	<2.0	1.6	3.0	<5.0
	11-23-20	10	2	27	76	<1.0	<2.0	84	2.2	<1.0	<0.40	0.97	2700	<0.50	330	<0.013	8.8	<2.0	2.5	<0.10	570	<0.10	<2.0	<2.0	2.4	5.5	<5.0
	12-01-21	7.5	3.0	21	61	<1.0	<2.0	83	0.33	<1.0	<0.40	**3100**	3100	<0.50	230	<0.013	7.1	<2.0	1.8	<0.10	530	<0.10	<2.0	<2.0	2.3	6.2	<5.0
CODT-008-MWB (1.62 m)	03-29-13	34	<1	9.7	27	<0.5	<2	<100	<0.017	<1	<1	4.7	<100	<1	6.9	0.12	<4	<3	2.8	<0.1	250	<0.8	<20	<3	1.2	9.7	<5
	07-16-13	41.3	<1	41.7	52.7	<1	<2	<50	0.028	2.2	<0.4	<2	134	<0.5	143	NM	5.9	<2	1.3	<0.1	509	<0.1	<2	<2	1.45	2.9	8
	10-23-13	45	<1	11	58	<1	<2	<50	<0.01	<1	<0.40	3.2	110	<0.50	220	NM	3.8	<2	1.6	<0.1	480	<0.1	<2	4.3	1.9	4.9	9.9
	12-15-14	510	<1	7.2	25	<1	<2	<50	0.085	1.3	<0.4	5.6	<50	<0.5	<2	<0.013	5.1	<2	1.8	<0.1	840	<0.1	<2	<2	0.19	11	<5
	12-10-15	250	<1.0	21	18	<1.0	<2.0	<50	0.13	<1.0	<0.40	8.2	<50	<0.50	<2.0	0.13	4.4	<2.0	2.1	<0.10	850	<0.10	<2.0	<2.0	0.18	16	<5.0
	11-30-16	41	<1.0	1.4	190	<1.0	<2.0	<50	0.15	<1.0	<0.40	<2.0	69	<0.50	430	<0.013	<2.0	<2.0	<1.0	<0.10	280	<0.10	<2.0	<2.0	0.31	<2.0	<5.0
	12-07-17	160	<1.0	7.1	41	<1.0	<2.0	<50	0.046	<1.0	<0.40	6.1	<50	<0.50	<2.0	<0.013	2.8	<2.0	<2.0	<0.10	790	<2.0	<2.0	1.2	10	<2.0	5.0
	12-05-18[FD]	520	<1.0	3.3	40	<1.0	<2.0	<50	0.026	1.6	<0.40	3.7	<50	<0.50	<2.0	<0.013	6.8	<2.0	1.4	<0.10	880	<0.10	<2.0	<2.0	0.30	8.8	<5.0
	12-05-18	530	<1.0	3.3	41	<1.0	<2.0	<50	0.025	1.7	<0.40	3.6	<50	<0.50	<2.0	<0.013	7.0	<2.0	1.4	<0.10	890	<0.10	<2.0	<2.0	0.30	8.5	<5.0
	11-28-19	410	<1.0	3.4	43	<1.0	<2.0	<50	<0.010	1.2	<0.40	3.9	<50	<0.50	<2.0	0.027	7.8	<2.0	1.6	<0.10	780	<0.10	<2.0	<2.0	0.65	9.3	<5.0
	11-24-20[FD]	230	<1.0	5.5	53	<1.0	<2.0	<50	0.013	1.3	<0.4	7.1	<50	<0.5	<2.0	<0.013	3.6	<2.0	3	<0.10	800	<0.10	<2.0	<2.0	1.70	13	<5.0
	11-24-20	230	<1.0	5.7	52	<1.0	<2.0	<50	0.072	1.5	<0.4	7.1	<50	<0.5	<2.0	<0.013	3.5	<2.0	3	<0.10	810	<0.10	<2.0	<2.0	1.80	13	<5.0
	12-02-21	360	<1.0	3.0	37	<0.10	<2.0	<50	<0.010	1.5	<0.40	3.6	<50	<0.50	<2.0	<0.013	6.9	<2.0	1.6	<0.10	610	<0.10	<2.0	<2.0	0.67	10	<5.0
CODT-105-MW (2.87 m)	01-15-13	18	2.3	1.7	22	<0.5	<2	<100	0.058	<1	<1	8.5	<100	<1	17	<0.013	9.5	<3	26	<0.1	480	<0.8	<20	<3	2.1	4.9	46
	03-13-13	1100	1.8	17	5.7	<0.5	<2	<100	<0.017	<1	<1	11	<100	<1	<4	0.013	14	<3	37	<0.1	1700	<0.8	<20	<3	<0.15	30	<5
	07-16-13	798	1.5	3.3	8.6	<1	<2	<50	0.027	1.1	<0.4	8.7	<50	<0.5	10.6	NM	14.9	3.1	19.1	<0.1	729	<0.1	<2	<2	0.74	7.4	12.3
	10-23-13	670	1.6	6.2	13	<1	<2	<50	0.053	1.8	<0.4	9.5	<50	<0.5	8.0	NM	9.9	<2.0	29	<0.1	1000	<0.1	<2.0	<2.0	0.97	9.7	<5.0
	12-16-14	20	2.2	2.1	25	<1	<2	62	0.13	<1	<0.4	4.3	<50	<0.5	2.9	<0.013	5.4	<2	15	<0.1	380	<0.1	<2	<2	2.3	2.5	18
	12-10-15	430	1.7	3.1	11	<1.0	<2.0	<50	0.034	1.1	<0.40	6	<50	6.6	2.6	<0.013	5.8	<2.0	21	<0.10	880	<0.10	<2.0	<2.0	0.82	6.6	11
	11-23-16[FD]	19	2.6	2.1	28	<1.0	<2.0	70	0.044	<1.0	<0.40	10	<50	0.52	7.5	<0.013	7.5	<2.0	11	<0.10	480	<0.10	<2.0	<2.0	2.5	3.4	69
	11-23-16	20	2.5	2.2	28	<1.0	<2.0	70	0.047	<1.0	<0.40	10	<50	0.52	7.6	<0.013	7.5	<2.0	12	<0.10	480	<0.10	<2.0	<2.0	2.5	3.3	68
	12-07-17	170	<1.0	2.9	13	<1.0	<2.0	<50	0.041	2.7	0.41	10	<50	<0.50	<2.0	<0.013	7.9	<2.0	11	<0.10	840	<0.10	<2.0	<2.0	0.43	10	16
	12-05-18	15	2.2	2.4	34	<1.0	<2.0	75	0.074	<1.0	<0.40	6.6	<50	<0.50	<2.0	<0.013	5.6	<2.0	18	<0.10	400	<0.10	<2.0	<2.0	3.2	4.0	30
	12-04-19	15	2.2	2.3	33	<1.0	<2.0	73	0.041	<1.0	<0.40	6.3	<50	1.2	2.2	<0.013	5.0	<2.0	17	<0.10	440	<0.10	<2.0	<2.0	3.1	4.3	100
	11-24-20	190	1.1	3.5	10	<1.0	<2.0	<50	0.03	2.3	<0.40	7.2	<50	<0.5	6.9	<0.013	5.7	<2.0	7.2	<0.10	450	<0.10	<2.0	<2.0	0.34	13.0	6.7
	12-03-21	18	2.2	2.5	36	<0.10	<2.0	82	0.024	<1.0	<0.40	3.6	<50	<0.50	<2.0	<0.013[13]	7.3	<2.0	29	<0.10	420	<0.10	<2.0	<2.0	3.2	4.4	39
CODT-201-MWA (3.28 m)	03-13-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-13-13	11	<1	0.73	17	<0.5	<2	<100	0.078	<1	<1	8	<100	<1	14	0.017	<4	<3	1.5	<0.1	310	<0.8	<20	<3	0.43	<2	48
	07-16-13	268	<1	<1	23.5	<1	<2	52	0.052	<1	<0.4	13	<50	<0.5	11.5	NM	<2	<2	2	<0.1	276	<0.1	<2	<2	0.67	<2	55.8
	10-23-13	20	<1	<1	25	<1	<2	<50	0.083	<1	<0.4	20	<50	<0.5	4.0	NM	<2	<2	2.3	<0.1	210	<0.1	<2	<2	0.49	<2	58
	12-15-14	17	<1	<1	27	<1	<2	<50	0.27	<1	<0.4	2.6	<50	<0.5	2.6	0.032	2.2	<2	4.3	<0.1	260	<0.1	<2	<2	0.71	<2	11
	12-9-15	14	<1.0	<1.0	23	<1.0	<2.0	<50	0.053	<1.0	<0.40	4	<50	<0.50	12	<0.013	<2.0	<2.0	5.2	<0.10	350	<0.10	<2.0	<2.0	0.72	<2.0	26
	11-28-16	8.2	<1.0	<1.0	24	<1.0	<2.0	<50	0.026	<1.0	<0.40	9.6	<50	<0.50	<2.0	<0.013	2.1	<2.0	4	<0.10	280	<0.10	<2.0	<2.0	0.6	<2.0	50
	12-05-17	15	<1.0	<1.0	20	<1.0	<2.0	56	0.036	<1.0	<0.40	16	<50	<0.50	<2.0	0.047	<2.0	<2.0	3.9	<0.10	290	<0.10	<2.0	0.68	<2.0	<2.0	48
	12-05-18	8.8	<1.0	<1.0	19	<1.0	<2.0	<50	0.052	<1.0	<0.40	3.1	<50	<0.50	<2.0	<0.013	2.3	<2.0	4.2	<0.10	250	<0.10	<2.0	<2.0	0.67	<2.0	34
	11-28-19	12	<1.0	<1.0	21	<1.0	<2.0	<50	0.053	<1.0	<0.40	7.7	<50	3.2	3.7	<0.013	<2.0	<2.0	4.7	<0.10	290	<0.10	<2.0	<2.0	0.68	<2.0	18
	11-23-20	15	<1.0	<1.0	15	<1.0	<2.0	<50	0.24	<1.0	<0.40	5.9	<50	<0.50	5.5	0.045	<2.0	<2.0	0.9	<0.10	250	<0.10	<2.0	<2.0	0.4	<2.0	32
	12-02-21	11	<1.0	<1.0	20	<0.10	<2.0	<50	0.030	<1.0	<0.40	6.9	<50	<0.50	<2.0	< 0.013[13]	2.1	4.6	4.5	<0.10	260	<0.10	<2.0	<2.0	0.66	<2.0	30

TABLE B-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021
OHP AND HE GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Water Level)	Sample Date	Na	K	Ca	Mg	ALK	SO4	Cl	SiO2	OPO4 (ORTHOPHOSPHATE)	P	NO3	NO2	NO2-NO3	NH3	Colour	TOC	TURBIDITY	CONDUCTIVITY	pH	HARDNESS	BICARB ALK	CARB ALK	TDS	Anion Sum	Ion Bal_	Langelier Ind_ (@20C)	Langelier Ind_ (@4C)	Sat_ pH (@20C)	Sat_ pH (@4C)
Units		µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	TCU	mg/L	NTU	µS/cm	pH	mg/L	mg/L	mg/L	mg/L	me/L	%	unitless	unitless	unitless	unitless
NS Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MECP Table 3[2]		2300000	-	-	-	-	-	2300000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CODT-201-MWC (3.48 m)	03-13-13	59000	2400	43000	4700	210	4.7	42	11	<0.01	<100	<0.05	<0.01	<0.05	0.64	7.3	6.3	14	500	8	130	200	1.9	292	5.4	1.69	0.527	0.278	7.47	7.72
	07-16-13	64900	2360	40800	4730	210	6	40	11	0.15	<100	<0.05	<0.01	<0.05	0.58	<5	<5	25	500	7.91	120	210	1.6	298	5.48	1.2	0.422	0.173	7.49	7.74
	10-23-13[FD]	67000	2300	41000	4500	200	13	44	11	<0.01	<100	<0.05	<0.01	<0.05	0.43	6	4.3	2.3	510	7.97	120	200	1.7	300	5.5	1.1	0.456	0.207	7.51	7.76
	10-23-13	67000	2400	40000	4600	200	13	45	12	<0.01	<100	0.058	<0.01	0.058	0.42	5.5	4.5	2.2	510	7.92	120	200	1.6	300	5.53	1.47	0.401	0.152	7.52	7.77
	12-15-14	66000	2300	38000	4300	200	5.3	43	11	0.01	<100	<0.05	<0.01	<0.05	0.52	5.5	5.2	9.3	500	7.87	110	200	1.4	290	5.32	1.04	0.327	0.077	7.54	7.79
	12-9-15	60000	2300	45000	5100	220	11	45	11	0.019	<100	<0.050	<0.010	<0.050	0.91	<5.0	NM	1.2	530	7.99	130	220	2	310	5.87	4.08	0.556	0.307	7.43	7.68
	11-28-16	70000	2500	38000	4200	200	6.7	64	11	0.019	<100	0.054	<0.010	0.054	0.45	<5.0	<5.0	4	510	8.05	110	200	2.1	320	5.89	4.53	0.497	0.248	7.56	7.81
	12-05-17	69000	2500	40000	4900	210	4.0	59	12	<0.010	<100	<0.050	<0.010	<0.050	0.59	5.2	5.7	0.84	560	7.81	120	200	1.2	320	5.85	3.08	0.299	0.050	7.51	7.76
	12-05-18	64000	2400	42000	4600	210	<2.0	50	12	0.013	<100	<0.050	<0.010	<0.050	0.54	5.3	14	7.7	530	7.97	120	210	1.8	300	5.57	1.92	0.488	0.239	7.48	7.73
	11-28-19	63000	2400	39000	4500	200	2.1	47	11	0.011	<100	<0.050	<0.010	<0.050	0.68	<5.0	14	1.6	480	8.13	120	200	2.5	290	5.36	2.00	0.597	0.348	7.53	7.78
	12-02-20	66000	2400	47000	5600	200	13.0	59	11	<0.010	<100	<0.05	<0.01	<0.05	0.72	10	7.8	1.8	550	7.78	140	200	1.1	330	6.01	1.95	0.325	0.076	7.45	7.7
	12-13-21	67000	2300	37000	4400	200	6.5	51	11	<0.010	<100	<0.050	<0.010	<0.050	0.52	6.5	12	4.6	500	7.97	110	200	1.8	300	5.6	3.61	0.416	0.167	7.56	7.81
CODT-203-MW (2.92 m)	3-13-13[L]	NM	NM	NM	NM	NM	200	210	NM	<0.01	NM	NM	<0.01	<0.05	NM	21	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-13-13	120000	6800	130000	13000	180	200	220	14	<0.01	<100	<0.05	<0.01	<0.05	0.66	14	2.3	56	1300	7.2	390	180	<1	824	13.9	2.51	0.065	-0.182	7.14	7.38
	07-16-13[FD]	130000	6430	143000	13000	220	180	220	15	<0.01	<100	<0.05	<0.01	<0.05	0.69	19	2.7	62	1500	7.33	410	220	<1	848	14.2	0.11	0.294	0.048	7.04	7.28
	07-16-13	132000	6560	143000	13000	220	170	210	15	<0.01	<100	<0.05	<0.01	<0.05	0.68	15	2.6	70	1500	7.35	410	220	<1	832	13.8	2.14	0.318	0.071	7.03	7.28
	10-23-13	47000	5100	140000	15000	220	240	58	19	<0.01	<100	<0.05	<0.01	<0.05	0.47	21	4.1	98	980	7.22	420	220	<1	670	10.9	0.87	0.217	-0.0300	7.00	7.25
	12-12-14	24000	2500	110000	6000	120	190	27	23	<10	<100	0.42	<0.01	0.42	0.1	6.5	4.4	14	660	7.19	290	120	<1	450	7.05	0.57	-0.166	-0.414	7.35	7.6
	12-8/-5[FD]	36000	4100	130000	8600	180	210	34	18	0.016	<100	<0.050	0.041	0.083	0.29	6.7	3.6	26	820	7.51	350	180	<1.0	550	8.87	0.8	0.388	0.14	7.13	7.37
	12-8-15	36000	4100	130000	8600	180	210	35	18	0.014	<100	<0.050	0.038	0.084	0.28	5.9	3.6	23	830	7.56	350	180	<1.0	550	8.94	1.42	0.434	0.186	7.12	7.37
	11-23-16	59000	3800	110000	6000	160	170	74	22	0.024	<100	0.29	0.02	0.31	0.057	7.5	3.6	65	800	7.18	300	160	<1.0	540	8.82	1.26	-0.059	-0.306	7.24	7.49
	12-07-17	160000	5500	93000	5200	150	160	200	14	<0.01	<100	<0.050	<0.010	<0.050	0.32	<5.0	3.6	3.6	1300	7.53	250	150	<1.0	730	11.9	1.70	0.150	-0.096	7.38	7.62
	12-10-18	89000	3600	59000	2700	110	110	120	14	<0.010	<100	<0.050	<0.010	<0.050	0.17	<5.0	2.9	0.87	810	7.52	160	110	<1.0	460	7.72	3.76	-0.138	-0.387	7.66	7.91
	11-28-19	55000	2500	80000	3500	140	130	43	20	0.011	<100	0.16	<0.010	0.16	0.062	5.8	4.1	1.9	650	7.81	210	140	<1.0	430	6.84	0.510	0.405	0.157	7.40	7.65
	11-24-20	91000	3200	79000	3700	180	93	110	17	<0.010	<100	<0.05	<0.01	<0.05	0.11	6.9	2.9	12	870	7.62	210	180	<1	510	8.59	1.360	0.293	0.045	7.32	7.57
	12-02-21	29000	2000	83000	3600	110	120	17	24	0.01	<100	0.42	<0.010	0.42	0.092	5.1	3.5	3.0	560	7.43	220	110	<1.0	340	5.19	5.03	-0.03	-0.279	7.46	7.71
CODT-205-MWA (1.74 m)	03-13-13[FD]	41000	5800	82000	11000	280	13	23	15	<0.01	<100	<0.05	<0.01	<0.05	0.26	9.1	7.2	130	600	7.6	250	280	1.1	363	6.59	2.66	0.527	0.278	7.07	7.32
	03-13-13	42000	5800	83000	11000	290	13	23	16	<0.01	<100	<0.05	<0.01	<0.05	0.25	9.7	6.7	130	610	7.5	250	290	<1	367	6.69	2.26	0.438	0.189	7.06	7.31
	07-16-13[L]	NM	NM	NM	NM	300	10	23	16	<0.01	NM	NM	<0.01	<0.05	0.16	6.8	5.2	33	610	7.64	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-16-13	40800	5720	72400	10700	300	11	22	16	<0.01	<100	<0.05	<0.01	<0.05	0.16	8.3	5.6	33	610	7.64	220	300	1.2	366	6.94	3.04	0.543	0.294	7.1	7.35
	10-23-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	600	7.64	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10-23-13	38000	5900	80000	11000	310	9.6	22	18	<0.01	<100	<0.05	<0.01	<0.05	0.17	12	5.5	31	610	7.64	250	310	1.3	370	6.98	1.01	0.592	0.343	7.05	7.30
	12-15-14	35000	5400	84000	12000	310	24	18	17	<10	<100	<0.05	<0.01	<0.05	0.24	7.7	7	66	620	7.52	260	300	<1	380	7.12	1.5	0.482	0.234	7.03	7.28
	12-8-15	27000	4800	77000	11000	270	18	15	16	0.013	<100	0.052	<0.010	0.052	0.28	12	9.2	35	530	7.84	240	270	1.7	330	6.14	0.08	0.721	0.472	7.12	7.37
	11-23-16	33000	4800	68000	9500	270	18	14	16	0.016	<100	0.05	0.015	0.065	0.19	9	6.8	24	510	7.7	210	270	1.3	330	6.13	2.77	0.528	0.279	7.17	7.42
	12-05-17	30000	4800	70000	9600	260	24	13	16	<0.010	<100	<0.050	<0.010	<0.050	0.2	11	8	24	530	7.95	210	260	2.1	330	6.01	1.43	0.775	0.526	7.17	7.42
	11-28-18	15000	4200	78000	7400	220	33	14	15	<0.010	<100	<0.050	<0.010	<0.050	0.74	13	9.7	140	510	7.47	220	220	<1.0	310	5.47	2.76	0.284	0.0350	7.19	7.44
	12-04-19	20000	3700	67000	8500	230	20	16	14	<0.010	<100	0.12	<0.010	0.12	0.16	8.7	7.4	16	480	7.96	200	220	1.9	290	5.40	3.25	0.721	0.472	7.24	7.49
	11-25-20	20000	4000	83000	9500	220	69	12	16	<0.010	<100	<0.05	0.02	<0.05	0.72	11	8.0	150	550	7.44	250	220	<1	360	6.20	1.2	0.266	0.017	7.17	7.42
	12-02-21	18000	3900	80000	8700	200	48	12	15	<0.010	<100	<0.050	<0.010	<0.050	0.47	11	8.0	110	520	7.52	230	200	<1.0	320	5.35	4.63	0.299	0.05	7.22	7.47
CODT-206-MW (2.16 m)	03-13-13[L]	NM	NM	NM	NM	NM	NM	NM	23	NM	<100	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-13-13	5800	2700	82000	5300	140	57	19	23	<0.01	<100	0.19	<0.01	0.19	0.24	19	6.1	7.8	440	7.5	230	140	<1	285	4.52	4.54	0.14	-0.11	7.36	7.61
	07-16-13	7200	4090	97300	8620	200	83	19	14	0.035	<100	<0.05	<0.01	<0.05	1.2	74	11	24	590	7.1	280	200	<1	371	6.34	0.56	-0.042	-0.29	7.14	7.39
	10-23-13	6800	2800	56000	3900	130	36	4.6	17	0.014	<100	0.47	<0.01	0.47	0.16	72	14	9.1	320	7.25	160	130	<1	210	3.46	0.86	-0.285	-0.535	7.54	7.79
	12-15-14	4400	2300	47000	1800	96	27	5.7	37	0.035	<100	0.37	<0.01	0.37	<50	18	5.3	32	260	7.83	130	96	<1	190	2.68	1.47	0.106	-0.144	7.72	7.97
	12-8-15	4400	3000	73000	2400	98	86	10	41	0.048	<100	0.48	<0.010	0.48	0.085	14	5	8	400	8.18	190	96	1.4	280	4.06	0.37	0.608	0.358	7.57	7.82
	11-28-16[FD]	5400	1700	41000	2000	91	17	7.4	13	0.038	<100	0.59	<0.010	0.59	0.094	32	7.5	71	210	7.35	110	91	<1.0	140	2.42	1.22	-0.45	-0.7	7.8	8.05
	11-28-16	5300	1700	40000	2000	93	17	7.2	13	0.037	<100	0.24	<0.010	0.24	0.093	32	7.2	76	210	7.39	110	92	<1.0	140	2.43	0.82	-0.398	-0.648	7.79	8.04
	12-05-17 [FD]	6700	4100	110000	7600	240	84	10	19	<0.010	<100	0.12	<0.010	0.12	1.1	22	19	95	650	7.33	300	240	<1.0	400	6.92	2.98	0.300	0.052	7.03	7.28
	12-05-17	6600	4100	110000	7600	230	91	9.8	21	<0.010	<100	0.16	<0.010	0.160	1	21.0	13	78	630	7.39	300	230	<1.0	400	6.84	2.7	0.33	0.084	7.05	7.3
	12-05-18	6100	1800	51000	1800	69	59	20	19	0.021	<100	0.15	<0.010	0.15	<0.050	9.3	3.4	3.2	310	7.94	130	68	<1.0	200	3.19	3.07	0.0930	-0.157	7.85	8.10
	12-04-19	4800	1700	55000	2000	89	65	10	23	0.017	<100	0.18	<0.010	0.18	<0.050	7.9	3.9	7.6	330	8.08	140	88	<1.0	220	3.44	4.56	0.366	0.116	7.71	7.96
	11-25-20	6700	2500	110000	4400	140	120	12	25	0.018	<100	0.41	0.010	0.42	0.1	11	4.3	3.8	560	7.97	280	140	1.2	370	5.74	2.30	0.698	0.449	7.28	7.53
	12-02-21	4600	2500	59000	2600	83	73	7.4	23	0.022	<100	0.17	<0.010	0.17	<0.050	12	3.9	25	340	7.95	160	82	<1.0	220	3.39	0.29	0.24	-0.01	7.71	7.96
CONCW-101-MWB (3.51 m)	03-15-13	86000	5700	90000	2000	24	130	150	14	<0.01	<100	0.25	0.024	0.27	0.24	5.9	2.1	0.38	770	9.1	230	21	2.5	489	7.31	7.93	0.918	0.67	8.18	8.43
	07-17-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	0.25	NM	NM	0.36	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-17-13	66100	5650	50700	4220	42	120	110	18	0.013	<100	0.24	0.078	0.32	0.26	8.6	2.4	0.36	670	9.18	140	36	5.1	398	6.37	3.66	0.993	0.745	8.19	8.44
	10-24-13	63000	6300	70000	2200	52	170	80	20	0.012	<100	0.095	0.035	0.13	0.43	9.1	3.1	1.4	700	9.65	180	35	15	440	6.78	1.42	1.59	1.34	8.06	8.31
	12-12-14	59000	5500	85000	1800	28	120	85	21	<10	<100	0.31	0.026	0.33	0.35	5.2	2.7	1.8	580	9.55	220	20	6.6	400	5.52	12.9	1.33	1.08	8.22	8.47
	12-8-15	56000	6500	96000	5900	39	130	82	17	0.015	<100	0.21	0.017	0.22	0.41	5.1	3.4	11	620	8.02	260	39	<1.0	420	5.93	14.2	0.139	-0.109	7.88	8.13
	11-23-16	51000	5900	95000	<100	39	130	88	22	0.022	<100	<0.050	0.015	<0.050	1	6.3	3.1	18	790	11.1	240	<1.0	<1.0	420	5.96	9.35	NC	NC	NC	NC
	12-11-17	49000	5200	76000	5700	100	120	56	25	0.036	<100	0.35	0.015	0.37	0.28	9.1	3.5	0.81	610	8.88	210	97	6.8	400	6.23	2.12	1.29	1.05	7.58	7.83
	11-28-18[FD]	52000	5800	67000	2900	60	110	91	21	0.012	<100	0.11	0.052	0.16	0.41	7.5	3.4	0.29	640	8.62	180	57	2.3	390	6.17	1.31	0.762	0.514	7.86	8.11
	11-28-18	54000	5900	68000	3000	54	110	94	21	<0.010	<100	0.12	0.055	0.17	0.44	6.7	3.4	0.25	630	8.6	180	51	1.9	390	6.08	0.57	0.698	0.45	7.90	8.15
	12-04-19	50000	5300	71000	5600	110	100	69	23	0.024	<100	0.73	0.042	0.77	0.23	6.6	3.1	1.1	670	8.52	200	110	3.4	400	6.44	1.18	0.962	0.713	7.55	7.80
	11-24-20	72000	6400	96000	920	120	120	100	17	<0.010	<100	0.17	<0.01	0.17	0.79	8.8	2.7	0.91	880	10.9[FB]	240	10	74	490	7.75	2.94	2.41	2.160	8.48	8.72
	12-03-21	35000	4900	68000	6500	89	100	37	24	0.016	<100	0.73	0.077	0.80	0.51	7.4	3.1	0.48	510	8.59	200	86	3.2	330	5.01	5.29	0.926	0.677	7.66	7.91

TABLE B-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021
OHP AND HE GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Water Level)	Sample Date	Al	Sb	As	Ba	Be	Bi	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	Sr	Tl	Sn	Ti	U	V	Zn
Units		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NS Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MECP Table 3[2]		-	20000	1900	29000	67	-	45000	2.7	810	66	87	-	25	-	0.29	9200	490	63	1.5	-	510	-	-	420	250	1100
CODT-201-MWC (3.48 m)	03-13-13	20	<1	4.1	340	<0.5	<2	<100	0.2	<1	<1	<2	<100	<1	780	<0.013	<4	<3	<1	<0.1	530	<0.8	<20	<3	<0.15	<2	7.5
	07-16-13	16.9	<1	4	331	<1	<2	73	<0.017	2.5	<0.4	<2	<50	<0.5	766	NM	<2	<2	<1	<0.1	504	<0.1	<2	<2	<0.1	<2	8.8
	10-23-13[FD]	9.7	<1	3.7	340	<1	<2	77	<0.01	<1	<0.4	<2	<50	<0.5	760	NM	<2	<2	1.6	<0.1	500	<0.1	<2	<2	<0.1	<2	<5
	10-23-13	10	<1	3.3	330	<1	<2	77	<0.01	<1	<0.4	<2	<50	<0.5	760	NM	<2	<2	2.7	<0.1	500	<0.1	<2	<2	<0.1	<2	6.1
	12-15-14	13	<1	4.1	340	<1	<2	77	0.28	<1	<0.4	<2	<50	<0.5	690	<0.013	<2	<2	3.2	<0.1	520	<0.1	<2	<2	<0.1	<2	6
	12-9-15	6.3	<1.0	4.2	420	<1.0	<2.0	73	<0.010	<1.0	<0.40	<2.0	<50	<0.50	930	<0.013	<2.0	<2.0	<1.0	<0.10	540	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	11-28-16	7.6	<1.0	3.7	380	<1.0	<2.0	77	<0.010	<1.0	<0.40	<2.0	<50	<0.50	670	<0.013	<2.0	<2.0	<1.0	<0.10	520	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12-05-17	<5.0	<1.0	3.5	420	<1.0	<2.0	80	<0.010	<1.0	<0.40	<2.0	<50	<0.50	810	<0.013	<2.0	<2.0	8.5	<0.10	560	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12-05-18	7.0	<1.0	3.6	460	<1.0	<2.0	85	0.045	<1.0	<0.40	<2.0	<50	<0.50	760	<0.013	<2.0	<2.0	<1.0	<0.10	560	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	11-28-19	5.4	<1.0	3.4	510	<1.0	<2.0	87	<0.010	<1.0	<0.40	<0.50	<50	<0.50	740	<0.013	<2.0	<2.0	1.0	<0.10	560	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12-02-20	5.4	<1.0	4.5	570	<1.0	<2.0	76	<0.010	<1.0	<0.40	<0.50	55	<0.50	1100	<0.013	<2.0	<2.0	3.3	<0.10	600	<0.1	<2.0	<2.0	<0.1.0	<2.0	<5.0
	12-13-21	5.5	<1.0	4.7	470	<0.10	<2.0	74	<0.010	<1.0	<0.40	<0.50	<50	<0.50	690	< 0.013[13]	<2.0	<2.0	2.6	<0.10	540	<0.10	<2.0	<2.0	<0.10	<2.0	7.5
CODT-203-MW (2.92 m)	3-13-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-13-13	13	<1	20	250	<0.5	<2	<100	0.028	<1	1.7	<2	5200	<1	7000	<0.013	<4	<3	<1	<0.1	850	<0.8	<20	<3	0.3	<2	41
	07-16-13[FD]	12.4	<1	16.9	230	<1	<2	<50	<0.017	<1	1.44	2.3	5000	<0.5	7650	NM	3.2	2.3	<1	<0.1	811	<0.1	<2	<2	0.91	<2	**5360**
	07-16-13	31.6	<1	17	229	<1	<2	<50	0.026	<1	1.54	2.3	5010	<0.5	7700	NM	3.5	<2	<1	<0.1	809	<0.1	<2	<2	0.93	<2	**5210**
	10-23-13	8.6	<1	30	150	<1	<2	52	0.013	<1	1.4	<2	10000	<0.50	5700	NM	3.2	<2	<1	<0.1	580	<0.1	<2	<2	0.76	<2	75
	12-12-14	15	<1	<1	58	<1	<2	57	0.34	<1	<0.4	3.3	90	<0.5	130	<0.013	<2	<2	1	<0.1	260	0.19	<2	<2	0.72	<2	25
	12-8/-5[FD]	7.3	<1.0	2.1	85	<1.0	<2.0	59	0.088	<1.0	0.48	4	720	<0.50	1900	0.057	2.6	<2.0	<1.0	<0.10	390	0.17	<2.0	<2.0	1.5	<2.0	46
	12-8-15	6.2	<1.0	2.1	85	<1.0	<2.0	59	0.08	<1.0	0.47	4.1	720	<0.50	1800	<0.013	2.7	<2.0	<1.0	<0.10	390	0.17	<2.0	<2.0	1.5	<2.0	46
	11-23-16	18	<1.0	1.1	67	<1.0	<2.0	56	0.1	<1.0	<0.40	<2.0	54	<0.50	390	<0.013	<2.0	<2.0	<1.0	<0.10	340	0.15	<2.0	<2.0	1.1	<2.0	60
	12-07-17	<5.0	<1.0	1.7	130	<1.0	<2.0	<50	0.10	<1.0	0.58	<2.0	270	<0.50	3300	<0.013	4.2	<2.0	<1.0	<0.10	510	0.12	<2.0	<2.0	0.94	<2.0	58
	12-10-18	11	<1.0	1.7	61	<1.0	<2.0	<50	0.094	<1.0	<0.40	<2.0	77	<0.50	1600	<0.013	5.5	<2.0	<1.0	<0.10	300	0.16	<2.0	<2.0	0.39	<2.0	21
	11-28-19	11	<1.0	1.0	52	<1.0	<2.0	<50	0.077	<1.0	<0.40	5.6	<50	5.0	270	<0.013	2.1	<2.0	0.77	<0.10	330	0.29	<2.0	<2.0	1.1	<2.0	16
	11-24-20	6.4	<1.0	4.2	60	<1.0	<2.0	<50	0.085	<1.0	<0.4	0.57	1100	<0.5	1300	<0.013	3.1	<2.0	<0.5	<0.1	340	<0.1	<2.0	<2.0	1.1	<2.0	35
	12-02-21	9.2	<1.0	<1.0	53	<0.10	<2.0	<50	0.041	<1.0	<0.40	8.9	<50	<0.50	3.2	< 0.013[13]	<2.0	<2.0	2.3	<0.10	340	0.21	<2.0	<2.0	0.95	<2.0	65
CODT-205-MWA (1.74 m)	03-13-13[FD]	5.6	<1	1.3	92	<0.5	<2	<100	0.044	<1	<1	<2	490	<1	1100	<0.013	5.4	<3	<1	<0.1	3700	<0.8	<20	<3	1.1	<2	31
	03-13-13	5.9	<1	1.3	93	<0.5	<2	<100	0.062	<1	<1	<2	460	<1	1200	<0.013	5.3	<3	<1	<0.1	3700	<0.8	<20	<3	1.1	<2	32
	07-16-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-16-13	10.6	<1	5	85.8	<1	<2	<50	0.025	<1	<0.4	5.3	2820	<0.5	1120	NM	2.2	<2	<1	<0.1	3380	<0.1	<2	<2	0.95	<2	24.5
	10-23-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10-23-13	13	<1	6.8	120	<1	<2	58	0.012	<1	<0.40	<2	3200	<0.50	1200	NM	3.3	<2	<1	<0.1	3600	<0.1	<2	<2	1.10	<2	23
	12-15-14	29	<1	4.1	140	<1	<2	55	0.25	<1	<0.4	<2	2100	<0.5	1300	<0.013	5.7	<2	<1	<0.1	3900	<0.1	<2	<2	1.2	<2	16
	12-8-15	10	<1.0	4.6	320	<1.0	<2.0	<50	0.019	<1.0	<0.40	<2.0	2200	<0.50	860	<0.013	6.9	<2.0	<1.0	<0.10	3100	<0.10	<2.0	<2.0	0.79	<2.0	19
	11-23-16	14	<1.0	8	280	<1.0	<2.0	54	0.011	<1.0	<0.40	<2.0	2000	<0.50	920	<0.013	3.1	<2.0	<1.0	<0.10	3300	<0.10	<2.0	<2.0	0.79	<2.0	35
	12-05-17	46	<1.0	8.1	250	<1.0	<2.0	56	0.027	<1.0	<0.40	<2.0	3000	<0.50	980	<0.013	3.5	<2.0	<1.0	<0.10	3400	<0.10	<2.0	<2.0	0.73	<2.0	21
	11-28-18	7.6	<1.0	11	260	<1.0	<2.0	<50	0.028	<1.0	<0.40	<2.0	14000	<0.50	1400	<0.013	2.6	<2.0	<1.0	<0.10	1800	<0.10	<2.0	<2.0	0.35	<2.0	36
	12-04-19	19	<1.0	3.9	190	<1.0	<2.0	<50	0.017	<1.0	<0.40	0.57	1200	<0.50	650	<0.013	5.1	<2.0	<0.50	<0.10	2600	<0.10	<2.0	<2.0	0.56	<2.0	29
	11-25-20	16	<1.0	12	250	<1.0	<2.0	<50	0.055	<1.0	<0.40	0.52	11000	<0.5	1400	<0.013	2.5	<2.0	<0.50	<0.10	2700	<0.10	<2.0	<2.0	0.45	<2.0	33
	12-02-21	13	<1.0	8.3	210	<0.10	<2.0	54	<0.010	<1.0	<0.40	<0.50	7100	<0.50	1200	< 0.013[13]	3.0	2.4	<0.50	<0.10	2300	<0.10	<2.0	<2.0	0.37	<2.0	89
CODT-206-MW (2.16 m)	03-13-13[L]	17	<1	2.4	41	<0.5	<2	<100	0.041	<1	<1	2.2	1600	<1	2900	NM	<4	<3	1.1	<0.1	250	<0.8	<20	<3	1.4	<2	36
	03-13-13	17	<1	2.4	42	<0.5	<2	<100	0.041	<1	<1	2.3	1600	<1	3000	0.015	<4	<3	1.4	<0.1	260	<0.8	<20	<3	1.4	<2	36
	07-16-13	29.8	<1	7.3	56.4	<1	<2	58	0.017	<1	0.61	8.5	5670	0.7	7880	NM	<2	2.1	<1	<0.1	250	<0.1	<2	<2	0.3	<2	137
	10-23-13	71	<1.0	2.1	36	<1.0	<2.0	<50	0.17	<1.0	<0.4	19	580	0.61	860	NM	<2	<2	<1	<0.1	150	<0.1	<2	2.6	1.4	2.1	71
	12-15-14	38	<1	4	33	<1	<2	<50	1.3	<1	<0.4	5.9	<50	<0.5	5.0	<0.013	<2	<2	1.4	<0.1	180	<0.1	<2	<2	2.2	4.9	14
	12-8-15	12	<1.0	4	46	<1.0	<2.0	<50	1.3	<1.0	<0.40	5.3	<50	<0.50	<2.0	<0.013	<2.0	<2.0	1.9	<0.10	340	<0.10	<2.0	<2.0	2.6	7.5	6.3
	11-28-16[FD]	30	<1.0	1.1	39	<1.0	<2.0	<50	0.068	<1.0	<0.40	11	57	<0.50	250	<0.013	<2.0	<2.0	<1.0	<0.10	170	<0.10	<2.0	<2.0	0.72	<2.0	87
	11-28-16	31	<1.0	1.1	39	<1.0	<2.0	<50	0.092	<1.0	<0.40	11	51	<0.50	250	<0.013	<2.0	<2.0	<1.0	<0.10	170	<0.10	<2.0	<2.0	0.71	<2.0	87
	12-05-17[FD]	20	<1.0	4.7	100	<1.0	<2.0	60	0.090	<1.0	0.87	2.6	2400	<0.50	6100	<0.013	<2.0	<2.0	<1.0	<0.10	400	<0.10	<2.0	<2.0	2.8	<2.0	44
	12-05-17	19	<1.0	4.8	100	<1.0	<2.0	62	0.22	<1.0	0.87	2.3	2300	<0.50	6100	<0.013	<2.0	<2.0	<1.0	<0.10	400	<0.10	<2.0	<2.0	2.8	<2.0	45
	12-05-18	23	<1.0	1.3	33	<1.0	<2.0	<50	0.014	<1.0	<0.40	<2.0	<50	<0.50	<2.0	<0.013	<2.0	<2.0	1.0	<0.10	240	<0.10	<2.0	<2.0	1.2	2.8	<5.0
	12-04-19	18	<1.0	1.2	40	<1.0	<2.0	<50	0.016	<1.0	<0.40	13	<50	<0.50	<2.0	<0.013	<2.0	<2.0	0.98	<0.10	300	<0.10	<2.0	<2.0	1.9	2.6	20
	11-25-20	13	<1.0	1.2	77	<1.0	<2.0	<50	0.033	<1.0	<0.40	3.5	<50	<0.50	<2.0	<0.013	<2.0	<2.0	2.10	<0.10	630	<0.10	<2.0	<2.0	4.1	2.3	12
	12-02-21	13	<1.0	1.4	41	<0.10	<2.0	<50	0.02	<1.0	<0.40	5.1	<50	<0.50	<2.0	< 0.013[13]	<2.0	<2.0	1.2	<0.10	310	<0.10	<2.0	<2.0	1.6	2.5	13
CONCW-101-MWB (3.51 m)	03-15-13	43	<1	5.1	56	<0.5	<2	<100	0.041	1.1	<1	<2	<100	<1	19	<0.013	6.4	<3	2.3	<0.1	700	<0.8	<20	<3	0.79	3.1	6.6
	07-17-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-17-13	23.6	<1	8	38.4	<1	<2	<50	<0.017	<1	<0.4	3.2	<50	<0.5	9.8	NM	9.3	<2	<1	<0.1	438	<0.1	<2	<2	0.91	4.2	7.1
	10-24-13	38	<1.0	7.8	45	<1.0	<2.0	<50	<0.01	<1.0	<0.4	<2.0	<50	<0.5	6.6	NM	9.5	<2	1.1	<0.1	520	<0.1	<2.0	<2.0	0.40	4.2	<5.0
	12-12-14	82	<1	8.2	46	<1	<2	<50	0.27	<1	<0.4	<2	<50	<0.5	7.7	<0.013	7.2	<2	3.1	<0.1	540	<0.1	<2	<2	0.68	2.7	<5
	12-8-15	63	<1.0	6.6	66	<1.0	<2.0	53	0.066	<1.0	<0.40	<2.0	<50	<0.50	250	<0.013	6.2	<2.0	2.8	<0.10	600	<0.10	<2.0	<2.0	1.2	<2.0	<5.0
	11-23-16	170	<1.0	8.9	45	<1.0	<2.0	<50	<0.010	<1.0	<0.40	<2.0	<50	<0.50	<2.0	0.013	5	<2.0	3.9	<0.10	560	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12-11-17	39	<1.0	8.5	43	<1.0	<2.0	54	0.087	<1.0	<0.40	<2.0	<50	<0.50	310	<0.013	7.5	<2.0	1.7	<0.10	420	<0.10	<2.0	<2.0	1.6	5.7	<5.0
	11-28-18[FD]	48	<1.0	10	35	<1.0	<2.0	51	0.054	<1.0	<0.40	<2.0	<50	<0.50	30	<0.013	10	<2.0	<1.0	<0.10	460	<0.10	<2.0	<2.0	1.4	4.3	<5.0
	11-28-18	45	<1.0	11	36	<1.0	<2.0	55	0.028	<1.0	<0.40	<2.0	<50	<0.50	31	<0.013	11	<2.0	<1.0	<0.10	460	<0.10	<2.0	<2.0	1.5	4.7	<5.0
	12-04-19	32	<1.0	10	36	<1.0	<2.0	55	<0.010	1.0	<0.40	1.3	<50	<0.50	27	<0.013	7.4	<2.0	1.6	<0.10	440	<0.10	<2.0	<2.0	1.6	7.8	<5.0
	11-24-20	120	<1.0	7.1	71	<1.0	<2.0	<50	<0.010	<1.0	<0.40	<0.5	<50	<0.50	13	<0.013	3.5	<2.0	10	<0.10	580	<0.10	<2.0	<2.0	0.22	2.2	<5.0
	12-03-21	72	<1.0	10	31	<0.10	<2.0	62	<0.010	1.1	<0.40	0.98	<50	<0.50	12	<0.013[13]	8.1	<2.0	2.6	<0.10	390	<0.10	<2.0	<2.0	1.7	7.3	<5.0

TABLE B-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021
OHP AND HE GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Water Level)	Sample Date	Na	K	Ca	Mg	ALK	SO4	Cl	SiO2	OPO4 (ORTHOPHOSPHATE)	P	NO3	NO2	NO2-NO3	NH3	Colour	TOC	TURBIDITY	CONDUCTIVITY	pH	HARDNESS	BICARB ALK	CARB ALK	TDS	Anion Sum	Ion Bal_	Langelier Ind_ (@20C)	Langelier Ind_ (@4C)	Sat_ pH (@20C)	Sat_ pH (@4C)
Units		µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	TCU	mg/L	NTU	µS/cm	pH	mg/L	mg/L	mg/L	mg/L	me/L	%	unitless	unitless	unitless	unitless
NS Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MECP Table 3[2]		2300000	-	-	-	-	-	2300000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CONPL-202-MWA (4.98 m)	12-15-14	22000	1900	170000	28000	410	170	22	12	<10	<100	<0.05	<0.01	<0.05	0.081	<5	1.7	14	1000	7.34	550	410	<1	680	12.4	1.27	0.693	0.446	6.65	6.9
	12-9-15	17000	1600	160000	25000	390	170	17	11	0.013	<100	<0.050	<0.010	<0.050	<0.050	<5.0	NM	2.2	950	7.7	510	390	1.9	650	11.9	3.92	1.01	0.766	6.69	6.93
	11-23-16	16000	1600	150000	23000	350	150	14	11	0.017	<100	<0.050	0.014	0.053	0.074	<5.0	2.8	3.3	800	7.41	460	350	<1.0	570	10.5	2.8	0.634	0.386	6.77	7.02
	12-21-17	13000	1500	140000	20000	320	130	13	11	0.011	<100	<0.050	<0.010	<0.050	<0.050	<5.0	<5.0	18	810	7.55	420	320	1.1	520	9.53	2.58	0.715	0.468	6.84	7.09
	11-28-18	12000	1400	120000	19000	300	110	12	11	<0.010	<100	<0.050	<0.010	<0.050	<0.050	<5.0	2.5	18	770	7.66	390	300	1.3	480	8.79	2.99	0.775	0.527	6.89	7.14
	11-29-19	11000	1300	120000	17000	270	110	10	10	<0.010	<100	<0.050	<0.010	<0.050	<0.050	<5.0	2.2	8.1	720	7.63	370	270	1.1	440	7.94	0.830	0.674	0.425	6.95	7.20
	11-27-20	12000	1200	120000	19000	280	92	11	11	<0.011	<100	<0.05	<0.01	<0.05	0.06	<5	<59	26	710	7.67	370	280	1.2	430	7.82	0.32	0.731	0.482	6.94	7.19
	12-01-21	9600	1200	110000	16000	250	97	9.2	9.5	<0.010	<100	0.053	<0.010	0.053	<0.050	<5.0	2.4	23	640	7.67	340	250	1.1	400	7.29	0.76	0.657	0.409	7.01	7.26
COSB-002-MWA (1.22 m)	03-18-13	17000	3300	140000	16000	210	200	32	21	<0.01	<100	0.25	<0.01	0.25	<0.05	<5	1.9	160	800	7.1	400	210	<1	550	9.23	1.88	0.075	-0.173	7.03	7.27
	07-26-13	19500	4200	178000	29200	170	410	39	26	<0.01	<100	<0.05	<0.01	<0.05	0.15	16	11	830	1100	6.97	560	170	<1	822	13.1	2.9	-0.075	-0.321	7.05	7.29
	11-6-13[FDL]	20000	5600	230000	36000	NM	NM	NM	NM	NM	<100	NM	NM	NM	NM	NM	2.1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11-6-13[FD]	20000	5700	230000	36000	130	620	49	30	<0.01	<100	<0.05	0.021	<0.05	0.32	130	2.2	160	1400	6.61	720	130	<1	1100	17	2.69	-0.473	-0.718	7.08	7.33
	11-06-13	20000	5500	230000	36000	130	610	49	29	<0.01	<100	<0.05	0.017	<0.05	0.33	120	1.9	77	1400	6.64	730	130	<1	1100	16.6	1.07	-0.451	-0.696	7.09	7.34
	12-15-14	14000	3200	150000	17000	200	210	26	20	<10	<100	1.6	<0.01	1.6	0.098	<5	1.9	17	860	6.72	450	200	<1	580	9.29	2.57	-0.276	-0.524	7	7.25
	12-9-15	11000	7100	340000	53000	<5.0	1500	12	150	0.066	240	0.18	<0.010	0.18	1.6	28	NM	250	2600	3.66	1100	<1.0	<1.0	2100	31.3	14.3	NC	NC	NC	NC
	11-28-16	11000	3600	170000	25000	190	300	16	20	0.018	<100	0.36	<0.010	0.36	0.13	84	2.9	43	910	6.97	530	190	<1.0	670	10.6	3.24	-0.003	-0.25	6.98	7.22
	12-08-17	18000	9700	470000	120000	10	1600	9.2	51	0.01	<100	0.76	<0.010	0.76	2.4	26	4.7	49	2700	4.43	1700	10	<1.0	2300	33.6	2.27	-3.55	-3.79	7.98	8.22
	11-28-18	10000	7300	280000	65000	130	900	9.9	26	<0.010	<100	0.13	<0.010	0.13	0.58	52	1.4	19	1700	6.54	970	130	<1.0	1400	21.5	2.73	-0.499	-0.744	7.04	7.28
	11-29-19	8900	4300	290000	46000	190	700	9.9	20	<0.010	<100	0.33	<0.010	0.33	<0.050	9.2	1.9	17	1500	6.98	900	190	<1.0	1200	18.8	0.750	0.148	-0.097	6.83	7.08
	11-27-20	11000	4300	280000	31000	200	650	7.3	21	<0.012	<100	0.45	0.02	0.46	<0.05	5.8	2.2	14	1400	7.16	810	200	<1	1,100	17.8	2.56	0.337	0.091	6.82	7.07
	12-01-21	10000	8600	560000	120000	70	1700	2.9	36	<0.010	<100	0.59	<0.010	0.59	0.55	29	2.1	2.8	2700	6.19	1900	70	<1.0	2,600	37.7	0.850	-0.898	-1.14	7.09	7.33
COSCW-001-MWA (3.32 m)	03-19-13	11000	1400	64000	6900	160	49	14	8.6	<0.01	<100	<0.05	<0.01	<0.05	<0.05	<5	<0.5	23	430	7.9	190	160	1.2	253	4.66	4.25	0.506	0.257	7.39	7.64
	07-17-13	12500	1660	66100	8100	170	50	13	11	0.013	<100	0.057	<0.01	0.057	<0.05	<5	1.1	24	440	7.71	200	170	<1	267	4.82	2.88	0.348	0.099	7.36	7.61
	10-24-13	14000	1800	72000	8700	170	52	14	12	<0.01	<100	<0.05	<0.01	<0.05	<0.05	<5	0.62	43	460	7.57	220	170	<1	280	4.93	0.100	0.251	0.002	7.32	7.57
	12-16-14	13,000	1900	74,000	8,800	180	49	14	12	<10	<100	0.052	<0.01	0.052	0.093	<5	0.93	46	480	7.61	220	180	<1	290	5.11	0.29	0.334	0.085	7.28	7.53
	12-8-15	13,000	1600	74,000	8,400	180	51	14	11	0.011	<100	0.058	<0.010	0.058	<0.050	<5.0	0.78	43	460	7.8	220	180	1.1	280	5.04	0.3	0.51	0.261	7.29	7.54
	11-22-16	14000	1700	72000	8500	180	47	0.014	13	12	<100	<0.050	<0.010	<0.050	<0.050	<5.0	<5.0	95	450	7.68	220	180	<1.0	280	4.96	0	0.381	0.132	7.3	7.55
	12-8-17	13000	1800	74000	8200	190	41	14	12	0.011	<100	0.071	<0.01	0.071	0.13	<5.0	1.5	15	490	7.93	220	190	1.5	290	5.12	1.29	0.665	0.416	7.26	7.51
	12-3-18	14000	1500	77000	8400	210	46	13	12	<0.010	<100	<0.050	<0.010	<0.050	0.058	<5.0	<5.0 [9]	110	480	7.60	230	210	<1.0	300	5.43	2.45	0.383	0.134	7.22	7.47
	12-9-19	13000	1600	80000	8700	210	46	12	11	<0.010	<100	0.051	0.010	0.062	0.061	<5.0	0.86	210	490	7.86	240	210	1.4	300	5.54	1.93	0.665	0.416	7.19	7.44
	11-24-20	13000	1600	79000	9000	210	45	11	12	<0.013	<100	<0.05	0.01	<0.05	0.06	<5	<59	23	500	7.83	230	210	1.4	300	5.5	1.95	0.635	0.386	7.2	7.45
	12-08-21	14000	1400	75000	8500	190	39	10	11	<0.010	<100	<0.050	<0.010	<0.050	<0.050	<5.0	1.0	2.7	470	7.81	220	190	1.2	280	4.99	0.89	0.556	0.306	7.25	7.50
COSCW-001-MWB (1.57 m)	03-19-13	18000	3200	56000	9600	190	29	14	8.6	<0.01	<100	<0.05	<0.01	<0.05	<0.05	<5	0.55	1	440	8	180	190	1.8	254	4.8	3.56	0.616	0.367	7.38	7.63
	07-17-13[L]	NM	NM	NM	NM	200	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-17-13	18200	3620	55800	10100	200	22	14	11	<0.01	<100	<0.05	<0.01	<0.05	0.057	<5	1.1	0.48	430	7.85	180	200	1.3	253	4.79	3.12	0.484	0.234	7.37	7.62
	10-24-13[L]	NM	NM	NM	NM	NM	23	14	12	<0.01	NM	NM	0.011	0.25	0.063	<5	1.5	2.5	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10-24-13	20000	4000	61000	11000	200	22	14	12	<0.01	<100	0.25	<0.01	0.25	0.065	<5	1.4	2.4	450	7.91	200	200	1.5	260	4.83	1.02	0.581	0.332	7.33	7.58
	12-12-14	19000	3700	65000	11000	210	38	13	11	<10	<100	0.091	<0.01	0.091	0.11	<5	1.2	0.32	460	7.88	210	200	1.5	290	5.28	1.64	0.587	0.338	7.29	7.54
	12-8-15	16000	3200	80000	15000	270	30	12	12	0.011	<100	<0.050	<0.010	<0.050	<0.050	<5.0	2.8	2.1	540	7.84	260	270	1.8	330	6.39	3.48	0.746	0.497	7.1	7.35
	11-22-16	14000	1700	72000	8500	180	47	13	12	0.014	<100	<0.050	<0.010	<0.050	<0.050	<5.0	<5.0	95	450	7.68	220	180	<1.0	280	4.96	0	0.381	0.132	7.3	7.55
	12-8-17	17000	3400	73000	13000	240	28	16	13	<0.01	<100	0.076	<0.010	0.076	<0.050	<5.0	2.7	1.0	530	7.96	230	230	2.0	310	5.74	1.86	0.773	0.524	7.19	7.44
	12-3-18	18000	3300	68000	12000	210	31	14	12	<0.010	<100	<0.050	<0.010	<0.050	0.055	<5.0	1.7	0.39	480	7.96	220	210	1.8	290	5.32	0.660	0.707	0.458	7.26	7.51
	11-29-19	21000	3400	77000	14000	250	38	18	13	<0.010	<100	<0.050	<0.010	<0.050	0.051	<5.0	2.3	1.30	560	7.90	250	250	1.9	340	6.32	2.60	0.755	0.506	7.15	7.39
	11-24-20	24000	3400	90000	18000	310	47	12	13	<0.014	<100	<0.05	<0.01	<0.05	0.09	<5	2.2	5.7	640	7.89	300	310	2.2	390	7.5	2.67	0.883	0.635	7	7.25
	12-08-21	11000	1800	80000	15000	260	21	9.3	13	0.01	<100	<0.050	<0.010	<0.050	<0.050	<5.0	2.1	0.64	500	7.93	260	260	2.1	310	5.99	2.22	0.829	0.58	7.1	7.35
COSCW-002-MWA (4.08 m)	03-26-13	7400	1400	160000	17000	320	150	7.9	12	<0.01	<100	<0.05	<0.01	<0.05	<0.05	<5	<0.5	5.5	820	7.5	470	320	<1	545	9.63	0.93	0.73	0.482	6.77	7.02
	07-17-13	7810	1650	154000	16700	340	150	8	13	<0.01	<100	<0.05	<0.01	<0.05	<0.05	<5	1.1	20	830	7.48	450	330	<1	548	9.96	2.57	0.715	0.468	6.77	7.01
	10-24-13	8200	1800	160000	18000	300	160	8.2	13	<0.01	<100	0.073	<0.01	0.073	<0.05	<5	0.87	25	840	7.45	470	300	<1	540	9.49	1.15	0.641	0.393	6.81	7.06
	12-12-14	7400	1600	160000	17000	340	160	8.2	12	<10	<100	0.1	<0.01	0.1	0.066	<5	<0.5	8.1	840	7.49	480	330	<1	570	10.2	1.64	0.744	0.205	6.75	7
	12-8-15	8700	1500	160000	18000	350	150	8.2	13	0.012	<100	0.077	<0.010	0.077	<0.050	<5.0	1.1	4.2	830	7.88	470	340	2.4	560	10.2	2.3	1.13	0.883	6.75	6.99
	11-22-16	20000	3700	65000	12000	220	29	14	13	0.014	<100	<0.050	<0.010	<0.050	<0.050	<5.0	1.5	0.42	470	7.87	210	210	1.5	290	5.31	1.14	0.601	0.352	7.27	7.52
	12-8-17	7300	1500	160000	17000	330	130	7.7	14	<0.01	<100	0.083	<0.010	0.083	<0.050	<5.0	0.99	13	850	7.58	470	330	1.2	530	9.53	0.68	0.831	0.583	6.75	7.00
	12-3-18	7300	1400	150000	16000	330	130	6.9	13	<0.010	<100	<0.050	<0.010	<0.050	<0.050	<5.0	0.82	7.4	800	7.70	450	330	1.5	530	9.47	1.12	0.918	0.671	6.78	7.03
	11-29-19	7800	1300	150000	16000	340	120	9.3	13	<0.010	<100	0.12	<0.010	0.12	<0.050	<5.0	<5.0 [9]	47	820	7.54	440	340	1.1	520	9.62	2.83	0.776	0.528	6.76	7.01
	11-24-20	7400	1400	150000	17000	340	150	6.2	13	<0.015	<100	0.06	<0.01	0.06	<0.05	<5	<59	38	840	7.66	460	330	1.4	550	10	2.82	0.895	0.648	6.77	7.01
	11-30-21	9200	1300	150000	15000	300	120	5.1	14	<0.010	<100	0.21	<0.010	0.21	0.059	<5.0	0.79	14	800	7.51	440	300	<1.0	500	8.8	1.84	0.698	0.451	6.81	7.06
COSCW-002-MWB (1.50 m)	03-19-13[L]	22000	1900	91000	9600	NM	NM	NM	7	NM	<100	NM	NM	NM	<0.05	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-19-13	22000	1900	89000	9700	150	180	8.6	7	<0.01	<100	0.081	<0.01	0.081	<0.05	<5	<0.5	10	610	7.9	260	150	1.1	411	7.06	6.25	0.583	0.335	7.32	7.57
	07-17-13	24400	2380	92700	10900	170	150	8.2	9.5	<0.01	<100	0.056	<0.01	0.056	0.12	<5	0.52	1.6	620	7.74	280	170	<1	399	6.73	0.52	0.495	0.246	7.25	7.49
	10-24-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	640	7.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10-24-13	26000	2700	98000	11000	180	150	7.9	10	<0.01	<100	0.16	<0.01	0.16	<0.05	<5	0.89	34	640	7.75	290	180	<1	420	6.98	0.36	0.543	0.295	7.21	7.46
	12-12-14	25,000	2100	100,000	11,000	180	160	9	9.1	<10	<100	0.11	<0.01	0.11	0.11	<5	0.5	3.9	640	7.64	300	180	<1	430	7.21	0.84	0.453	0.497	7.19	7.43
	12-8-15	24,000	1700	88,000	11,000	180	130	10	8.4	<0.010	<100	0.15	<0.010	0.15	<0.050	<5.0	0.63	1.5	600	7.85	270	180	1.2	380	6.59	1.23	0.609	0.36	7.24	7.49
	11-22-16	25000	1700	86000	11000	180	120	10	9.4	0.014	<100	0.087	<0.010	0.087	<0.050	<5.0	0.66	5	580	7.75	260	180	<1.0	370	6.4	0.39	0.507	0.259	7.25	7.49
	12-8-17	24000	1600	87000	10000	200	110	11	10	<0.010	<100	0.085	<0.010	0.085	<0.050	<5.0	1.2	2.0	610	7.88	260	200	1.4	370	6.51	1.56	0.680	0.431	7.20	7.45
	12-3-18	24000	1400	87000	11000	190	100	9.7	9.1	<0.010	<100	0.081	<0.010	0.081	<0.050	<5.0	0.72	3.5	570	7.89	260	190	1.4	360	6.23	0.480	0.668	0.419	7.22	7.47
	11-29-19	24000	1400	89000	11000	210	110	9.6	9.4	<0.010	<100	0.056	<0.010	0.056	<0.050	<5.0	0.80	1.6	600	7.79	270	210	1.2	380	6.73	2.36	0.628	0.380	7.17	7.41
	11-30-20	24000	1400	89000	11000	210	93	11	9.4	<0.016	<100	0.08	<0.01	0.08	<0.05	<5.0	<0.5	3.4	610	7.67	270	200	<1	360	6.35	0.94	0.493	0.244	7.18	7.43
	11-30-21	25000	1400	92000	11000	220	98	6.9	10	<0.010	<100	0.057	<0.010	0.057	<0.050	<5.0	0.75	2.2	610	7.76	280	210	1.2	370	6.55	0.68	0.616	0.367	7.14	7.39

TABLE B-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021
OHP AND HE GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Water Level)	Sample Date	Al	Sb	As	Ba	Be	Bi	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	Sr	Tl	Sn	Ti	U	V	Zn
Units		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NS Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MECP Table 3[2]		-	20000	1900	29000	67	-	45000	2.7	810	66	87	-	25	-	0.29	9200	490	63	1.5	-	510	-	-	420	250	1100
CONPL-202-MWA (4.98 m)	12-15-14	17	<1	2.2	43	<1	<2	<50	0.27	<1	0.84	<2	280	<0.5	1100	<0.013	<2	<2	<1	<0.1	720	<0.1	<2	<2	2.7	<2	14
	12-9-15	12	<1.0	2.2	36	<1.0	<2.0	<50	0.012	<1.0	0.46	<2.0	270	<0.50	830	<0.013	<2.0	<2.0	<1.0	<0.10	540	<0.10	<2.0	<2.0	2.1	<2.0	<5.0
	11-23-16	6	<1.0	<1.0	33	<1.0	<2.0	<50	0.025	<1.0	<0.40	<2.0	<50	<0.50	430	<0.013	<2.0	<2.0	<1.0	<0.10	470	<0.10	<2.0	<2.0	2	<2.0	<5.0
	12-21-17	5.3	<1.0	<1.0	31	<1.0	<2.0	<50	0.078	<1.0	<0.40	<2.0	<50	<0.50	470	<0.013	<2.0	<2.0	<1.0	<0.10	460	<0.10	<2.0	<2.0	1.7	<2.0	<5.0
	11-28-18	9.6	<1.0	<1.0	29	<1.0	<2.0	<50	0.051	<1.0	<0.40	<2.0	<50	<0.50	390	<0.013	<2.0	<2.0	<1.0	<0.10	400	<0.10	<2.0	<2.0	1.5	<2.0	<5.0
	11-29-19	<5.0	<1.0	<1.0	30	<1.0	<2.0	<50	0.027	<1.0	<0.40	<0.50	<50	<0.50	320	<0.013	<2.0	<2.0	<0.50	<0.10	390	<0.10	<2.0	<2.0	1.3	<2.0	<5.0
	11-27-20	<5.0	<1.0	<1.0	28	<1.0	<2.0	<50	0.036	<1.0	<0.40	<0.50	<50	<0.50	590	<0.013	<2.0	<2.0	<0.50	<0.10	480	<0.10	<2.0	<2.0	1.3	<2.0	<5.0
	12-01-21	20	<1.0	<1.0	28	<0.10	<2.0	<50	0.074	<1.0	<0.40	<0.50	<50	<0.50	260	<0.013[13]	<2.0	<2.0	<0.50	<0.10	350	<0.10	<2.0	<2.0	1.1	<2.0	<5.0
COSB-002-MWA (1.22 m)	03-18-13	10	2.3	<0.6	20	<0.5	<2	<100	0.098	<1	<1	3.3	220	<1	42	<0.013	<4	3.6	<1	<0.1	370	<0.8	<20	<3	0.54	<2	110
	07-26-13	59	<1	<1	40	<1	<2	55	0.273	<1	3.51	<2	3660	<0.5	5980	NM	<2	30.7	<1	<0.1	533	<0.1	<2	<2	0.69	<2	466
	11-6-13[FDL]	1000	<1	2.2	67	<1	<2	63	0.8	<1	9.2	3.1	17000	<0.5	14000	NM	<2	91	<1	<0.1	690	<0.1	<2	<2	0.4	<2	**1200**
	11-6-13[FD]	1000	<1	2.3	68	<1	<2	63	0.81	<1	9.6	3.3	18000	<0.5	14000	NM	<2	92	<1	<0.1	690	<0.1	<2	<2	0.42	<2	**1300**
	11-06-13	1100	<1	2.3	68	<1	<2	61	0.80	<1	9.2	4.0	18000	<0.5	14000	NM	<2	91	<1	<0.1	700	<0.1	<2	<2	0.40	<2	**1300**
	12-15-14	73	<1	<1	19	<1	<2	<50	0.66	<1	0.43	5.1	1700	0.52	480	<0.013	<2	7.3	<1	<0.1	390	<0.1	<2	<2	0.22	<2	92
	12-9-15	180000	<1.0	6.2	76	25	<2.0	120	**8.5**	91	**80**	**650**	32000	7.8	23000	<0.013	<2.0	270	<1.0	<0.10	1200	0.39	<2.0	<2.0	11	<2.0	**3800**
	11-28-16	16	<1.0	<1.0	21	<1.0	<2.0	54	0.097	<1.0	<0.40	3.3	2800	<0.50	580	<0.013	<2.0	4.5	<1.0	<0.10	420	<0.10	<2.0	<2.0	0.14	<2.0	97
	12-08-17	34000	<1.0	<1.0	70	3.7	<2.0	110	**3.9**	3.8	29	**100**	7500	1.8	16000	<0.013	<2.0	300	<1.0	<0.1	1700	0.33	<2.0	<2.0	1.6	<2.0	**2400**
	11-28-18	63	<1.0	<1.0	29	<1.0	<2.0	110	0.43	<1.0	2.2	<2.0	7600	<0.50	17000	<0.013	<2.0	140	<1.0	<0.10	870	<0.10	<2.0	<2.0	0.25	<2.0	190
	11-29-19	86	<1.0	<1.0	26	<1.0	<2.0	68	0.21	<1.0	0.42	0.76	1000	<0.50	5100	<0.013	<2.0	47	<0.50	<0.10	750	<0.10	<2.0	<2.0	0.45	<2.0	45
	11-27-20	44	<1.0	<1.0	24	<1.0	<2.0	51	0.074	1.4	<0.40	0.6	1200	<0.50	730	<0.013	<2.0	16	<0.50	<0.10	700	<0.10	<2.0	<2.0	0.33	<2.0	25
	12-01-21	3200	<1.0	<1.0	72	0.3	<2.0	120	2.1	1.0	32	1.7	1700	<0.50	30000	<0.013	<2.0	620	<0.50	<0.10	1600	0.1	<2.0	<2.0	0.22	<2.0	1700
COSCW-001-MWA (3.32 m)	03-19-13	7.3	<1	<0.6	41	<0.5	<2	<100	<0.017	<1	<1	5.3	280	<1	16	<0.013	<4	<3	<1	<0.1	560	<0.8	<20	<3	0.55	<2	38
	07-17-13	7.8	<1	<1	47.1	<1	<2	<50	0.104	<1	<0.4	11.2	<50	<0.5	1470	NM	<2	<2	<1	<0.1	672	<0.1	<2	<2	0.55	<2	52.5
	10-24-13	16	<1	<1	53	<1	<2	<50	0.032	<1	<0.4	2.2	<50	<0.5	620	NM	<2	<2	<1	<0.1	680	<0.1	<2	<2	0.59	<2	21
	12-16-14	13	<1	<1	48	<1	<2	<50	0.13	<1	<0.4	7.5	<50	<0.5	10	<0.013	<2	<2	<1	<0.1	650	<0.1	<2	<2	0.82	<2	45
	12-8-15	7.6	<1.0	<1.0	45	<1.0	<2.0	<50	0.061	<1.0	<0.40	12	<50	<0.50	87	0.11	<2.0	<2.0	<1.0	<0.10	600	<0.10	<2.0	<2.0	0.75	<2.0	44
	11-22-16	9.9	<1.0	<1.0	48	<1.0	<2.0	<50	0.13	<1.0	<0.40	15	<50	<0.50	66	<0.013	<2.0	<2.0	<1.0	<0.10	660	<0.10	<2.0	<2.0	0.63	<2.0	81
	12-8-17	7.6	<1.0	1.6	82	<1.0	<2.0	<50	0.10	<1.0	0.65	3.0	<50	<0.50	3900	<0.013	<2.0	<2.0	<1.0	<0.10	250	<0.10	<2.0	<2.0	0.70	<2.0	29
	12-3-18	<5.0	<1.0	<1.0	55	<1.0	<2.0	<50	0.10	<1.0	<0.40	5.0	<50	<0.50	340	<0.013	<2.0	<2.0	<1.0	<0.10	620	<0.10	<2.0	<2.0	0.68	<2.0	62
	12-9-19	9.0	<1.0	<1.0	51	<1.0	<2.0	<50	0.054	<1.0	<0.40	10	<50	<0.50	150	<0.013	<2.0	<2.0	<0.50	<0.10	560	<0.10	<2.0	<2.0	0.73	<2.0	34
	11-24-20	<5.0	<1.0	1.2	51	<1.0	<2.0	<50	0.036	<1.0	<0.40	<0.50	63	<0.50	1100	<0.013	<2.0	<2.0	<0.50	<0.10	620	<0.10	<2.0	<2.0	0.75	<2.0	<5.0
	12-08-21	7.6	<1.0	<1.0	47	<0.10	<2.0	<50	0.023	<1.0	<0.40	<0.50	<50	<0.50	110	<0.013	<2.0	<2.0	<0.50	<0.10	520	<0.10	<2.0	<2.0	0.63	<2.0	<5.0
COSCW-001-MWB (1.57 m)	03-19-13	6.7	<1	1.8	120	<0.5	<2	<100	0.19	<1	<1	<2	640	<1	1000	<0.013	4.7	<3	<1	<0.1	1300	<0.8	<20	<3	0.87	<2	12
	07-17-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-17-13	16.2	<1	2.6	107	<1	<2	52	<0.017	<1	<0.4	4.9	181	<0.5	348	NM	2.2	<2	<1	<0.1	1260	<0.1	<2	<2	0.68	<2	19.1
	10-24-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10-24-13	18	<1	1.1	120	<1	<2	62	<0.01	<1	<0.4	<2	200	<0.5	350	NM	2.7	<2	<1	<0.1	1300	<0.1	<2	<2	0.76	<2	14
	12-12-14	22	<1	<1	130	<1	<2	62	0.22	<1	<0.4	<2	57	1.1	66	<0.013	5.7	<2	<1	<0.1	1400	<0.1	<2	<2	1.2	<2	20
	12-8-15	5.2	<1.0	<1.0	150	<1.0	<2.0	62	0.051	<1.0	<0.40	<2.0	110	<0.50	160	0.19	3.4	<2.0	<1.0	<0.10	1400	<0.10	<2.0	<2.0	2.6	<2.0	<5.0
	11-22-16	9.9	<1.0	<1.0	48	<1.0	<2.0	<50	0.13	<1.0	<0.40	15	<50	<0.50	66	<0.013	<2.0	<2.0	<1.0	<0.10	660	<0.10	<2.0	<2.0	0.63	<2.0	81
	12-8-17	<5.0	<1.0	<1.0	130	<1.0	<2.0	56	0.012	<1.0	<0.40	<2.0	59	<0.50	120	<0.013	3.4	<2.0	<1.0	<0.10	1300	<0.10	<2.0	<2.0	1.8	<2.0	<5.0
	12-3-18	6.6	<1.0	<1.0	130	<1.0	<2.0	57	0.073	<1.0	<0.40	<2.0	82	<0.50	98	<0.013	4.3	<2.0	<1.0	<0.10	1300	<0.10	<2.0	<2.0	1.3	<2.0	<5.0
	11-29-19	7.0	<1.0	<1.0	150	<1.0	<2.0	61	0.23	<1.0	<0.40	<0.50	110	<0.50	130	<0.013	4.7	<2.0	<0.50	<0.10	1600	<0.10	<2.0	<2.0	1.8	<2.0	<5.0
	11-24-20	<5.0	<1.0	2.6	170	<1.0	<2.0	63	0.15	<1.0	<0.40	<0.50	800	<0.50	460	<0.013	<2.0	<2.0	<0.50	<0.10	1600	<0.10	<2.0	<2.0	2.7	<2.0	<5.0
	12-08-21	5.3	<1.0	<1.0	130	<0.10	<2.0	<50	0.013	<1.0	<0.40	1.4	66	<0.50	120	<0.013	<2.0	<2.0	<0.50	<0.10	870	<0.10	<2.0	<2.0	2.8	<2.0	<5.0
COSCW-002-MWA (4.08 m)	03-26-13	9.5	<1	<0.6	21	<0.5	<2	<100	0.066	<1	<1	5	<100	<1	<4	<0.013	<4	<3	<1	<0.1	240	<0.8	<20	<3	3.9	<2	37
	07-17-13	7.1	<1	<1	21.7	<1	<2	<50	0.298	<1	<0.4	48.1	<50	0.68	<2	NM	<2	3.2	<1	<0.1	255	<0.1	<2	<2	3.87	<2	216
	10-24-13	16	<1	<1	24	<1	<2	51	0.36	<1	<0.4	37	<50	0.55	5.5	NM	<2	2.8	<1	<0.1	240	<0.1	<2	<2	4.6	<2	260
	12-12-14	17	<1	<1	22	<1	<2	<50	0.26	<1	<0.4	12	<50	<0.5	5.2	<0.013	<2	<2	<1	<0.1	250	<0.1	<2	<2	4.9	<2	59
	12-8-15	7.8	<1.0	<1.0	22	<1.0	<2.0	<50	0.14	<1.0	<0.40	65	<50	1	<2.0	<0.013	<2.0	2.9	<1.0	<0.10	240	<0.10	<2.0	<2.0	4.1	<2.0	210
	11-22-16	5.6	<1.0	<1.0	130	<1.0	<2.0	66	0.014	<1.0	<0.40	<2.0	<50	<0.50	18	<0.013	5.6	<2.0	<1.0	<0.10	1300	<0.10	<2.0	<2.0	1.1	<2.0	<5.0
	12-8-17	7.0	<1.0	<1.0	23	<1.0	<2.0	<50	0.10	<1.0	<0.40	23	<50	<0.50	2.3	<0.013	<2.0	<2.0	<1.0	<0.10	250	<0.10	<2.0	<2.0	4.4	<2.0	110
	12-3-18	<5.0	<1.0	<1.0	22	<1.0	<2.0	<50	0.12	<1.0	<0.40	15	<50	<0.50	<2.0	<0.013	<2.0	<2.0	<1.0	<0.10	240	<0.10	<2.0	<2.0	3.8	<2.0	100
	11-29-19	6.9	<1.0	<1.0	24	<1.0	<2.0	<50	0.078	1.1	<0.40	4.8	<50	1.2	22	<0.013	<2.0	<2.0	<0.50	<0.10	230	<0.10	<2.0	3.1	3.5	<2.0	34
	11-24-20	<5.0	<1.0	<1.0	23	<1.0	<2.0	<50	0.066	<1.0	<0.40	5.7	<50	<0.50	<2.0	<0.013	<2.0	<2.0	<0.50	<0.10	240	<0.10	<2.0	<2.0	4.6	<2.0	39
	11-30-21	15	<1.0	<1.0	22	<0.10	<2.0	53	0.043	<1.0	<0.40	36	<50	1.6	5.2	<0.013	<2.0	<2.0	<0.50	<0.10	220	<0.10	<2.0	<2.0	2.8	<2.0	54
COSCW-002-MWB (1.50 m)	03-19-13[L]	6.1	<1	<0.6	26	<0.5	<2	<100	0.045	<1	<1	<2	<100	<1	130	NM	<4	<3	<1	<0.1	170	<0.8	<20	<3	2.7	<2	33
	03-19-13	6.3	<1	<0.6	26	<0.5	<2	<100	0.043	<1	<1	<2	<100	<1	130	<0.013	<4	<3	<1	<0.1	170	<0.8	<20	<3	2.6	<2	33
	07-17-13	10.2	<1	2.7	24.1	<1	<2	<50	<0.017	<1	0.44	<2	273	<0.5	470	NM	4.2	<2	<1	<0.1	173	<0.1	<2	<2	2.4	<2	13.9
	10-24-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	10-24-13	26	<1	2.3	30	<1	<2	<50	0.15	<1	<0.4	<2	320	<0.5	460	NM	5.4	<2	<1	<0.1	180	<0.1	<2	<2	2.3	<2	20
	12-12-14	11	<1	<1	34	<1	<2	<50	0.63	<1	<0.4	4.5	80	<0.5	130	<0.013	7.2	<2	<1	<0.1	190	<0.1	<2	<2	3.2	<2	47
	12-8-15	7.5	<1.0	<1.0	31	<1.0	<2.0	<50	0.038	<1.0	<0.40	6.3	61	0.65	110	<0.013	5.3	<2.0	<1.0	<0.10	150	<0.10	<2.0	<2.0	1.9	<2.0	38
	11-22-16	7.7	<1.0	<1.0	30	<1.0	<2.0	<50	0.23	<1.0	<0.40	2.3	130	<0.50	200	<0.013	7.1	<2.0	<1.0	<0.10	150	<0.10	<2.0	<2.0	1.7	<2.0	80
	12-8-17	<5.0	<1.0	<1.0	32	<1.0	<2.0	<50	0.031	<1.0	<0.40	3.9	130	<0.50	340	<0.013	5.3	<2.0	<1.0	<0.10	160	<0.10	<2.0	<2.0	1.7	<2.0	25
	12-3-18	15	<1.0	<1.0	34	<1.0	<2.0	<50	0.11	<1.0	<0.40	5.4	<50	<0.50	33	<0.013	3.7	<2.0	<1.0	<0.10	140	<0.10	<2.0	<2.0	1.6	<2.0	38
	11-29-19	10	<1.0	<1.0	37	<1.0	<2.0	<50	0.035	<1.0	<0.40	3.6	<50	1.6	47	<0.013	3.0	<2.0	<0.50	<0.10	150	<0.10	<2.0	<2.0	1.6	<2.0	20
	11-30-20	<5.0	<1.0	<1.0	37	<1.0	<2.0	<50	0.033	<1.0	<0.40	4.2	<50	<0.50	82	<0.013	3.8	<2.0	<0.50	<0.10	150	<0.10	<2.0	<2.0	1.6	<2.0	29
	11-30-21	8.2	<1.0	<1.0	37	<0.10	<2.0	<50	0.22	<1.0	<0.40	8.8	<50	0.88	62	<0.013	3.8	<2.0	<0.50	<0.10	160	<0.10	<2.0	<2.0	1.6	<2.0	21

TABLE B-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021
OHP AND HE GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Water Level)	Sample Date	Na	K	Ca	Mg	ALK	SO4	Cl	SiO2	OPO4 (ORTHOPHOSPHATE)	P	NO3	NO2	NO2-NO3	NH3	Colour	TOC	TURBIDITY	CONDUCTIVITY	pH	HARDNESS	BICARB ALK	CARB ALK	TDS	Anion Sum	Ion Bal	Langelier Ind_ (@20C)	Langelier Ind_ (@4C)	Sat_ pH (@20C)	Sat_ pH (@4C)
Units		µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	TCU	mg/L	NTU	µS/cm	pH	mg/L	mg/L	mg/L	mg/L	me/L	%	unitless	unitless	unitless	unitless
NS Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MECP Table 3[2]		2300000	-	-	-	-	-	2300000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COTS-001-MWA[3] (3.63 m)	11/-5-13[L]	8000	3100	96000	7400	NM	NM	NM	NM	NM	<100	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11-15-13	8000	3100	96000	7400	33	74	11	17	<0.01	<100	50	0.05	50	5.3	23	6.2	73	710	6.04	270	33	<1	470	6.08	0.98	-1.92	-2.17	7.96	8.21
	12-15-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12-08-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
COTS-001-MWB[3] (1.5 m)	12-08-15	37,000	2,800	120,000	14,000	260	120	48	13	0	<100	2	<0.010	2	0	<5.0	2	4	810	8	360	260	2	520	9	3	1	1	7	7
	11-28-16	35000	2700	110000	13000	260	110	53	13	0.018	<100	1.2	<0.010	1.2	0.31	<5.0	1	1.6	740	7.6	340	260	<1.0	500	9.1	4.12	0.603	0.355	6.99	7.24
	12-21-17	33000	2800	120000	13000	280	98	51	14	<0.010	<100	<0.050	<0.010	<0.050	1.1	<5.0	1.2	0.86	810	7.75	340	280	1.5	500	9.04	3.20	0.791	0.543	6.96	7.21
	11-28-18	36000	2900	110000	13000	280	96	46	15	0.014	<100	0.14	<0.010	0.14	0.57	<5.0	<5.0 [9]	2.3	800	7.88	330	280	2.0	500	9.00	3.69	0.911	0.663	6.96	7.21
	11-29-19	32000	2700	120000	13000	290	100	40	13	<0.010	<100	0.065	<0.010	0.065	1.2	<5.0	1.2	0.94	810	7.78	350	290	1.6	500	9.07	2.89	0.847	0.599	6.93	7.18
	11-27-20	35000	2600	120000	13000	280	90	47	14	0.012	<100	<0.05	<0.01	<0.05	0.41	<5	<59	1.5	810	7.65	350	270	1.2	490	8.73	0.75	0.693	0.445	6.96	7.2
	12-03-21	39000	2600	120000	14000	290	100	40	14	0.011	<100	0.16	0.16	0.32	0.27	<5.0	1.3	0.96	810	7.66	360	290	1.2	510	9.06	0.830	0.728	0.480	6.93	7.18
MCES-001-MWA (5.3 m)	03-28-13[FD]	31000	17000	220000	<60	430	83	38	2.8	<0.01	<100	<0.05	0.39	0.28	1	<5	2.2	21	2100	12	550	<1	<1	656	11.5	5.81	NC	NC	NC	NC
	03-28-13	30000	17000	200000	<60	430	85	36	3	<0.01	<100	<0.05	0.41	0.27	1	<5	2	18	2100	11.8	500	1.8	110	631	11.3	2.5	2.87	2.63	8.93	9.17
	07-24-13	36400	17800	230000	<100	87	160	43	2.9	<0.01	<100	<0.05	0.17	0.13	1.3	6.2	2.2	15	2300	11.8	570	<1	<1	542	6.24	37.2	NC	NC	NC	NC
	12-10-14	34000	18,000	240000	<100	420	120	50	3.5	<10	<100	0.096	0.28	0.38	1.5	<5	3.4	37	1900	11.9	610	<1	17	730	12.4	6.93	2.12	1.88	9.78	10
	12-2-15	39000	17,000	240000	<100	66	160	44	2.7	<0.010	<100	<0.050	0.29	0.31	1.3	<5.0	2.2	3.5	2100	11.8	590	<1.0	<1.0	540	5.89	40.9	NC	NC	NC	NC
	11-25-16	36000	19000	250000	<100	280	190	60	2.8	<0.010	<100	<0.050	0.47	0.39	1.1	<5.0	<5.0	10	1900	11.9	610	<1.0	<1.0	730	11.4	11.8	NC	NC	NC	NC
	12-12-17 [FD]	42000	17000	240000	<0.10	70	150	55	2.4	<0.010	<100	<0.050	0.13	0.16	1.4	<5.0	3.1	0.27	2400	12	600	<1.0	<1.0	560	6.16	39.9	NC	NC	NC	NC
	12-12-17	42000	17000	240000	<0.10	76	160	52	2.3	<0.010	<100	<0.050	0.13	0.16	1.4	5.5	3.1	0.25	2500	12	600	<1.0	<1.0	560	6.26	39.5	NC	NC	NC	NC
	11-28-18	26000	13000	240000	<100	240	110	36	2.0	<0.010	<100	<0.050	0.26	0.29	0.47	<5.0	2.5	0.75	2300	12.0 [8]	600	<1.0	<1.0	580	8.28	23.8	NC	NC	NC	NC
	12-02-19	28000	13000	220000	<100	240	130	31	2.8	<0.010	<100	0.086	0.28	0.37	0.84	<5.0	2.4	0.62	2000	11.9 [8]	550	<1.0	<1.0	570	8.33	20.8	NC	NC	NC	NC
	11-27-20	Dry																												
	12-07-21	35000	15000	250000	<100	480	130	53	2.9	<0.010	<100	0.11	0.21	0.32	1.0	7.3	2.9	0.73	2200	12.1 [8]	610	<1.0	<1.0	770	13.8	1.60	NC	NC	NC	NC
MCES-001-MWB (Decommissioned in 2020 and Replaced with MCES-201-MWB)	03-28-13	**7200000**	160000	630000	910000	1400	29	15000	19	<0.01	<1000	<0.05	<0.01	<0.05	26	19	7.4	230	35000	7.1	5300	1400	1.7	24700	447	2.38	1.19	0.948	5.91	6.15
	07-25-13	**6500000**	148000	449000	868000	1400	25	12000	23	<0.01	<1000	<0.05	<0.01	<0.05	31	42	12	160	36000	7.42	4700	1400	3.4	21000	370	1.71	1.32	1.09	6.1	6.34
	11-14-13	**6500000**	160000	410000	830000	1300	10	13000	23	0.013	<1000	0.09	0.019	0.11	35	43	17	150	35000	7.32	4500	1300	2.5	22000	392	1.8	1.16	0.926	6.16	6.39
	12-10-14	**6800000**	160000	500000	900000	1500	6.7	11000	25	0.013	<1000	<0.05	<0.01	<0.05	33	39	17	130	34000	7.4	5000	1400	3.5	21000	346	7.51	1.38	1.14	6.03	6.27
	12-2-15	**6300000**	150000	480000	820000	1200	<2.0	13000	28	0.054	<1000	<0.050	0.013	<0.050	41	41	17	150	34000	7.49	4600	1200	3.4	22000	399	3.35	1.36	1.12	6.13	6.37
	11-25-16	**6200000**	150000	480000	790000	1200	<2.0	11000	28	0.04	<1000	<0.050	<0.010	<0.050	36	39	20	140	32000	7.42	4400	1200	3.1	19000	328	5.07	1.3	1.07	6.11	6.35
	12-15-17	**6300000**	150000	520000	820000	1500	<2.0	12000	28	0.013	<1000	<0.050	<0.010	<0.050	29	42	16	120	35,000	7.47	4700	1400	4.0	21000	379	0.52	1.46	1.22	6.01	6.25
	11-28-18 [10]	29000	13000	210000	<100	180	94	55	2.5	<0.010	<100	0.34	0.25	0.59	0.37	<5.0	3.2	0.25	1900	11.9 [8]	530	<1.0	<1.0	520	7.20	25.7	NC	NC	NC	NC
	12-02-19	28000	13000	220000	<100	190	96	33	2.3	<0.010	<100	0.096	0.69	0.78	0.44	<5.0	3.0	2.5	2100	12 [8]	550	<1.0	<1.0	510	6.84	29.8	NC	NC	NC	NC
MCES-201-MWB (6.23 m)	12-10-20	2200000	71000	180000	250000	680	34	4800	8.6	<0.010	<1000	0.05	<0.01	0.05	17	15	109.0	47	15000	7.5	1500	680	2.0	8000	149.00	6.95	0.713	0.475	6.78	7.02
	12-7-21[FD]	50000	14000	220000	<100	440	140	45	3.7	<0.010	<100	<0.050	0.24	0.16	1.1	<5.0	2.8	15	2300	12.1 [8]	540	<1.0	<1.0	730	12.80	2.25	NC	NC	NC	NC
	12-7-21	48000	14000	220000	<100	400	130	55	3.4	<0.010	<100	<0.050	0.17	0.22	1.1	<5.0	2.6	17	2,300	12.1 [8]	550	<1.0	<1.0	720	12.3	4.86	NC	NC	NC	NC
MCES-006-MW (2.80 m)	03-12-12	9400	1800	82000	10000	210	50	12	12	0.016	<100	0.91	<0.01	0.91	0.083	13	7.4	16	520	7.6	250	210	<1.0	311	5.68	2.34	0.414	0.165	7.19	7.44
	6-20-12[L]	NM	NM	NM	NM	NM	46	15	NM	<0.01	NM	NM	<0.01	0.27	NM	12	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06-20-12	11000	1900	95000	9800	240	43	14	10	<0.01	<100	0.27	<0.01	0.27	0.23	14	7.4	31	530	7.7	280	240	1.2	337	6.22	0.97	0.632	0.383	7.07	7.32
	09-24-12	15000	2700	110000	11000	270	49	13	14	<0.01	<100	0.75	<0.01	0.75	0.12	16	7.9	19	580	7.5	310	270	<1.0	385	6.87	1.43	0.528	0.279	6.97	7.22
	01-16-13	14000	2200	100000	12000	260	50	15	13	<0.01	<100	0.067	0.01	0.077	0.35	15	9.5	88	600	7.8	300	260	1.5	371	6.7	0.74	0.787	0.538	7.01	7.26
	03-28-13	14000	1300	100000	12000	280	34	17	13	0.062	<100	<0.05	<0.01	<0.05	0.17	14	11	310	610	7.50	310	280	<1.0	374	6.87	0.79	0.533	0.285	6.97	7.22
	07-26-13	13300	1030	103000	12100	300	28	20	13	<0.01	<100	<0.05	<0.01	<0.05	0.18	12	10	250	630	7.57	310	300	1	376	7.1	1.87	0.617	0.368	6.95	7.2
	11-05-13[L]	13000	1200	110000	12000	NM	NM	NM	NM	NM	<100	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11-05-13	13000	1200	110000	12000	290	34	22	13	<0.01	<100	0.15	<0.01	0.15	0.29	17	10	100	640	7.61	320	290	1.1	390	7.21	1.34	0.664	0.415	6.95	7.2
	12-10-14	9600	5800	77000	3200	77	70	23	14	0.014	<100	1.4	0.11	1.5	0.18	10	3.6	10	360	8.91	200	71	5.4	260	3.77	10.7	1.24	0.99	7.67	7.92
	12-3-15	7800	5500	65000	1700	84	88	21	11	0.045	110	1.3	0.12	1.4	0.14	12	3.8	3.2	370	9.44	170	66	17	260	4.2	4.22	1.66	1.41	7.78	8.03
	12-02-16	7900	1800	59000	4700	100	48	17	14	0.015	<100	0.52	0.062	0.58	0.14	13	5.4	7.9	320	7.95	170	100	<1.0	220	3.58	2.19	0.334	0.084	7.62	7.87
	12-13-17	7600	3100	51000	2900	120	35	14	9.5	<0.010	<100	0.59	0.016	0.60	0.19	15	5.5	1.0	360	7.86	140	120	<1.0	200	3.57	5.15	0.262	0.012	7.60	7.85
	11-28-18	6800	3900	56000	1700	59	64	11	14	<0.010	<100	1.6	0.028	1.7	0.087	13	4.6	1.9	280	9.15	150	51	6.9	200	2.93	6.54	1.22	0.973	7.93	8.18
	12-02-19	6000	3400	58000	630	66	83	13	11	<0.010	<100	1.1	0.083	1.2	0.071	10	3.9	0.74	340	10.3 [8]	150	18	37	220	3.48	2.65	1.97	1.72	8.37	8.62
	11-26-20	6000	3200	52000	1200	78	62	9.1	8.8	0.018	<100	1.1	0.1	1.2	0.39	18	6.6	1.40	300	9.02	130	70	6.9	200	3.19	2.24	1.2	0.946	7.83	8.08
	12-08-21	5900	2800	50000	1100	71	62	8.7	10	0.023	<100	0.48	0.088	0.56	0.60	19	6.4	1.1	280	9.41	130	56	14	190	2.98	0.51	1.47	1.22	7.94	8.19

TABLE B-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021
OHP AND HE GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Water Level)	Sample Date	Al	Sb	As	Ba	Be	Bi	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	Sr	Tl	Sn	Ti	U	V	Zn
Units		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NS Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MECP Table 3[2]		-	20000	1900	29000	67	-	45000	2.7	810	66	87	-	25	-	0.29	9200	490	63	1.5	-	510	-	-	420	250	1100
COTS-001-MWA[3] (3.63 m)	11/-5-13[L]	230	<1	<1	64	<1	<2	<50	0.59	<1	2.4	47	59	2.8	3200	NM	<2	7.2	<1	<0.1	300	<0.1	<2	<2	0.24	<2	160
	11-15-13	230	<1	<1	63	<1	<2	<50	0.57	<1	2.5	47	60	2.8	3100	NM	<2	7.2	<1	<0.1	300	<0.1	<2	<2	0.24	<2	160
	12-15-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12-08-14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
COTS-001-MWB[3] (1.5 m)	12-08-15	6	<1.0	<1.0	43	<1.0	<2.0	<50	0.029	<1.0	<0.40	<2.0	<50	<0.50	22	<0.013	<2.0	<2.0	<1.0	<0.10	1600	<0.10	<2.0	<2.0	1	<2.0	<5.0
	11-28-16	11	<1.0	<1.0	38	<1.0	<2.0	<50	0.20	<1.0	<0.40	<2.0	<50	<0.50	1400	<0.013	<2.0	<2.0	<1.0	<0.10	1500	<0.10	<2.0	<2.0	0.62	<2.0	<5.0
	12-21-17	6.0	<1.0	2.8	44	<1.0	<2.0	<50	<0.010	<1.0	0.45	<2.0	530	<0.50	2100	<0.013	<2.0	<2.0	<1.0	<0.10	1600	<0.10	2.2	<2.0	0.52	<2.0	<5.0
	11-28-18	6.9	<1.0	<1.0	33	<1.0	<2.0	<50	0.031	<1.0	<0.40	<2.0	<50	<0.50	700	<0.013	<2.0	<2.0	<1.0	<0.10	1500	<0.10	3.2	<2.0	1.1	<2.0	<5.0
	11-29-19	6.6	<1.0	1.4	41	<1.0	<2.0	<50	0.029	<1.0	<0.40	<0.5	250	<0.50	1600	<0.013	<2.0	<2.0	<0.50	<0.10	1700	<0.10	<2.0	<2.0	0.48	<2.0	<5.0
	11-27-20	5.1	<1.0	<1.0	35	<1.0	<2.0	<50	0.027	<1.0	<0.40	<0.5	<50	<0.5	850	<0.013	<2.0	<2.0	<0.50	<0.10	1600	<0.10	<2.0	<2.0	0.77	<2.0	<5.0
	12-03-21	<5.0	<1.0	<1.0	36	<0.10	<2.0	<50	0.023	<1.0	<0.40	<0.50	<50	<0.50	59	<0.013[13]	<2.0	<2.0	<0.50	<0.10	1600	<0.10	<2.0	<2.0	1.1	<2.0	<5.0
MCES-001-MWA (5.3 m)	03-28-13[FD]	18	<1	0.9	150	<0.5	<2	<100	<0.017	<1	<1	4.7	100	3.9	<4	0.015	8.1	<3	4	<0.1	1100	<0.8	<20	<3	<0.15	26	12
	03-28-13	20	<1	<0.6	150	<0.5	<2	<100	<0.017	<1	<1	4.8	110	3.9	<4	0.015	8.3	<3	1.8	<0.1	1100	<0.8	<20	<3	<0.15	21	14
	07-24-13	30.8	<1	<1	159	<1	<2	<50	<0.017	<1	<0.4	13.3	<50	1.87	3.2	NM	9.4	<2	1.6	<0.1	1180	<0.1	<2	<2	<0.1	23.3	8.7
	12-10-14	310	<1	<1	160	<1	<2	<50	0.085	2.6	<0.4	10	<50	0.83	2.9	<0.013	9.5	<2	1.8	<0.1	1200	<0.1	<2	<2	<0.1	16	7.7
	12-2-15	53	<1.0	<1.0	150	<1.0	<2.0	<50	<0.010	<1.0	<0.40	2.7	<50	2.9	<2.0	<0.013	8.9	<2.0	1.5	<0.10	1300	<0.10	<2.0	<2.0	<0.10	20	<5.0
	11-25-16	79	<1.0	<1.0	160	<1.0	<2.0	<50	<0.010	2.6	<0.40	4.3	<50	5.1	<2.0	<0.013	9.3	<2.0	1.9	<0.10	1300	<0.10	<2.0	<2.0	<0.10	18	<5.0
	12-12-17 FD	54	<1.0	<1.0	140	<1.0	<2.0	<50	0.017	2.1	<0.40	4.3	<50	4.2	<2.0	<0.013	9.0	<2.0	1.8	<0.10	1300	<0.10	<2.0	<2.0	<0.10	18	<5.0
	12-12-17	52	<1.0	<1.0	140	<1.0	<2.0	<50	<0.010	2.0	<0.40	11	<50	4.0	<2.0	<0.013	8.5	<2.0	1.8	<0.10	1300	<0.10	<2.0	<2.0	<0.10	18	<5.0
	11-28-18	43	<1.0	<1.0	150	<1.0	<2.0	<50	0.018	7.9	<0.40	2.8	<50	4.9	<2.0	<0.013	9.0	<2.0	1.5	<0.10	1000	<0.10	<2.0	<2.0	<0.10	16	<5.0
	12-02-19	38	<1.0	<1.0	140	<1.0	<2.0	<50	<0.010	2.6	<0.40	2.8	<50	3.9	<2.0	<0.013	7.3	<2.0	1.6	<0.10	1100	<0.10	<2.0	<2.0	<0.10	18	<5.0
	11-27-20	Dry																									
	12-07-21	69	<1.0	<1.0	150	<0.10	<2.0	<50	<0.010	4.6	<0.40	5.5	<50	2.8	23	<0.013[13]	8.8	<2.0	1.7	<0.10	1200	<0.10	<2.0	<2.0	<0.10	17	<5.0
MCES-001-MWB (Decommissioned in 2020 and Replaced with MCES-201-MWB)	03-28-13	<50	<10	<6	3500	<5	<20	2200	0.19	<10	<10	<20	18000	<10	2200	<0.013	<40	<30	32	<1	68000	<8	<200	<30	6.6	49	110
	07-25-13	<50	<10	<10	5210	<10	<20	3260	<0.17	11	<4	<20	14700	<5	1220	NM	<20	<20	<10	<1	51000	<1	<20	<20	5	<20	<50
	11-14-13	110	<10	<10	7000	<10	<20	3600	<0.1	<10	<4	<20	15000	<5	1000	NM	<20	<20	<10	<1	41000	<1	<20	<20	3.7	<20	120
	12-10-14	86	<1	8.7	7200	<1	<2	3600	0.16	1.5	0.88	<2	14000	<0.5	1400	0.017	<2	<2	<1	<0.1	52000	<0.1	<2	3.3	2.5	2.3	10
	12-2-15	<50	<10	<10	7000	<10	<20	3500	<0.10	<10	<4.0	<20	11000	<5.0	1300	<0.013	<20	<20	<10	<1.0	54000	<1.0	<20	<20	1.9	<20	<50
	11-25-16	<50	<10	<10	7200	<10	<20	3700	<0.10	<10	<4.0	<20	10000	<5.0	1300	<0.013	<20	<20	<10	<1.0	54000	<1.0	<20	<20	1.3	<20	<50
	12-15-17	<50	<10	<10	7700	<10	<20	3300	<0.10	<10	<4.0	<2.0	11000	<5.0	1300	0.015	<20	<20	<10	<1.0	58000	<1.0	<20	<20	<1.0	<20	<50
	11-28-18 [10]	650	2.2	<1.0	260	<1.0	<2.0	<50	<0.010	5.8	<0.40	2.4	<50	<0.50	<2.0	<0.013	11	<2.0	1.8	<0.10	1100	<0.10	<2.0	<2.0	<0.10	2.7	<5.0
	12-02-19	21	<1.0	<1.0	260	<1.0	<2.0	<50	<0.010	<1.0	<0.40	<0.50	<50	<0.50	<2.0	<0.013	10	2.3	1.6	<0.10	1100	<0.10	<2.0	<2.0	<0.10	2.1	<5.0
MCES-201-MWB (6.23 m)	12-10-20	<50	<10	<10	3100	<10	<20	1400	<0.10	<10	<4	<5	1300	<5	670	<0.013	22	<20	<5	<1	14000	<1	<20	<20	5.6	<20	<50
	12-7-21[FD]	45	<1.0	<1.0	120	<0.10	<2.0	<50	<0.010	2.1	<0.40	3.5	<50	<0.50	<2.0	<0.013[13]	9.1	<2.0	1.6	<0.10	1100	<0.10	<2.0	<2.0	<0.10	25	<5.0
	12-7-21	46	<1.0	<1.0	120	<0.10	<2.0	<50	<0.010	2.3	<0.40	3.5	<50	<0.50	<2.0	<0.013[13]	9.3	<2.0	1.6	<0.10	1100	<0.10	<2.0	<2.0	<0.10	25	<5.0
MCES-006-MW (2.80 m)	03-12-12	14	0.74	5.5	280	<0.5	<2.0	<100	<0.017	<1.0	<1.0	3.5	440	<1.0	1700	<0.013	<4	<3.0	<1.0	<0.1	540	<0.8	<20	<3.0	1.8	9.4	38
	6-20-12[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	06-20-12	8.7	<1.0	4.9	360	<0.5	<2.0	<100	<0.017	<1.0	<1.0	2.6	1100	<1.0	2700	<0.013	<4	<3.0	<1.0	<0.1	680	<0.8	<20	<3.0	1.2	9.6	19
	09-24-12	13	<1.0	5.6	370	<0.5	<2.0	<100	0.022	<1.0	<1.0	2.1	1600	<1.0	4500	<0.013	<4	<3.0	1.8	<0.1	650	<0.8	<20	<3.0	1.0	12	60
	01-16-13	46	2.6	9.3	400	<0.5	<2.0	<100	0.046	<1.0	<1.0	<2.0	420	<1.0	3600	<0.013	4.9	<3.0	1.8	<0.1	680	<0.8	<20	<3.0	3.0	10	10
	03-28-13	7.7	<1.0	13	490	<0.5	<2.0	<100	<0.017	<1.0	<1.0	<2.0	2000	<1.0	4500	<0.013	<4	<3.0	6.3	<0.1	860	<0.8	<20	<3.0	0.84	18	<5
	07-26-13	16.6	<1.0	12.1	588	<1.0	<2.0	<50	<0.017	<1.0	<0.4	<2.0	2200	<0.5	4520	NM	<2.0	<2.0	<1.0	<0.1	883	<0.1	<2.0	<2.0	0.89	7.6	<5
	11-05-13[L]	25	<1.0	12	520	<1.0	<2.0	<50	0.037	<1.0	<0.4	<2.0	2500	<0.5	4800	NM	<2.0	<2.0	<1.0	<0.1	830	<0.1	<2.0	<2.0	0.79	9.0	15
	11-05-13	27	<1.0	12	520	<1.0	<2.0	<50	0.038	<1.0	<0.4	<2.0	2500	<0.5	4800	NM	<2.0	<2.0	<1.0	<0.1	840	<0.1	<2.0	<2.0	0.79	9.1	16
	12-10-14	210	1.5	10	130	<1	<2	<50	0.041	<1	<0.4	9.3	110	<0.5	550	<0.013	4.5	<2	2.9	<0.1	730	<0.1	<2	<2	0.21	120	<5
	12-3-15	300	1.3	11	65	<1.0	<2.0	<50	<0.010	<1.0	0.47	13	<50	<0.50	160	<0.013	4.8	<2.0	3.3	<0.10	580	<0.10	<2.0	<2.0	0.37	140	<5.0
	12-02-16	23	<1.0	11	240	<1.0	<2.0	<50	0.049	<1.0	<0.40	2.5	650	<0.50	2700	<0.013	<2.0	<2.0	<1.0	<0.10	510	<0.10	<2.0	<2.0	0.6	16	<5.0
	12-13-17	20	<1.0	4.3	120	<1.0	<2.0	<50	0.018	<1.0	<0.40	5.2	130	<0.50	1100	<0.013	3.7	<2.0	1.7	<0.10	360	<0.10	<2.0	<2.0	0.91	23	<5.0
	11-28-18	200	<1.0	7.2	110	<1.0	<2.0	<50	0.048	<1.0	<0.40	5.1	220	<0.50	740	<0.013	2.7	<2.0	1.5	<0.10	440	<0.10	<2.0	<2.0	0.13	110	<5.0
	12-02-19	380	<1.0	6.4	60	<1.0	<2.0	<50	<0.010	<1.0	<0.40	6.1	<50	<0.50	170	<0.013	3.2	<2.0	2.2	<0.10	520	<0.10	<2.0	<2.0	<0.10	120	<5.0
	11-26-20	150	<1.0	7.8	120	<1.0	<2.0	<50	0.011	1.2	0.54	7.5	98	<0.50	630	<0.013	5.1	<2.0	4.2	<0.10	400	<0.10	<2.0	<2.0	0.47	65	<5.0
	12-08-21	120	<1.0	9.1	85	<0.10	<2.0	<50	<0.010	<1.0	<0.40	5.9	<50	<0.50	380	<0.013	3.5	<2.0	1.6	<0.10	390	<0.10	<2.0	<2.0	0.20	58	6.9

TABLE B-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021
OHP AND HE GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Water Level)	Sample Date	Na	K	Ca	Mg	ALK	SO4	Cl	SiO2	OPO4 (ORTHOPHOSPHATE)	P	NO3	NO2	NO2-NO3	NH3	Colour	TOC	TURBIDITY	CONDUCTIVITY	pH	HARDNESS	BICARB ALK	CARB ALK	TDS	Anion Sum	Ion Bal	Langelier Ind_ (@20C)	Langelier Ind_ (@4C)	Sat_ pH (@20C)	Sat_ pH (@4C)
Units		µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	TCU	mg/L	NTU	µS/cm	pH	mg/L	mg/L	mg/L	mg/L	me/L	%	unitless	unitless	unitless	unitless
NS Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MECP Table 3[2]		2300000	-	-	-	-	-	2300000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MCWS-113-MWB (1.63 m)	12-18-12	84000	7000	71000	11000	300	<2	92	9.9	<0.01	240	<0.05	<0.01	<0.05	2	5.5	<5	1.3	820	7.7	220	300	1.4	463	8.59	0.64	0.565	0.317	7.14	7.38
	03-27-13	91000	7200	83000	13000	300	<2	98	7.1	<0.01	<500	<0.05	<0.01	<0.05	1.6	9.8	4.6	13	820	7.4	260	300	<1	486	8.68	4.72	0.324	0.076	7.08	7.32
	07-24-13	72600	6710	73300	10800	310	<2	92	9.4	<0.01	315	<0.05	<0.01	<0.05	1.8	7.7	4.6	8.8	820	7.48	230	310	<1	458	8.72	3.69	0.371	0.123	7.11	7.36
	11-15-13	78000	7300	74000	11000	310	<2	93	10	<0.01	310	<0.05	<0.01	<0.05	1.8	8.1	<5	13	850	7.52	230	310	<1	470	8.87	2.78	0.42	0.172	7.1	7.35
	12-9-14	74000	6800	72000	12000	310	<2	100	10	<10	290	<0.05	<0.01	<0.05	1.9	11	<5	15	790	7.47	230	300	<1	470	9.03	5.18	0.354	0.106	7.12	7.37
	12-2-15	71000	6800	73000	12000	310	<2.0	91	10	0.017	310	<0.050	0.012	0.052	1.7	7.8	<5.0	20	760	7.65	230	300	1.3	460	8.69	3.51	0.542	0.294	7.11	7.36
	11-30-16	72000	7200	74000	13000	300	<2.0	91	9.9	0.012	160	<0.050	0.01	<0.050	1.7	12	5.2	16	780	7.78	240	300	1.7	460	8.66	2.61	0.677	0.429	7.11	7.35
	12-12-17	67000	6800	77000	13000	300	<2.0	98	10	<0.010	260	<0.050	<0.010	<0.050	1.7	7.0	0.97	7.9	810	7.85	250	300	2.0	460	8.86	4.05	0.760	0.512	7.09	7.34
	12-7-18	58000	6700	76000	12000	330	<2.0	60	10	<0.010	310	<0.050	<0.010	<0.050	1.4	8.8	7.5	5.6	740	7.60	240	330	1.2	430	8.30	3.75	0.544	0.295	7.05	7.30
	12-4-19[FD]	60000	6600	76000	13000	330	<2.0	58	9.7	<0.010	290	<0.080	0.011	0.084 [11]	1.6	7.0	7.8	14	750	7.83	240	330	2.1	430	8.20	2.76	0.773	0.525	7.06	7.31
	12-4-19	60000	6400	76000	13000	350	<2.0	60	9.7	<0.010	280	<0.080	<0.010	<0.080 [11]	1.6	7.4	7.1	14	760	7.86	240	340	2.4	440	8.63	4.92	0.827	0.579	7.04	7.29
	11-27-20[FD]	59000	7100	83000	13000	300	<2	90	10	<0.010	300	<0.05	0.01	0.05	1.8	8.0	5.9	22	800	7.64	260	300	1.2	450	8.52	2.04	0.574	0.325	7.07	7.32
	11-27-20	60000	7000	81000	13000	300	<2	90	10	<0.010	310	<0.05	<0.01	<0.05	1.8	9.0	5.8	23	800	7.93	260	290	2.4	450	8.48	2.05	0.851	0.603	7.08	7.33
	12-08-21	59000	6900	77000	13000	310	<2.0	59	9.8	<0.010	230	<0.050	<0.010	<0.050	1.6	8.0	8.2 [12]	13	740	7.79	250	310	1.8	420	7.97	0.82	0.722	0.473	7.07	7.32
MCWS-306-MWB (0.47 m)	03-27-13	43000	5400	110000	34000	210	280	51	11	0.011	<100	0.052	<0.01	0.052	<0.05	<5	1.2	94	990	7.6	420	210	<1	664	11.4	4.72	0.463	0.216	7.14	7.38
	07-24-13	31700	3990	109000	27700	230	230	21	11	<0.01	<100	<0.05	<0.01	<0.05	<0.05	<5	1	46	870	7.61	390	230	<1	573	9.92	3.66	0.529	0.281	7.08	7.33
	11-15-13	23000	3900	110000	26000	250	170	14	12	0.012	<100	0.057	<0.01	0.057	<0.05	<5	2.7	>1000	810	7.71	370	250	1.2	510	8.95	2.29	0.672	0.424	7.04	7.29
	12-9-14	16000	2900	110000	20000	250	130	17	12	0.015	<100	<0.05	<0.01	<0.05	0.065	<5	1.2	83	700	7.46	350	250	<1	460	8.2	2.5	0.432	0.184	7.03	7.28
	12-2-15	16000	3000	110000	21000	290	140	16	13	0.018	<100	<0.050	0.01	<0.050	<0.050	<5.0	1.2	2.6	720	7.66	360	280	1.2	490	9.03	6.49	0.686	0.438	6.97	7.22
	11-30-16	23000	3900	130000	24000	270	190	16	13	0.015	<100	<0.050	<0.010	<0.050	0.12	<5.0	1.5	22	850	7.61	430	270	1	560	9.72	0.36	0.678	0.431	6.93	7.18
	12-12-17	13000	2600	110000	20000	280	95	16	13	<0.010	<100	<0.050	<0.010	<0.050	0.066	<5.0	1.5	1.5	710	7.61	350	280	1.1	440	8.02	2.30	0.627	0.378	6.98	7.23
	12-7-18	12000	2500	89000	18000	240	87	14	13	<0.010	<100	<0.050	<0.010	<0.050	0.063	<5.0	1.9	1.3	610	7.57	290	240	<1.0	380	6.93	3.43	0.444	0.196	7.12	7.37
	12-4-19	16000	3400	140000	19000	290	160	16	13	<0.010	<100	<0.080	<0.010	<0.080 [11]	0.28	<5.0	2.1	5.1	830	7.66	420	290	1.3	550	9.60	1.69	0.792	0.545	6.87	7.12
	11-27-20	8700	4900	200000	15000	270	280	18	17	<0.010	<100	<0.05	<0.01	<0.05	0.42	<5.0	<5[9]	30	1000	7.61	560	270	1	710	11.7	0.55	0.832	0.585	6.77	7.02
	12-07-21	7700	4200	130000	14000	230	160	9.2	15	<0.010	<100	<0.050	<0.010	<0.050	0.30	<5.0	2.9	6.3	740	7.79	390	230	1.3	480	8.11	0.920	0.801	0.553	6.99	7.23
MCWS-307-MWB (0.61 m)	03-27-13	180000	2200	70000	10000	330	110	160	11	<0.01	<100	0.064	<0.01	0.064	<0.05	<5	0.88	1.2	1200	7.8	220	330	2	738	13.4	5.02	0.65	0.404	7.15	7.4
	07-24-13	193000	2130	64300	10000	340	100	160	10	<0.01	<100	<0.05	<0.01	<0.05	0.063	<5	0.92	1.6	1300	7.77	200	340	1.9	744	13.4	3.52	0.592	0.346	7.18	7.42
	11-14-13	190000	2100	65000	9800	340	97	150	10	<0.01	<100	<0.05	<0.01	<0.05	0.11	<5	1.4	5.0	1300	7.72	200	340	1.7	730	13.1	3.14	0.556	0.309	7.16	7.41
	12-9-14	190000	2200	70000	11000	330	96	170	10	0.012	<100	0.088	0.011	0.099	0.12	<5	1	50	1200	7.73	220	330	1.7	750	13.3	2.46	0.432	0.336	7.15	7.39
	12-2-15	190000	2000	68000	10000	350	96	180	10	0.017	<100	<0.050	0.011	0.052	0.11	<5.0	0.93	3	1300	7.87	210	340	2.4	770	14	5.23	0.725	0.478	7.15	7.4
	12-02-16	200000	2100	71000	11000	360	90	200	11	0.016	<100	<0.050	<0.010	<0.050	0.1	<5.0	0.94	0.4	1200	7.7	220	350	1.7	790	14.5	5.1	0.582	0.335	7.12	7.37
	12-12-17	200000	2000	69000	11000	340	90	200	11	<0.010	<100	<0.050	<0.010	<0.050	0.087	<5.0	1.0	0.85	1400	7.91	220	340	2.6	790	14.2	3.51	0.752	0.506	7.16	7.40
	12-7-18	190000	2000	73000	11000	330	82	210	10	<0.010	<100	0.058	<0.010	0.058	0.083	<5.0	1.1	0.67	1400	7.85	230	330	2.2	770	14.1	4.07	0.709	0.462	7.14	7.39
	12-4-19	210000	2100	77000	12000	330	91	220	10	<0.010	<100	<0.080	<0.010	<0.080 [11]	0.13	<5.0	1.2	2.1	1400	7.82	240	330	2.1	820	14.7	2.98	0.703	0.457	7.11	7.36
	11-27-20	210000	2200	80000	12000	330	82	230	11	<0.010	<100	0.062	<0.01	0.062	0.14	<5.0	<5[9]	1.4	1500	7.75	250	330	1.8	820	14.8	2.04	0.652	0.406	7.1	7.35
	12-07-21	210000	2200	82000	12000	330	88	230	11	<0.010	<100	<0.050	<0.010	<0.050	0.12	<5.0	1.1	1.9	1500	7.93	250	320	2.6	830	14.8	1.75	0.822	0.575	7.11	7.35
MCWS-309-MW (0.80 m)	03-29-13	170000	7300	5400	2900	280	84	37	14	0.093	180	<0.05	<0.01	<0.05	0.14	33	18	>1000	700	7.7	25	280	1.3	490	8.46	2.61	-0.583	-0.831	8.28	8.53
	07-26-13	177000	7870	4010	2230	250	84	39	8.1	0.11	179	<0.05	<0.01	<0.05	<0.05	19	12	170	760	7.68	19	250	1.1	475	7.92	2.22	-0.778	-1.03	8.46	8.71
	11-14-13	170000	8000	4000	2000	260	89	39	8.3	0.10	250	<0.05	<0.01	<0.05	<0.05	18	13	110	800	7.52	18	260	<1.0	480	8.26	2.93	-0.92	-1.17	8.44	8.69
	12-9-14	88000	4700	3900	1100	110	35	18	4.7	0.091	180	0.15	<0.01	0.15	0.13	21	<5	510	340	7.31	14	110	<1	220	3.4	11.5	0.432	-1.72	8.78	9.02
	12-3-15	160000	7700	5000	1800	250	95	48	7	0.095	180	<0.050	0.011	<0.050	0.13	18	9.4	910	750	7.62	20	250	<1.0	480	8.41	4.15	-0.742	-0.99	8.36	8.61
	12-02-16	170000	8400	8200	2200	310	88	49	10	0.067	150	<0.050	<0.010	<0.050	0.14	18	9.8	130	800	7.62	30	310	1.2	530	9.42	6.44	-0.453	-0.701	8.07	8.32
	12-12-17	180000	8800	6700	2200	310	90	51	7.9	0.14	190	<0.050	<0.010	<0.050	0.31	17	14	470	880	7.52	26	300	<1.0	540	9.42	3.80	-0.649	-0.896	8.17	8.42
	12-7-18	94000	6300	6100	1800	160	51	40	5.2	0.14	230	0.24	0.060	0.30	0.43	12	8.7	240	540	7.29	23	160	<1.0	310	5.45	6.97	-1.13	-1.38	8.42	8.67
	12-5-19	88000	6900	4300	1600	150	37	24	5.1	0.13	210	0.10	<0.010	0.10	0.60	15	<50 [9]	>1000	430	7.81	17	150	<1.0	260	4.53	1.23	-0.782	-1.03	8.59	8.84
	11-27-20	150000	8700	6200	2100	310	42	34	9	0.51	760	0.076	<0.01	0.076	2.6	26	<50[9]	400	740	7.69	24	310	1.4	450	8.1	4.79	-0.482	-0.73	8.17	8.42
	12-07-21	130000	8700	6500	2500	270	44	30	7.0	0.23	340	<0.050	<0.010	<0.050	1.4	19	13 (9)	900	640	7.83	26	270	1.7	400	7.16	3.17	-0.374	-0.623	8.21	8.46
MCWS-310-MW (0.61 m)	03-29-13[L]	49000	3400	75000	10000	NM	NM	NM	9.5	NM	<100	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-29-13	51000	3600	79000	11000	240	49	51	9.5	<0.01	<100	2.7	<0.01	2.7	<0.05	<5	<0.5	0.24	650	7.6	240	240	<1	410	7.46	2.26	0.431	0.183	7.17	7.42
	07-26-13	76100	3430	97100	14200	210	120	120	10	<0.01	<100	1.7	0.016	1.7	<0.05	<5	0.77	0.4	980	7.68	300	210	<1	574	10.2	4.03	0.506	0.258	7.17	7.42
	11-14-13	43000	3700	75000	9600	220	46	46	9.5	<0.01	<100	2.3	0.023	2.4	<0.05	<5	1.3	0.37	640	7.89	230	210	1.6	370	6.72	1.9	0.653	0.405	7.24	7.49
	12-9-14	17000	1500	21000	2400	130	29	30	6.6	<10	<100	0.81	<0.01	0.81	0.097	11	1.3	31	400	7.42	61	130	<1	190	4.02	33.3	0.432	-0.796	7.97	8.22
	12-10-15[FD]	8200	3200	10000	1400	50	7.5	6.4	3.6	<0.010	<100	<0.050	<0.010	<0.050	0.15	25	NM	8.3	120	7.19	32	50	<1.0	72	1.33	8.13	-1.42	-1.67	8.61	8.86
	12-10-15	8000	3200	10000	1400	49	6.7	6.5	3.7	<0.010	<100	<0.050	<0.010	<0.050	0.16	27	NM	8.0	110	7.23	32	49	<1.0	71	1.31	8.26	-1.38	-1.63	8.62	8.87
	12-02-16	7600	3200	14000	1500	49	6.4	11	3.4	0.011	<100	<0.050	0.013	<0.050	0.053	14	1.7	3.2	120	7.15	42	49	<1.0	76	1.41	6.02	-1.33	-1.58	8.48	8.73
	12-12-17	16000	1600	29000	3800	52	10	12	2.6	<0.010	<100	0.22	<0.010	0.22	<0.25	26	6.9	12	150	7.43	89	52	<1.0	110	1.59	22.4	-0.737	-0.988	8.17	8.42
	12-7-18	8800	940	4900	860	16	5.9	15	1.6	0.011	<100	0.17	<0.010	0.17	<0.050	22	5.6	24	93	6.70	16	16	<1.0	48	0.880	10.0	-2.70	-2.95	9.40	9.65
	12-5-19	4700	1000	2700	500	7.7	3.7	10	1.0	0.011	<100	0.054	<0.010	0.054	<0.050	34	5.5	13	46	6.46	8.8	7.7	<1.0	29	0.520	11.8	-3.52	-3.77	9.97	10.2
	11-26-20	5000	2100	3900	600	15	<2	5.9	2.2	0.025	<100	<0.05	<0.01	<0.05	0.099	83	10	7.7	55	6.59	12	15	<1	29	0.46	8	-2.95	-3.2	9.53	9.79
	12-08-21	45000	3600	74000	9700	220	44	52	8.7	<0.010	<100	0.88	<0.010	0.88	<0.050	<5.0	1.1	3.4	640	7.95	230	220	1.8	370	6.86	2.31	0.72	0.471	7.23	7.48

TABLE B-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021
OHP AND HE GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Water Level)	Sample Date	Al	Sb	As	Ba	Be	Bi	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	Sr	Tl	Sn	Ti	U	V	Zn
Units		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NS Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MECP Table 3[2]		-	20000	1900	29000	67	-	45000	2.7	810	66	87	-	25	-	0.29	9200	490	63	1.5	-	510	-	-	420	250	1100
MCWS-113-MWB (1.63 m)	12-18-12	12	<1	<0.6	200	<0.5	<2	300	<0.017	<1	<1	<2	2000	<1	4600	<0.013	<4	<3	<1	<0.1	340	<0.8	<20	<3	<0.15	<2	17
	03-27-13	<25	<5	<3	210	<2.5	<10	<500	<0.085	<5	<5	<10	2300	<5	4900	0.014	<20	<15	<5	<0.5	340	<4	<100	<15	<0.75	<10	32
	07-24-13	13.2	<1	<1	218	<1	<2	253	<0.017	<1	<0.4	<2	2570	<0.5	4580	NM	<2	<2	<1	<0.1	357	<0.1	<2	<2	<0.1	<2	21.3
	11-15-13	16	<1	<1	210	<1	<2	330	0.041	<1	<0.4	<2	2200	<0.5	4600	NM	<2	<2	<1	<0.1	370	<0.1	<2	<2	<0.1	<2	41
	12-9-14	13	<1	<1	190	<1	<2	320	1.0	<1	<0.4	4.1	1800	<0.5	4300	<0.013	<2	<2	<1	<0.1	340	<0.1	<2	<2	<0.1	<2	45
	12-2-15	44	<1.0	<1.0	210	<1.0	<2.0	310	<0.010	<1.0	0.61	<2.0	2200	26	4300	<0.013	<2.0	<2.0	<1.0	<0.10	350	<0.10	<2.0	<2.0	<0.10	<2.0	13
	11-30-16	7.7	<1.0	<1.0	150	<1.0	<2.0	330	0.046	<1.0	<0.40	<2.0	1300	<0.50	3500	<0.013	<2.0	<2.0	<1.0	<0.10	350	<0.10	<2.0	<2.0	<0.10	<2.0	97
	12-12-17	5.1	<1.0	<1.0	210	<1.0	<2.0	300	<0.010	<1.0	<0.40	<2.0	2100	<0.50	3500	<0.013	<2.0	<2.0	<1.0	<0.10	360	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12-7-18	6.6	<1.0	<1.0	210	<1.0	<2.0	290	0.043	<1.0	<0.40	<2.0	2100	<0.50	3600	<0.013	<2.0	<2.0	<1.0	<0.10	350	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12-4-19[FD]	8.3	<1.0	<1.0	200	<1.0	<2.0	320	0.087	<1.0	<0.40	<0.50	2000	<0.50	3300	<0.013	<2.0	<2.0	<0.50	<0.10	350	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12-4-19	6.4	<1.0	<1.0	200	<1.0	<2.0	310	0.014	<1.0	<0.40	<0.50	2000	<0.50	3300	<0.013	<2.0	<2.0	<0.50	<0.10	350	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	11-27-20[FD]	8.5	<1.0	<1.0	240	<1.0	<2.0	300	<0.010	<1.0	<0.40	<0.50	2600	<0.50	3800	<0.013	<2.0	<2.0	<0.50	<0.10	390	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	11-27-20	7.4	<1.0	<1.0	240	<1.0	<2.0	320	<0.010	<1.0	<0.40	<0.50	2500	<0.50	3700	<0.013	<2.0	<2.0	<0.50	<0.10	380	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12-08-21	5.7	<1.0	<1.0	190	<0.10	<2.0	310	0.022	<1.0	<0.40	<0.50	1800	<0.50	3300	<0.013[13]	<2.0	<2.0	<0.50	<0.10	340	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
MCWS-306-MWB (0.47 m)	03-27-13	12	<1	<0.6	17	<0.5	<2	110	0.38	<1	<1	<2	<100	<1	2600	0.018	5.7	<3	<1	<0.1	290	<0.8	<20	<3	1.7	<2	48
	07-24-13	8.1	<1	<1	20.2	<1	<2	97	0.108	<1	0.72	<2	<50	<0.5	2870	NM	3.5	2.2	<1	<0.1	250	<0.1	<2	<2	1.33	<2	33.9
	11-15-13	24	<1	<1	21	<1	<2	96	0.22	<1	0.95	<2	<50	<0.5	2800	NM	2.3	<2	<1	<0.1	250	<0.1	<2	<2	1.2	<2	5.3
	12-9-14	9.4	<1	<1	31	<1	<2	78	0.28	<1	0.85	<2	<50	<0.5	2200	<0.013	<2	<2	<1	<0.1	260	<0.1	<2	<2	0.89	<2	5.6
	12-2-15	9.7	<1.0	<1.0	46	<1.0	<2.0	73	0.12	<1.0	1.1	<2.0	150	<0.50	2900	<0.013	<2.0	2.2	<1.0	<0.10	280	<0.10	<2.0	<2.0	1.1	<2.0	<5.0
	11-30-16	16	<1.0	<1.0	58	<1.0	<2.0	84	0.038	<1.0	0.98	<2.0	320	<0.50	2900	<0.013	2.3	2	<1.0	<0.10	340	<0.10	<2.0	<2.0	1.9	<2.0	5.3
	12-12-17	<5.0	<1.0	<1.0	69	<1.0	<2.0	69	0.10	<1.0	1.2	<2.0	100	<0.50	3000	<0.013	<2.0	2.4	<1.0	<0.10	270	<0.10	<2.0	<2.0	0.78	<2.0	<5.0
	12-7-18	7.7	<1.0	<1.0	88	<1.0	<2.0	60	0.27	<1.0	0.90	<2.0	<50	<0.50	1700	<0.013	<2.0	2.3	<1.0	<0.10	220	<0.10	<2.0	<2.0	1.0	<2.0	76
	12-4-19	<5.0	<1.0	2.7	110	<1.0	<2.0	78	0.019	<1.0	1.3	<0.50	920	<0.50	5100	<0.013	2.4	2.7	<0.50	<0.10	390	<0.10	<2.0	<2.0	1.2	<2.0	<5.0
	11-27-20	5.9	<1.0	3.1	62	<1.0	<2.0	120	0.014	<1.0	1.5	<0.50	3400	<0.50	6800	<0.013	6.8	3.5	<0.50	<0.10	620	<0.10	<2.0	<2.0	1.1	<2.0	20
	12-07-21	9.6	<1.0	1.5	52	<0.10	<2.0	91	0.091	<1.0	1.1	<0.50	1200	<0.50	4300	<0.013[13]	4.9	3.4	<0.50	<0.10	410	<0.10	<2.0	<2.0	0.94	<2.0	85
MCWS-307-MWB (0.61 m)	03-27-13	7.7	<1.0	3.7	25	<0.5	<2.0	120	0.051	<1.0	<1.0	2.9	<100	<1.0	110	<0.013	<4.0	<3.0	<1.0	<0.1	290	<0.8	<20	<3.0	1.3	<2.0	31
	07-24-13	9.5	<1.0	4.2	24.9	<1.0	<2.0	116	<0.017	<1.0	<0.4	2.2	<50	<0.5	162	NM	<2.0	<2.0	<1.0	<0.1	281	<0.1	<2.0	<2.0	1.25	<2.0	11.3
	11-14-13	21	<1.0	5.7	24	<1.0	<2.0	120	<0.01	<1.0	<0.4	<2.0	100	<0.5	140	NM	<2.0	<2.0	<1.0	<0.1	280	<0.1	<2.0	<2.0	1.2	<2.0	53
	12-9-14	20	<1	1.8	37	<1	<2	130	<0.01	<1	<0.4	<2	83	<0.5	120	<0.013	<2	<2	<1	<0.1	290	<0.1	<2	<2	1.3	<2	5.2
	12-2-15	7.1	<1.0	1.4	33	<1.0	<2.0	140	<0.010	<1.0	<0.40	<2.0	95	<0.50	130	<0.013	<2.0	<2.0	<1.0	<0.10	300	<0.10	<2.0	<2.0	1.3	<2.0	<5.0
	12-02-16	13	<1.0	<1.0	33	<1.0	<2.0	120	0.14	<1.0	<0.40	<2.0	61	<0.50	130	<0.013	<2.0	<2.0	<1.0	<0.10	310	<0.10	<2.0	<2.0	1.3	<2.0	<5.0
	12-12-17	5.4	<1.0	<1.0	31	<1.0	<2.0	120	0.020	<1.0	<0.40	<2.0	<50	<0.50	130	<0.013	<2.0	<2.0	<1.0	<0.10	320	<0.10	<2.0	<2.0	1.2	<2.0	<5.0
	12-7-18	<5.0	<1.0	<1.0	32	<1.0	<2.0	120	0.039	<1.0	<0.40	<2.0	<50	<0.50	130	<0.013	<2.0	<2.0	<1.0	<0.10	310	<0.10	<2.0	<2.0	1.1	<2.0	8.7
	12-4-19	<5.0	<1.0	<1.0	34	<1.0	<2.0	120	<0.010	<1.0	<0.40	<0.50	110	<0.50	150	<0.013	<2.0	<2.0	<0.50	<0.10	340	<0.10	<2.0	<2.0	1.2	<2.0	<5.0
	11-27-20	<5.0	<1.0	<1.0	34	<1.0	<2.0	120	0.012	<1.0	<0.40	<0.50	83	<0.50	150	<0.013	<2.0	<2.0	<0.50	<0.10	350	<0.10	<2.0	<2.0	1.2	<2.0	<5.0
	12-07-21	<5.0	<1.0	1.0	34	<0.10	<2.0	120	<0.010	<1.0	<0.40	<0.50	160	<0.50	150	<0.013[13]	<2.0	<2.0	<0.50	<0.10	350	<0.10	<2.0	<2.0	1.2	<2.0	<5.0
MCWS-309-MW (0.80 m)	03-29-13	1800	<1.0	5.1	21	<0.5	<2.0	640	0.17	2.2	<1.0	11	2500	3	99	NM	5.4	<3.0	<1.0	<0.1	45	<0.8	<20	58	0.33	3.5	11
	07-26-13	145	<1.0	4.8	10.1	<1.0	<2.0	386	<0.017	<1.0	0.49	<2.0	352	<0.5	1030	NM	2.4	<2.0	<1.0	<0.1	20.9	<0.1	<2.0	<2.0	0.17	<2.0	5.7
	11-14-13	380	<1.0	4.7	13	<1.0	<2.0	390	0.013	<1.0	0.43	<2.0	690	0.61	880	NM	<2.0	<2.0	<1.0	<0.1	22	<0.1	<2.0	7.8	0.12	<2.0	14
	12-9-14	160	<1	2.7	6.3	<1	<2	210	0.023	<1	<0.4	<2	770	0.75	520	0.013	<2	<2	<1	<0.1	14	<0.1	<2	3.3	0.13	<2	10
	12-3-15	120	<1.0	2.3	9.3	<1.0	<2.0	370	0.072	<1.0	0.43	<2.0	190	<0.50	890	<0.013	2.0	<2.0	<1.0	<0.10	22	<0.10	<2.0	5.3	0.45	<2.0	<5.0
	12-02-16	60	<1.0	4.4	17	<1.0	<2.0	400	0.076	<1.0	<0.40	<2.0	590	<0.50	2000	0.013	2.3	<2.0	<1.0	<0.10	29	<0.10	<2.0	<2.0	0.19	<2.0	<5.0
	12-12-17	62	<1.0	3.6	12	<1.0	<2.0	410	0.019	<1.0	<0.40	<2.0	190	<0.50	1200	0.018	<2.0	<2.0	<1.0	<0.10	28	<0.10	<2.0	3.1	0.20	<2.0	<5.0
	12-7-18	72	<1.0	3.1	11	<1.0	<2.0	220	0.011	<1.0	0.74	<2.0	320	<0.50	1400	<0.013	3.2	<2.0	<1.0	<0.10	21	<0.10	<2.0	3.3	<0.10	<2.0	13
	12-5-19	7.7	<1.0	3.1	7.4	<1.0	<2.0	200	0.023	<1.0	<0.40	1.6	<50	<0.50	990	0.055	3.1	<2.0	<0.50	<0.10	17	<0.10	<2.0	<2.0	0.23	<2.0	<5.0
	11-27-20	110	<1.0	7.7	15	<1.0	<2.0	310	0.026	<1.0	<0.40	<0.5	210	<0.50	2500	0.013	<2.0	<2.0	<0.50	<0.10	26	<0.10	<2.0	2.3	0.13	<2.0	<5.0
	12-07-21	83	<1.0	6.3	13	<0.10	<2.0	310	0.061	<1.0	<0.40	0.61	170	0.56	1200	<0.013[13]	2.1	<2.0	<0.50	<0.10	27	<0.10	<2.0	<2.0	0.19	<2.0	<5.0
MCWS-310-MW (0.61 m)	03-29-13[L]	<5	<1.0	<0.6	60	<0.5	<2.0	100	<0.017	<1.0	<1.0	3.3	<100	<1.0	<4.0	NM	<4.0	<3.0	1.2	<0.1	2300	<0.8	<20	<3.0	0.89	<2.0	22
	03-29-13	<5	<1.0	<0.6	63	<0.5	<2.0	110	<0.017	<1.0	<1.0	3.6	<100	<1.0	<4.0	<0.013	<4.0	<3.0	<1.0	<0.1	2400	<0.8	<20	<3.0	0.93	<2.0	24
	07-26-13	12	<1.0	<1.0	76	<1.0	<2.0	122	0.035	<1.0	<0.4	2.8	<50	<0.5	90.1	NM	<2.0	<2.0	<1.0	<0.1	3210	<0.1	<2.0	<2.0	0.85	<2.0	13.7
	11-14-13	8.1	<1.0	<1.0	63	<1.0	<2.0	100	0.061	<1.0	<0.4	14	<50	<0.5	7.2	NM	<2.0	<2.0	<1.0	<0.1	2100	<0.1	<2.0	<2.0	0.9	<2.0	60
	12-9-14	84	<1	<1	23	<1	<2	<50	0.038	<1	<0.4	3.0	50	<0.5	4.1	<0.013	<2	<2	<1	<0.1	360	<0.1	<2	2.5	0.37	<2	410
	12-10-15[FD]	81	<1.0	<1.0	15	<1.0	<2.0	<50	<0.010	<1.0	<0.40	<2.0	1100	<0.50	39	<0.013	<2.0	<2.0	<1.0	<0.10	110	<0.10	<2.0	<2.0	<0.10	<2.0	79
	12-10-15	78	<1.0	<1.0	15	<1.0	<2.0	<50	<0.010	<1.0	<0.40	<2.0	990	<0.50	36	<0.013	<2.0	<2.0	<1.0	<0.10	100	<0.10	<2.0	2.2	<0.10	<2.0	82
	12-02-16	18	<1.0	<1.0	17	<1.0	<2.0	<50	0.048	<1.0	<0.40	<2.0	<50	<0.50	2.3	<0.013	<2.0	6	<1.0	<0.10	130	<0.10	<2.0	<2.0	<0.10	<2.0	440
	12-12-17	100	<1.0	<1.0	29	<1.0	<2.0	<50	0.023	<1.0	<0.40	<2.0	<50	<0.50	3.6	0.013	<2.0	<2.0	<1.0	<0.10	830	<0.10	<2.0	<2.0	0.40	<2.0	190
	12-7-18	85	<1.0	<1.0	11	<1.0	<2.0	<50	0.037	<1.0	<0.40	<2.0	<50	<0.50	2.9	<0.013	<2.0	<2.0	<1.0	<0.10	65	<0.10	<2.0	<2.0	<0.10	<2.0	130
	12-5-19	130	<1.0	<1.0	6.7	<1.0	<2.0	<50	0.050	<1.0	<0.40	<2.0	110	<0.50	4.3	<0.013	<2.0	<2.0	<0.50	<0.10	10	<0.10	<2.0	2.6	<0.10	<2.0	140
	11-26-20	260	<1.0	<1.0	9.1	<1.0	<2.0	<50	0.029	<1.0	<0.40	1.4	520	<0.50	14	<0.013	<2.0	<2.0	<0.50	<0.10	20	<0.10	<2.0	5.5	<0.10	<2.0	42
	12-08-21	7.4	<1.0	<1.0	78	<0.10	<2.0	100	0.012	<1.0	<0.40	<0.50	<50	<0.50	<2.0	<0.013[13]	<2.0	<2.0	<0.50	<0.10	2100	<0.10	<2.0	<2.0	0.89	<2.0	<5.0

TABLE B-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021
OHP AND HE GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Water Level)	Sample Date	Na	K	Ca	Mg	ALK	SO4	Cl	SiO2	OPO4 (ORTHOPHOSPHATE)	P	NO3	NO2	NO2-NO3	NH3	Colour	TOC	TURBIDITY	CONDUCTIVITY	pH	HARDNESS	BICARB ALK	CARB ALK	TDS	Anion Sum	Ion Bal_	Langelier Ind_ (@20C)	Langelier Ind_ (@4C)	Sat_ pH (@20C)	Sat_ pH (@4C)
Units		µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	TCU	mg/L	NTU	µS/cm	pH	mg/L	mg/L	mg/L	mg/L	me/L	%	unitless	unitless	unitless	unitless
NS Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MECP Table 3[2]		2300000	-	-	-	-	-	2300000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MSES-004-MW (7.34 m)	03-26-13	12000	2300	320000	58000	61	1100	24	9.1	<0.01	<1000	<0.05	<0.01	<0.05	0.19	76	1.1	4.9	1800	6.3	1000	61	<1	1560	24.5	6.54	-1.02	-1.26	7.32	7.56
	07-26-13	14100	2400	345000	61400	70	1000	25	6.9	<0.01	<100	<0.05	<0.01	<0.05	0.18	68	1.3	2	1800	6.25	1100	70	<1	1550	23.8	1.64	-0.978	-1.22	7.23	7.47
	11-15-13	13000	2600	360000	60000	67	980	25	6.7	0.031	<100	<0.05	<0.01	<0.05	0.18	72	2.1	48	1900	6.15	1200	67	<1	1500	22.5	2.68	-1.07	-1.31	7.22	7.46
	12-10-14	11000	2100	300000	49000	92	690	21	5.4	<10	<100	<0.05	0.011	<0.05	0.19	30	1.5	12	1500	6.37	940	92	<1	1100	16.7	7.67	0.432	-1.01	7.13	7.38
	12-3-15	13000	2300	320000	55000	98	740	26	5.7	0.01	<100	<0.050	0.013	<0.050	0.28	25	1.9	7.5	1700	6.49	1000	98	<1.0	1200	18.1	8.41	-0.581	-0.826	7.07	7.32
	11-25-16	12000	2200	260000	44000	140	650	17	4.9	<0.010	<100	<0.050	<0.010	<0.050	0.21	13	2.3	15	1300	6.57	830	140	<1.0	1100	16.8	1	-0.444	-0.69	7.01	7.26
	12-13-17[FD]	12000	2000	260000	39000	130	630	17	4.6	<0.010	<100	<0.050	<0.010	<0.050	0.19	23	2.5	6.6	1300	6.61	810	130	<1.0	1000	16.1	2.04	-0.429	-0.674	7.04	7.28
	12-13-17	12000	2000	240000	39000	130	630	17	4.6	<0.010	<100	<0.050	<0.010	<0.050	0.18	21	2.4	4.6	1400	6.54	750	130	<1.0	1000	16.1	1.29	-0.536	-0.782	7.08	7.32
	12-10-18	12000	2100	240000	41000	130	680	17	5.0	<0.010	<100	<0.050	<0.010	<0.050	0.18	39	2.2	4.7	1400	6.51	770	130	<1.0	1100	17.4	4.07	-0.547	-0.793	7.05	7.30
	12-5-19	11000	1900	180000	30000	140	430	13	3.9	<0.010	<100	<0.050	<0.010	<0.050	0.18	7.0	1.9	7.7	1100	6.85	590	140	<1.0	760	12.1	0.610	-0.257	-0.504	7.11	7.36
	11-26-20	11000	2000	220000	34000	160	540	14	4.4	<0.010	<100	<0.05	<0.01	<0.05	0.21	20	1.9	6.4	1300	6.67	690	160	<1	920	14.7	0.99	-0.327	-0.573	6.99	7.24
	12-08-21	14000	2600	200000	35000	200	440	13	5.8	<0.010	<100	<0.050	<0.010	<0.050	1.9	<5.0	3.9	23	1200	7.57	640	200	<1.0	840	13.6	0.15	0.647	0.401	6.92	7.17
MSES-006-MW (3.53 m)	03-26-13	130000	13000	450000	210000	330	2100	100	15	<0.01	<1000	<0.05	<0.01	<0.05	0.18	41	0.75	9.8	3500	6.9	2000	330	<1	3290	53.5	7.78	0.348	0.107	6.55	6.79
	07-24-13[L]	NM	NM	NM	NM	340	2100	110	12	<0.01	NM	NM	<0.01	<0.05	NM	68	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-24-13	142000	12900	483000	216000	340	2000	100	12	<0.01	<100	<0.05	<0.01	<0.05	0.17	81	0.51	8.4	3600	6.79	2100	340	<1	3230	51.3	2.9	0.278	0.037	6.51	6.75
	11-05-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	<0.5	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11-05-13	140000	14000	470000	230000	330	2200	100	12	<0.01	<100	<0.05	<0.01	<0.05	0.16	31	<0.5	11	3500	6.74	2100	330	<1	3400	54.2	5.25	0.2	-0.041	6.54	6.78
	12-10-14	25000	6900	430000	62000	250	790	52	23	<10	<100	<0.05	0.015	<0.05	0.22	5	1.7	4.6	2000	7.49	1300	250	<1	1500	22.9	9.74	0.432	0.667	6.58	6.83
	12-3-15	26000	7100	410000	64000	310	820	62	23	0.049	<100	<0.050	0.015	<0.050	0.45	<5.0	2.4	1.3	2100	7.42	1300	310	<1.0	1600	25.1	3.4	0.906	0.662	6.51	6.76
	11-25-16	130000	13000	470000	210000	350	1700	99	13	0.013	<100	<0.050	<0.010	<0.050	0.22	<5.0	2.6	9.1	3200	6.81	2000	350	<1.0	2900	44.5	1.92	0.327	0.085	6.48	6.73
	12-13-17	7000	2300	130000	18000	100	270	14	27	0.022	<100	<0.050	<0.010	<0.050	0.056	6.8	8.1	2.8	780	7.41	400	100	<1.0	540	8.16	1.27	0.067	-0.181	7.34	7.59
	12-10-18	120000	12000	450000	190000	360	1700	93	13	<0.010	<100	<0.050	<0.010	<0.050	0.18	35	0.84	7.2	3400	7.02	1900	360	<1.0	2800	44.3	0.290	0.527	0.285	6.49	6.73
	12-2-19	17000	4900	250000	38000	140	650	33	25	<0.010	<100	0.054	<0.010	0.054	0.30	5.7	2.4	9.3	1400	7.29	770	140	<1.0	1100	17.1	2.42	0.254	0.008	7.04	7.28
	11-26-20	28000	6100	290000	51000	310	1700	61	17	<0.010	<100	<0.05	<0.01	<0.05	0.20	<5	2.5	1.6	2800	6.88	940	300	<1	2300	42.7	35.9	0.156	-0.088	6.72	6.96
	12-08-21	130000	12000	460000	190000	350	1800	80	12	<0.010	<100	<0.050	<0.010	<0.050	0.17	<5.0	1.0	7.2	3400	7.18	1900	350	<1.0	3000	47.6	3.12	0.674	0.432	6.5	6.74
MSES-008-MW (3.80 m)	03-26-13[L]	NM	NM	NM	NM	190	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	2400	7.3	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-26-13	130000	6600	420000	28000	190	1000	190	32	<0.01	<1000	<0.05	<0.01	<0.05	0.1	37	1.2	130	2400	7.3	1200	180	<1	1950	30.2	0.38	0.55	0.307	6.75	6.99
	07-26-13	115000	5770	458000	28700	160	1100	200	24	<0.01	<100	<0.05	<0.01	<0.05	0.1	46	1.3	120	2500	7.25	1300	160	<1	2080	32.6	2.78	0.472	0.228	6.78	7.02
	11-15-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	2500	7.12	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11-15-13	120000	6100	430000	27000	200	930	200	27	<0.01	<100	<0.05	<0.01	<0.050	0.076	270	1.1	83	2500	7.11	1200	200	<1	1900	29	0.8	0.408	0.164	6.7	6.95
	12-10-14	120000	5400	420000	27000	180	760	150	27	<10	<100	<0.05	<0.01	<0.05	0.11	160	2.7	140	2300	6.96	1200	180	<1	1600	23.7	9.68	0.432	-0.024	6.74	6.98
	12-3-15[FD]	90000	4500	390000	24000	200	740	150	27	0.026	<100	<0.050	0.011	<0.050	0.092	24	1.4	120	2200	7.4	1100	200	<1.0	1600	23.6	4.69	0.676	0.432	6.72	6.96
	12-3-15	89000	4500	400000	24000	200	620	150	28	0.025	<100	<0.050	<0.010	<0.050	0.096	<5.0	1.5	110	2100	7.32	1100	200	<1.0	1400	21.2	10.3	0.614	0.369	6.71	6.96
	11-25-16[FD]	110000	5400	460000	31000	200	1000	200	28	0.02	<100	0.074	<0.010	0.074	0.088	<5.0	1.6	180	2400	7.11	1300	200	<1.0	2000	31	0.78	0.424	0.181	6.68	6.93
	11-25-16	110000	5400	450000	32000	210	990	210	29	0.02	<100	<0.050	<0.010	<0.050	0.099	<5.0	1.5	150	2400	7.09	1300	210	<1.0	2000	30.6	0.15	0.417	0.174	6.67	6.92
	12-13-17	100000	4900	410000	25000	180	840	190	27	<0.010	<100	<0.050	<0.010	<0.050	0.071	17	2.4	170	2300	7.34	1100	170	<1.0	1700	26.3	2.14	0.567	0.323	6.77	7.01
	12-10-18	110000	5000	360000	25000	200	870	190	28	<0.010	<100	<0.050	<0.010	<0.050	0.075	170	0.94	150	2200	7.14	1000	200	<1.0	1700	27.5	4.01	0.378	0.135	6.77	7.01
	12-2-19	100000	4900	380000	25000	200	800	170	26	<0.010	<100	0.10	<0.010	0.10	0.066	110	1.0	140	2200	7.38	1000	200	<1.0	1600	25.6	0.120	0.640	0.395	6.74	6.98
	11-26-20	130000	5400	420000	25000	200	860	230	26	<0.010	<100	<0.05	<0.01	<0.05	0.11	100	0.9	130	2500	7.26	1200	200	<1	1800	28.3	1.68	0.551	0.308	6.71	6.95
	11-30-21	130000	5300	360000	25000	220	730	200	25	<0.010	<100	<0.050	<0.010	<0.050	0.093	8.4	0.91	110	2300	7.33	990	210	<1.0	1,600	25.2	1.31	0.599	0.355	6.73	6.98
MSES-012-MWA (3.18 m)	03-15-13	290000	4900	240000	19000	180	510	360	35	<0.01	<100	0.43	<0.01	0.43	<0.05	17	0.85	5.5	2600	7.1	680	180	<1.0	1570	24.3	4.6	0.116	-0.129	6.98	7.23
	07-25-13[FDL]	NM	NM	NM	NM	200	480	330	37	<0.01	NM	NM	<0.01	0.23	NM	19	NM	10	2200	7.08	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-25-13[FD]	198000	4230	242000	24300	200	440	330	37	<0.01	<100	0.23	<0.01	0.23	<0.05	15	0.85	11	2200	7.07	700	200	<1.0	1410	22.7	0.37	0.168	-0.077	6.9	7.15
	07-25-13	197000	4170	244000	24500	190		330	37	<0.01	<100	0.22	<0.01	0.22	0.052	25	0.91	15	2200	7.19	710	190	<1.0	1470	23.9	1.9	0.259	0.015	6.93	7.18
	11-05-13	200000	4600	240000	25000	200	570	280	37	<0.01	<100	0.19	<0.01	0.19	0.33	70	1.5	49	2200	6.91	720	200	<1.0	1500	23.9	0.97	0.005	-0.240	6.91	7.15
	12-16-14	150000	3500	290000	26000	180	49	230	43	18	<100	0.052	<0.01	<0.01	0.088	46	1.3	18	2100	6.9	220	180	<1	290	21.5	0.29	0.022	-0.222	6.88	7.13
	12-3-15	180000	3700	350000	29000	180	600	320	47	0.035	<100	0.14	0.014	0.16	0.12	<5.0	0.88	3.5	2500	7.26	980	180	<1.0	1600	25.2	4.65	0.438	0.194	6.82	7.06
	11-22-16	140000	3300	330000	33000	200	740	170	45	0.031	<100	0.5	<0.010	0.5	<0.050	<5.0	1.3	20	2200	7.02	970	200	<1.0	1600	24.2	2.81	0.232	-0.013	6.79	7.03
	12-13-17	190000	3700	290000	23000	190	600	300	44	<0.010	<100	0.091	<0.010	0.091	<0.050	<5.0	1.5	8.7	2200	7.17	810	190	<1.0	1600	24.6	0.220	0.287	0.042	6.88	7.12
	12-10-18	110000	2400	230000	22000	200	540	140	42	<0.010	<100	0.78	<0.010	0.78	<0.050	<5.0	1.3	5.2	1700	7.56	660	200	<1.0	1200	19.4	3.69	0.635	0.390	6.92	7.17
	12-5-19	150000	3100	220000	22000	210	430	240	37	<0.010	<100	0.67	<0.010	0.67	<0.050	<5.0	1.3	22	1900	7.64	630	210	<1.0	1200	19.9	1.37	0.711	0.466	6.93	7.17
	11-25-20	330000	4700	340000	30000	200	630	540	40	<0.010	<100	0.13	0.011	0.15	<0.05	<5.0	0.96	14	3300	7.07	980	200	<1	2000	32.3	2.42	0.251	0.008	6.82	7.07
	11-30-21	220000	3600	280000	24000	190	630	270	41	0.011	<100	0.97	<0.010	0.97	0.055	<5.0	1.5	7.1	2400	7.2	800	190	<1.0	1,600	24.8	1.8	0.321	0.076	6.88	7.12
MSES-104-MWA (1.73 m)	03-28-13	17000	5600	410000	38000	67	1100	53	4.8	<0.01	<100	<0.05	<0.01	<0.05	0.25	15	16	960	2000	7.60	1200	67	<1	1700	26.4	3.94	0.409	0.165	7.19	7.44
	12-10-14	29000	7700	530000	44000	59	1400	56	5.4	<10	<100	<0.05	0.011	<0.05	0.44	<5	1	12	2300	7.61	1500	59	<1	2100	30.9	1.42	0.432	0.217	7.15	7.4
	12-3-15	30000	8500	510000	42000	48	1200	62	4.6	0.012	110	<0.050	0.01	<0.050	0.62	<5.0	1.3	1.9	2300	8.07	1500	47	<1.0	1900	27.7	5.16	0.818	0.574	7.26	7.5
	11-25-16	28000	9300	470000	31000	35	1100	55	3.4	0.013	<100	<0.050	<0.010	<0.050	0.55	<5.0	1.7	13	2000	7.5	1300	35	<1.0	1700	25.2	4.18	0.087	-0.157	7.42	7.66
	12-13-17	32000	9200	560000	37000	35	1400	55	3.1	0.012	<100	<0.050	<0.010	<0.05	0.61	<5.0	1.6	0.6	2400	7.6	1500	35	<1.0	2100	30.4	3.30	0.244	0.000	7.36	7.60
	12-10-18	29000	8900	440000	28000	29	1200	47	2.5	0.012	<100	<0.050	<0.010	<0.050	0.64	<5.0	1.7	1.4	2100	7.45	1200	29	<1.0	1800	26.6	1.41	-0.0730	-0.317	7.52	7.77
	12-2-19[FD]	30000	9500	460000	30000	30	1100	47	2.4	0.012	<100	<0.10	<0.010	<0.10[11]	0.63	<5.0	1.8	3.7	2100	8.27	1300	29	<1.0	1700	25.4	2.79	0.770	0.526	7.50	7.75
	12-2-19	30000	9500	460000	30000	29	1100	47	2.1	0.012	<100	0.084	<0.010	0.084	0.62	<5.0	1.9	5.3	2100	8.07	1300	29	<1.0	1700	25.3	3.22	0.570	0.326	7.50	7.75
	11-26-20[FD]	32000	10000	530000	31000	30	1,500	46	2.3	<0.010	<100	<0.05	<0.01	<0.05	0.78	<5.0	1.8	0.61	2300	8.11	1500	29	<1	2,200	33.8	4.7	0.635	0.392	7.47	7.72
	2020-11-26	33000	10000	530000	32000	34	1,500	46	2.4	<0.010	<100	<0.05	<0.01	<0.05	0.81	<5.0	1.7	0.77	2300	8.16	1500	33	<1	2,200	33.5	4.07	0.746	0.503	7.42	7.66
	12-01-21	30000	10000	480000	32000	28	1,200	45	2.3	<0.010	<100	<0.05	<0.01	<0.05	0.81	<5.0	1.7	3.7	2200	7.79	1300	28	<1	1,800	26.1	4.13	0.292	0.048	7.5	7.74

TABLE B-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021
OHP AND HE GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Water Level)	Sample Date	Al	Sb	As	Ba	Be	Bi	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	Sr	Tl	Sn	Ti	U	V	Zn
Units		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NS Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MECP Table 3[2]		-	20000	1900	29000	67	-	45000	2.7	810	66	87	-	25	-	0.29	9200	490	63	1.5	-	510	-	-	420	250	1100
MSES-004-MW (7.34 m)	03-26-13	240	<10	<6	7.4	<5	<20	<1000	<0.17	<10	<10	<20	2500	<10	1300	<0.013	<40	<30	<10	<1	320	<8	<200	<30	<1.5	<20	210
	07-26-13	517	<1.0	1.7	8.8	<1.0	<2.0	91	0.179	<1.0	1.22	<2.0	2510	<0.5	1630	NM	<2.0	3.2	<1.0	<0.1	314	<0.1	<2.0	<2.0	0.18	3.3	69.9
	11-15-13	290	<1.0	1.8	7.3	<1.0	<2.0	82	0.14	<1.0	1.6	<2.0	2700	<0.5	1700	NM	<2.0	2.4	<1.0	<0.1	370	<0.1	<2.0	<2.0	0.12	<2.0	7.5
	12-10-14	170	<1	1.9	7.5	<1	<2	85	0.073	<1	0.91	<2	1900	<0.5	1200	<0.013	<2	2.0	<1.0	<0.1	290	<0.1	<2	<2	<0.1	<2	63
	12-3-15	130	<1.0	1.9	7.5	<1.0	<2.0	83	0.051	<1.0	1.1	<2.0	2000	<0.50	1500	<0.013	<2.0	3.0	<1.0	<0.10	340	<0.10	<2.0	<2.0	0.15	<2.0	97
	11-25-16	61	<1.0	2.5	8.6	<1.0	<2.0	81	0.14	<1.0	0.5	<2.0	1700	<0.50	1100	<0.013	<2.0	<2.0	<1.0	<0.10	280	<0.10	<2.0	<2.0	0.16	<2.0	140
	12-13-17[FD]	63	<1.0	2.1	9.3	<1.0	<2.0	82	0.016	<1.0	0.48	<2.0	1100	<0.50	860	<0.013	<2.0	<2.0	<1.0	<0.10	270	<0.10	<2.0	<2.0	0.15	<2.0	100
	12-13-17	61	<1.0	1.9	9.4	<1.0	<2.0	80	0.027	<1.0	0.52	<2.0	1100	<0.50	860	<0.013	<2.0	<2.0	<1.0	<0.10	270	<0.10	<2.0	<2.0	0.17	<2.0	99
	12-10-18	56	<1.0	2.2	8.9	<1.0	<2.0	82	0.032	<1.0	0.60	<2.0	1500	<0.50	1200	<0.013	<2.0	<2.0	<1.0	<0.10	280	<0.10	<2.0	<2.0	0.20	<2.0	130
	12-5-19	41	<1.0	1.8	9.0	<1.0	<2.0	76	0.029	<1.0	<0.40	2.4	880	<0.50	770	<0.013	<2.0	5.5	<0.50	<0.10	220	<0.10	<2.0	<2.0	0.14	<2.0	76
	11-26-20	39	<1.0	1.7	10	<1.0	<2.0	84	0.029	<1.0	0.55	1.1	910	<0.50	1200	<0.013	<2.0	<2.0	<0.50	<0.10	260	<0.10	<2.0	<2.0	0.2	<2.0	120
	12-08-21	42	<1.0	5.3	12	<0.10	<2.0	75	<0.010	<1.0	<0.40	<0.50	2900	<0.50	1100	<0.013[13]	<2.0	<2.0	<0.50	<0.10	310	<0.10	<2.0	<2.0	2.0	<2.0	<5.0
MSES-006-MW (3.53 m)	03-26-13	<50	<10	<6	13	<5	<20	<1000	0.24	<10	<10	<20	3000	<10	49000	0.017	<40	<30	<10	<1	3500	<8	<200	<30	4.3	<20	65
	07-24-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-24-13	35.9	<1	1.5	13.9	<1	<2	309	0.083	<1	5.29	<2	1940	<0.5	50300	NM	<2	12.6	<1	<0.1	3610	<0.1	<2	<2	4.95	<2	55.9
	11-05-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11-05-13	11	<1	1.8	13	<1	<2	300	0.027	<1	5.4	<2	2200	<0.5	60000	NM	<2	14	<1	<0.1	3600	<0.1	<2	<2	4.4	<2	89
	12-10-14	34	<1	1.1	23	<1	<2	100	0.11	<1	<0.4	<2	160	<0.5	1900	<0.013	<2	<2	<1	<0.1	770	<0.1	<2	<2	4.3	4.4	6.2
	12-3-15	11	<1.0	<1.0	22	<1.0	<2.0	100	<0.010	<1.0	<0.40	<2.0	<50	<0.50	1800	<0.013	<2.0	<2.0	13	<0.10	810	<0.10	<2.0	<2.0	4.2	4.8	<5.0
	11-25-16	<5.0	<1.0	2.2	13	<1.0	<2.0	330	0.012	<1.0	4.6	<2.0	1900	<0.50	54000	<0.013	<2.0	13	<1.0	<0.10	3600	<0.10	<2.0	<2.0	4.4	<2.0	250
	12-13-17	8.9	<1.0	1.9	23	<1.0	<2.0	<50	0.013	1.1	<0.40	<2.0	<50	<0.50	86	<0.013	<2.0	<2.0	1.2	<0.10	330	<0.10	<2.0	<2.0	3.6	30	<5.0
	12-10-18	<5.0	<1.0	<1.0	11	<1.0	<2.0	320	0.30	<1.0	3.3	<2.0	1100	<0.50	47000	<0.013	<2.0	8.4	<1.0	<0.10	3400	<0.10	<2.0	<2.0	4.4	<2.0	<5.0
	12-2-19	12	<1.0	<1.0	20	<1.0	<2.0	<50	<0.010	<1.0	<0.40	<0.50	790	<0.50	770	<0.013	<2.0	<2.0	0.75	<0.10	480	<0.10	<2.0	<2.0	4.0	13	<5.0
	11-26-20	22	<1.0	<1.0	18	<1.0	<2.0	64	0.017	<1.0	<0.40	<0.50	400	<0.50	3800	<0.013	<2.0	<2.0	<0.50	<0.10	730	<0.10	<2.0	<2.0	5	6.4	<5.0
	12-08-21	14	<1.0	1.1	12	<0.10	<2.0	310	0.22	<1.0	3.0	<0.50	1000	<0.50	46000	<0.013	<2.0	8.0	<0.50	<0.10	3600	<0.10	<2.0	<2.0	4.5	<2.0	5.6
MSES-008-MW (3.80 m)	03-26-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-26-13	<50	<10	16	8.1	<5	<20	<1000	<0.17	<10	<10	<20	13000	<10	1400	<0.013	<40	<30	<10	<1.0	660	<8	<200	<30	<1.5	<20	69
	07-26-13	10.7	<1.0	11.6	8.3	<1.0	<2.0	68	0.107	<1.0	<0.4	<2.0	12200	<0.50	1190	NM	3.2	<2.0	<1.0	<0.10	707	<0.10	<2.0	<2.0	0.72	<2.0	19
	11-15-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	11-15-13	9.3	<1.0	11	9.9	<1.0	<2.0	66	0.073	<1	<0.40	<2.0	9200	<0.50	820	NM	2.9	<2.0	<1.0	<0.10	660	<0.10	<2.0	<2.0	0.68	<2.0	72
	12-10-14	100	<1	14	7.9	<1	<2	70	0.082	<1	<0.4	<2	15000	<0.5	1200	<0.013	3.1	<2	<1	<0.1	590	<0.1	<2	<2	0.6	<2	41
	12-3-15[FD]	5.2	<1.0	10	7.5	<1.0	<2.0	63	0.01	<1.0	<0.40	<2.0	9200	<0.50	650	<0.013	2.3	<2.0	<1.0	<0.10	490	<0.10	<2.0	<2.0	0.55	<2.0	39
	12-3-15	5.0	<1.0	10	7.7	<1.0	<2.0	67	0.016	<1.0	<0.40	<2.0	9200	<0.50	650	<0.013	2.4	<2.0	<1.0	<0.10	490	<0.10	<2.0	<2.0	0.55	<2.0	38
	11-25-16[FD]	6.8	<1.0	11	8.6	<1.0	<2.0	67	0.027	<1.0	<0.40	<2.0	11000	<0.50	990	<0.013	3	<2.0	<1.0	<0.10	600	<0.10	<2.0	<2.0	0.74	<2.0	100
	11-25-16	6.2	<1.0	12	8.7	<1.0	<2.0	66	0.013	<1.0	<0.40	<2.0	12000	<0.50	1000	<0.013	3	<2.0	<1.0	<0.10	600	<0.10	<2.0	<2.0	0.74	<2.0	110
	12-13-17	<5.0	<1.0	11	7.8	<1.0	<2.0	65	0.025	<1.0	<0.40	<2.0	13000	<0.50	1100	<0.013	2.4	<2.0	<1.0	<0.10	570	<0.10	<2.0	<2.0	0.57	<2.0	38
	12-10-18	<5.0	<1.0	11	7.9	<1.0	<2.0	71	<0.010	<1.0	<0.40	<2.0	10000	<0.50	920	<0.013	2.7	<2.0	<1.0	<0.10	520	<0.10	<2.0	<2.0	0.52	<2.0	40
	12-2-19	<5.0	<1.0	12	7.8	<1.0	<2.0	63	0.017	<1.0	<0.40	<0.50	10000	<0.50	780	<0.013	2.7	3.3	<0.50	<0.10	550	<0.10	<2.0	<2.0	0.56	<2.0	28
	11-26-20	5.5	<1.0	10	8	<1.0	<2.0	60	<0.010	<1.0	<0.40	<0.50	8600	<0.50	620	<0.013	2.8	<2.0	<0.50	<0.10	610	<0.10	<2.0	<2.0	0.61	<2.0	45
	11-30-21	17	<1.0	12	7.7	<0.10	<2.0	63	<0.010	<1.0	<0.40	<0.50	8100	>0.50	630	<0.013	3.2	<2.0	<0.50	<0.10	540	<0.10	<2.0	<2.0	0.52	<2.0	34
MSES-012-MWA (3.18 m)	03-15-13	14	<1.0	1.4	4.7	<0.5	<2.0	<100	0.039	<1.0	<1.0	<2.0	750	<1.0	110	<0.013	<4	3.3	9.3	<0.1	300	<0.8	<20	<3.0	0.3	2.5	58
	07-25-13[FDL]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-25-13[FD]	12.6	<1.0	<1.0	6.7	<1.0	<2.0	<50	0.028	<1.0	<0.40	<2.0	1960	<0.50	230	NM	<2.0	<2.0	6.7	<0.1	315	<0.1	<2.0	<2.0	0.34	<2.0	92
	07-25-13	21.4	<1.0	<1.0	7.1	<1.0	<2.0	<50	0.054	<1.0	<0.40	<2.0	2190	<0.50	253	NM	<2.0	2.1	6.6	<0.1	316	<0.1	<2.0	<2.0	0.31	<2.0	103
	11-05-13	17	<1.0	2.4	4.9	<1.0	<2.0	<50	0.069	<1.0	<0.40	<2.0	4800	<0.50	670	NM	<2.0	2.2	4.3	<0.1	300	<0.1	<2.0	<2.0	0.31	<2.0	190
	12-16-14	26	<1	<1	5.3	<1	<2	<50	0.37	<1	<0.4	3.7	1800	<0.5	230	<0.013	<2	<2	6.2	<0.1	320	<0.1	<2	<2	0.33	<2	52
	12-3-15	5.7	<1.0	<1.0	5.7	<1.0	<2.0	<50	0.042	<1.0	<0.40	<2.0	90	<0.50	20	<0.013	<2.0	<2.0	3.5	<0.10	410	<0.10	<2.0	<2.0	0.43	<2.0	39
	11-22-16	9.7	<1.0	<1.0	6.5	<1.0	<2.0	<50	0.066	<1.0	<0.40	20	180	<0.50	81	<0.013	<2.0	<2.0	13	<0.10	400	<0.10	<2.0	<2.0	0.47	<2.0	82
	12-13-17	7.0	<1.0	<1.0	4.7	<1.0	<2.0	<50	0.025	<1.0	<0.40	<2.0	670	<0.50	95	<0.013	<2.0	<2.0	3.5	<0.10	340	<0.10	<2.0	<2.0	0.38	<2.0	42
	12-10-18	<5.0	<1.0	<1.0	4.7	<1.0	<2.0	<50	0.026	<1.0	<0.40	3.6	480	<0.50	93	<0.013	<2.0	<2.0	15	<0.10	270	<0.10	<2.0	<2.0	0.33	<2.0	47
	12-5-19	8.1	<1.0	<1.0	5.0	<1.0	<2.0	<50	0.17	<1.0	<0.40	1.6	1200	<0.50	160	<0.013	<2.0	7.1	10	<0.10	280	<0.10	<2.0	<2.0	0.32	<2.0	41
	11-25-20	5.8	<1.0	<1.0	7.6	<1.0	<2.0	<50	0.054	<1.0	<0.40	3	58	<0.50	32	<0.013	<2.0	<2.0	6.8	<0.10	450	<0.10	<2.0	<2.0	0.43	<2.0	35
	11-30-21	47	<1.0	<1.0	7.6	<0.10	<2.0	<50	0.056	<1.0	<0.40	3.5	84	0.77	14	<0.013	<2.0	35	18	<0.10	360	<0.10	<2.0	<2.0	0.38	<2.0	48
MSES-104-MWA (1.73 m)	03-28-13	8.9	<1	1.8	12	<0.5	<2	<100	<0.017	<1	<1	<2	1600	<1	400	0.28	<4	<3	3.4	<0.1	420	<0.8	<20	<3	<0.15	6.9	<5
	12-10-14	11	<1	1.8	16	<1	<2	<50	0.065	<1	<0.4	<2	890	<0.5	220	<0.013	5.6	<2	<1	<0.1	540	<0.1	<2	<2	<0.1	<2	<5
	12-3-15	<5.0	<1.0	1.5	20	<1.0	<2.0	<50	<0.010	<1.0	<0.40	<2.0	580	<0.50	190	<0.013	5.7	<2.0	<1.0	<0.10	560	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	11-25-16	33	<1.0	1.4	17	<1.0	<2.0	<50	0.64	<1.0	<0.40	<2.0	300	<0.50	100	<0.013	6.3	<2.0	<1.0	<0.10	520	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12-13-17	<5.0	<1.0	1.4	17	<1.0	<2.0	<50	0.054	<1.0	<0.40	<2.0	200	<0.50	91	<0.013	6.8	<2.0	<1.0	<0.10	590	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12-10-18	<5.0	<1.0	1.4	15	<1.0	<2.0	<50	<0.010	<1.0	<0.40	<2.0	120	<0.50	64	<0.013	6.5	<2.0	<1.0	<0.10	510	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12-2-19[FD]	<5.0	<1.0	1.7	15	<1.0	<2.0	<50	<0.010	<1.0	<0.40	<0.50	83	<0.50	68	6.2	<2.0	9500	<0.50	<0.10	530	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12-2-19	5.9	<1.0	1.7	16	<1.0	<2.0	<50	0.069	<1.0	<0.40	<0.50	86	<0.50	67	<0.013	6.0	<2.0	<0.50	<0.10	530	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	11-26-20[FD]	5.8	<1.0	1.3	18	<1.0	<2.0	<50	0.019	<1.0	<0.40	<0.50	130	<0.50	61	<0.013	7.6	<2.0	<0.50	<0.10	600	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	2020-11-26	<5.0	<1.0	1.3	18	<1.0	<2.0	<50	<0.010	<1.0	<0.40	<0.50	130	<0.50	62	<0.013	7.6	<2.0	<0.50	<0.10	610	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12-01-21	<5.0	<1.0	1.2	18	<0.10	<2.0	<50	0.096	<1.0	<0.40	<0.50	110	<0.50	100	<0.013[13]	6.4	<2.0	<0.50	<0.10	580	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0

TABLE A-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021
OHP AND HE GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Water Level)	Sample Date	Na	K	Ca	Mg	ALK	SO4	Cl	SiO2	OPO4 (ORTHOPHOSPHATE)	P	NO3	NO2	NO2-NO3	NH3	Colour	TOC	TURBIDITY	CONDUCTIVITY	pH	HARDNESS	BICARB ALK	CARB ALK	TDS	Anion Sum	Ion Bal	Langelier Ind (@20C)	Langelier Ind (@4C)	Sat. pH (@20C)	Sat. pH (@4C)
Units		µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	TCU	mg/L	NTU	µS/cm	pH	mg/L	mg/L	mg/L	mg/L	me/L	%	unitless	unitless	unitless	unitless
NS Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MECP Table 3[2]		2300000	-	-	-	-	-	2300000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MSES-104-MWB (2.26 m)	03-26-13	170000	12000	420000	200000	320	2200	70	18	<0.01	<1000	<0.05	<0.01	<0.05	0.55	54	3.5	92	3500	6.9	1900	320	<1	3370	53.9	8.24	0.299	0.058	6.6	6.84
	07-24-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-24-13	189000	11900	426000	208000	350	2100	73	12	<0.01	<100	<0.05	<0.01	<0.05	0.45	190	3.7	77	3500	6.86	1900	350	<1	3340	53.1	5.81	0.302	0.061	6.56	6.8
	11-05-13[FD]	190000	12000	400000	200000	370	2000	71	13	<0.01	<100	<0.05	<0.01	<0.05	0.42	30	3.8	100	3500	6.88	1800	370	<1	3200	50.6	5.3	0.33	0.088	6.55	6.79
	11-05-13	190000	12000	390000	200000	370	2000	73	13	<0.01	<100	<0.05	<0.01	<0.05	0.42	40	4.1	99	3400	6.80	1800	370	<1	3200	51.8	6.56	0.242	0.000	6.56	6.8
	12-10-14	170000	13000	440000	210000	330	1800	70	14	<10	<100	<0.05	<0.01	<0.05	0.57	190	3.5	55	3400	6.67	2000	330	<1	3000	46.3	1.16	0.432	-0.13	6.56	6.8
	12-3-15	180000	13000	390000	190000	430	1000	77	13	0.016	<100	<0.050	0.014	<0.050	0.59	18	4.0	58	3400	7.00	1800	430	<1.0	2200	31.5	16.2	0.562	0.319	6.44	6.68
	11-25-16	160000	14000	380000	140000	570	1100	75	11	0.013	<100	<0.050	<0.010	<0.050	0.54	9.1	5.3	33	2700	6.96	1500	570	<1.0	2300	37.2	0.93	0.622	0.379	6.34	6.59
	12-13-17	150000	12000	370000	170000	410	1700	78	12	<0.010	<1000	<0.050	<0.010	<0.050	0.49	13	4.0	50	3400	7.07	1600	410	<1.0	2800	45.4	7.09	0.556	0.313	6.52	6.76
	12/10/18[FD]	140000	12000	400000	180000	340	1700	68	13	<0.010	<100	<0.050	<0.010	<0.050	0.60	110	3.5	68	3500	7.02	1800	340	<1.0	2800	43.6	1.99	0.463	0.221	6.56	6.80
	12-10-18	140000	12000	400000	180000	340	1700	70	13	<0.010	<100	<0.050	<0.010	<0.050	0.62	130	3.5	72	3400	6.91	1800	340	<1.0	2800	44.7	3.08	0.342	0.100	6.57	6.81
	12-2-19	150000	13000	380000	160000	490	1400	61	12	<0.010	<100	0.063	<0.010	0.063	0.51	39	5.4	45	3100	6.97	1600	490	<1.0	2500	41.2	3.07	0.554	0.312	6.42	6.66
	11-26-20	150000	13000	400000	170000	430	1800	63	12	<0.010	<100	<0.05	<0.01	<0.05	0.58	120	4.1	45	3300	6.9	1700	430	<1	3000	48.3	7.28	0.435	0.193	6.47	6.71
	2021-12-01[FD]	140000	13000	400000	170000	360	1600	62	13	<0.0010	<100	<0.050	<0.010	<0.050	0.53	35	3.7	59	3200	7.01	1700	360	<1.0	2700	43.2	2.98	0.48	0.237	6.53	6.77
	12-01-21	140000	13000	400000	170000	360	1,700	62	13	<0.010	<100	<0.05	<0.01	<0.05	0.54	24	3.7	58	3300	7.14	1700	360	<1	2,800	43.9	4.06	0.601	0.359	6.54	6.78
SCU11-001-MWA (1.94 m)	03-29-13	53000	5400	120000	14000	130	42	220	7.3	<0.01	<100	0.058	<0.01	0.058	<0.05	<5	0.89	>1000	1000	8.1	340	120	1.5	534	9.65	1.74	0.781	0.533	7.32	7.57
	07-17-13	55500	6280	132000	15600	97	39	260	8.4	<0.01	<100	<0.05	<0.01	<0.05	<0.05	<5	<50	>1000	1200	7.66	390	96	<1	570	9.95	2.31	0.28	0.033	7.38	7.63
	10-24-13	250000	5300	66000	9000	170	520	49	8.0	0.20	260	<0.05	0.016	0.066	1.2	<5	<5	85	1500	7.72	200	170	<1	1000	15.6	2.13	0.213	-0.032	7.51	7.75
	12-15-14	64000	6900	170000	19000	110	37	310	9.4	<10	<100	0.17	0.024	0.19	0.12	<5	<0.5	3.3	1400	7.52	490	110	<1	690	11.9	3.68	0.432	0.044	7.23	7.47
	12-11-15	27000	6100	62000	6800	110	6.1	170	6.2	0.15	240	0.11	0.016	0.12	2.7	6.6	NM	3.2	780	7.64	180	110	<1.0	350	7.04	15.4	0.022	-0.227	7.62	7.86
	11-23-16	51000	8000	140000	16000	160	6.8	320	9	0.55	780	<0.050	0.016	<0.050	2.7	8.1	7.1	8.2	1300	7.45	430	160	<1.0	660	12.3	4.98	0.303	0.056	7.14	7.39
	12-13-17	43000	8100	130000	14000	230	11	210	11	0.68	820	0.16	<0.010	0.16	7.1	8.3	3.0	4.5	1100	7.71	380	230	1.1	580	10.8	3.30	0.690	0.443	7.02	7.27
	12-10-18	70000	10000	190000	21000	170	11	410	11	<0.010	380	0.83	0.50	1.3	2.7	<5.0	3.3	8.7	1600	7.57	550	170	<1.0	830	15.3	2.41	0.559	0.313	7.02	7.26
	12-05-19	28000	7900	88000	8900	240	2.2	140	6.7	2.2	3100	0.20	0.019	0.22	22	25	11	21	890	7.70	260	240	1.1	460	8.94	4.81	0.556	0.308	7.14	7.39
	11-25-20	70000	8000	180000	20000	220	5	340	11	0.38	1100	0.32	0.039	0.36	4.7	8	<509	23	1500	7.39	520	220	<1	770	14	0.32	0.463	0.216	6.93	7.18
	12-2-21	74000	7900	180000	22000	170	<2.0	350	12	0.1	1000	0.066	0.012	0.078	3.8	7.9	4.9	15	1600	7.58	550	170	<1.0	760	13.2	5.64	0.56	0.313	7.02	7.27
SCU11-001-MWB (1.97 m)	03-29-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-29-13	220000	4500	45000	6200	160	440	43	5	<0.01	<100	<0.05	<0.01	<0.05	0.22	<5	1.8	>1000	1200	8.6	140	160	5.8	856	13.5	4.68	0.911	0.665	7.69	7.94
	07-17-13	246000	4620	60300	8370	140	500	51	8	0.026	<100	<0.05	<0.01	<0.05	0.081	<5	<5	240	1400	7.83	190	140	<1	967	14.7	0.79	0.213	-0.033	7.62	7.86
	10-24-13	63000	7300	150000	18000	120	38	310	8.7	<0.010	<100	0.1	0.033	0.13	0.13	<5	1.8	>1000	1300	7.64	440	120	<1	670	12.0	1.06	0.377	0.130	7.26	7.51
	12-15-14[FD]	31000	2800	29000	3300	38	13	82	3.4	0.054	110	0.1	0.029	0.13	0.79	8.2	4.7	13	360	6.9	86	38	<1	190	3.35	2.29	-1.44	-1.69	8.34	8.59
	12-15-14	31000	2900	29000	3400	39	12	83	3.4	0.054	130	0.075	0.028	0.1	0.74	9.1	4.4	5.1	360	7.02	87	39	<1	190	3.38	2.11	0.432	-1.55	8.32	8.57
	12-11-15	22000	4500	17000	2000	40	5.5	48	1.6	0.23	510	<0.050	<0.010	<0.050	1.8	30	NM	3.2	240	7.04	51	40	<1.0	130	2.28	0	-1.48	-1.73	8.52	8.77
	11-23-16	28000	8900	29000	3300	59	17	54	2.8	0.75	960	1.5	0.057	1.5	3.8	62	8.1	3.9	320	7.11	87	59	<1.0	190	3.21	3.75	-1.04	-1.29	8.15	8.4
	12-13-17	72000	10000	64000	7200	93	27	190	5.8	1.8	2000	<0.050	0.011	<0.050	3.3	44	8.4	2.5	860	7.30	190	92	<1.0	440	7.89	3.20	-0.384	-0.633	7.69	7.94
	12-05-18	49000	6000	47000	5200	60	22	150	5.4	0.89	1100	0.13	0.01	0.14	2.5	46	7.1	5.0	630	7.18	140	60	<1.0	330	5.88	5.47	-0.794	-1.04	7.98	8.23
	12-5-19[FD]	20000	4700	27000	3100	94	<2.0	38	7.7	0.16	370	<0.050	0.014	<0.050	1.7	61	6.8[12]	5.2	280	7.44	80	94	<1.0	160	2.97	1.89	-0.531	-0.781	7.97	8.22
	12-05-19	20000	4600	27000	3200	94	<2.0	38	7.3	0.14	380	<0.050	0.016	<0.050	1.6	56	5.9	11	280	7.45	81	94	<1.0	170	2.97	1.37	-0.513	-0.763	7.96	8.21
	11-25-20	46000	9200	44000	5400	150	9.4	74	11	0.088	210	0.48	0.08	0.56	3	16	<59	10	530	7.56	130	150	<1	390	5.28	2.03	-0.044	-0.293	7.61	7.86
	12-2-21	37000	16000	38000	4900	100	12	47	14	1.7	2100	6.5	0.031	6.5	1.6	71	12	41	460	7.3	120	100	<1.0	270	4.18	3.46	-0.524	-0.773	7.82	8.07
SCU7-001-MW (1.75 m)	12-12-14	27000	2400	390000	15000	220	780	55	19	<10	<100	0.093	<0.01	0.093	0.69	<5	1.3	7.5	1800	7.05	1000	220	<1	1400	22.2	0.77	0.432	0.142	6.66	6.91
	12-10-15	18000	2000	290000	12000	200	550	35	15	0.015	<100	<0.050	<0.010	<0.050	0.099	<5.0	NM	21	1400	7.33	760	200	<1.0	1000	16.4	0.86	0.526	0.28	6.81	7.05
	12-02-16	24000	2500	410000	15000	230	770	92	18	0.02	<100	<0.050	<0.010	<0.050	0.11	<5.0	1.6	5.0	1700	7.21	1100	230	<1.0	1500	23.3	0.63	0.588	0.344	6.62	6.86
	12-15-17	38000	2700	510000	15000	230	1000	140	16	0.01	<1000	<0.050	<0.010	<0.050	0.12	<5.0	1.5	0.5	2300	7.26	1300	230	<1.0	1900	29.8	2.46	0.688	0.445	6.58	6.82
	12-07-18	51000	2300	520000	15000	180	1100	170	15	<0.010	<100	<0.050	<0.010	<0.050	0.12	<5.0	1.3	2.7	2300	7.22	1400	180	<1.0	2000	31.0	2.28	0.554	0.311	6.67	6.91
	12-05-19	53000	2200	500000	13000	140	950	200	11	<0.010	<100	<0.050	<0.010	<0.050	0.094	<5.0	1.2	4.2	2400	7.57	1300	140	<1.0	1800	28.1	0.780	0.794	0.550	6.78	7.03
	11-25-20	66000	2100	600000	13000	160	1300	220	12	<0.010	<100	<0.05	0.015	<0.05	0.12	<5	<59	6.4	2800	7.51	1500	160	<1	2300	35.5	2.58	0.82	0.577	6.69	6.94
	12-2-21	70000	2100	620000	12000	140	1100	230	12	<0.010	<100	<0.050	<0.010	<0.050	0.15	<5.0	1.0	3.5	2800	7.39	1600	140	<1.0	2200	33	2.98	0.669	0.426	6.72	6.96
SCU7-003-MW (1.02 m)	03-29-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1.3	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-29-13	51000	6100	150000	13000	210	210	120	9.5	<0.01	<100	0.19	0.017	0.21	0.76	<5.0	1.1	67	1000	6.7	420	210	<1.0	685	11.9	4.92	-0.316	-0.563	7.02	7.26
	07-17-13[L]	NM	NM	NM	NM	NM	170	120	9	<0.01	NM	NM	<0.01	0.13	NM	<5.0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-17-13	51000	5890	142000	14100	190	170	120	8.9	<0.01	<100	0.13	<0.01	0.13	1.1	<5.0	1.3	37	1100	7.0	410	190	<1.0	631	10.7	0	-0.073	-0.32	7.07	7.32
	11-07-13	63000	6100	130000	13000	180	180	130	8.7	<0.01	<100	<0.05	0.017	0.067	1.2	<5.0	1.1	41	1100	7.0	380	180	<1.0	640	10.9	1.44	-0.112	-0.359	7.11	7.36
	12-12-14	67000	5600	130000	12000	190	190	110	9.6	0.011	<100	0.97	0.02	0.99	1.0	<5	1.3	500	1000	6.75	360	190	<1	640	10.9	2.31	0.432	-0.622	7.13	7.37
	12-10-15	76000	6500	150000	15000	190	180	180	9.3	<0.010	<100	<0.050	<0.010	<0.050	1.2	11	NM	970	1200	7.01	430	190	<1.0	740	12.7	1.84	-0.057	-0.303	7.07	7.32
	11-30-16	81000	6000	130000	13000	170	190	160	9.6	0.011	<100	0.18	0.021	0.2	0.89	18	1.3	86	1100	6.99	380	170	<1.0	700	11.9	2.06	-0.173	-0.42	7.16	7.41
	12-15-17	87000	5900	130000	12000	170	170	180	9.3	<0.010	<100	0.069	<0.010	0.069	1.2	<5.0	1.6	4.6	1200	6.94	370	160	<1.0	700	12	2.74	-0.242	-0.489	7.19	7.43
	12-11-18	91000	5700	120000	12000	150	120	220	9.8	<0.010	<100	0.33	<0.010	0.33	0.79	<5.0	1.3	0.22	1200	7.02	340	150	<1.0	670	11.7	3.31	-0.228	-0.475	7.25	7.50
	12-5-19	90000	5900	110000	11000	150	120	210	9.0	<0.010	<100	<0.050	<0.010	<0.050	1.2	5.1	1.3	16	1100	7.16	320	150	<1.0	650	11.4	3.60	-0.128	-0.375	7.29	7.53
	11-25-20	120000	5800	120000	12000	160	110	250	9.3	<0.010	<100	0.087	0.018	0.1	1.4	13	<5[9]	6.9	1300	6.88	340	160	<1	720	12.4	0.16	-0.364	-0.61	7.24	7.49
	12-3-21	130000	5500	91000	9300	150	110	180	9.8	<0.010	<100	0.41	0.014	0.42	0.69	<5.0	1.6	6.9	1200	6.96	270	150	<1.0	620	10.4	2.86	-0.405	-0.652	7.37	7.61

TABLE A-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021
OHP AND HE GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Water Level)	Sample Date	Al	Sb	As	Ba	Be	Bi	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	Sr	Tl	Sn	Ti	U	V	Zn
Units		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
NS Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MECP Table 3[2]		-	20000	1900	29000	67	-	45000	2.7	810	66	87	-	25	-	0.29	9200	490	63	1.5	-	510	-	-	420	250	1100
MSES-104-MWB (2.26 m)	03-26-13	400	<10	<6	19	<5	<20	<1000	<0.17	<10	44	<20	13000	<10	83000	0.014	<40	48	<10	<1	2300	<8	<200	<30	<1.5	<20	110
	07-24-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-24-13	239	<1	4.2	17.5	<1	<2	187	0.071	<1	23.8	<2	9590	<0.5	75000	NM	<2	33.9	<1	<0.1	2230	<0.1	<2	<2	1.26	<2	45.2
	11-05-13[FD]	110	<1	4.9	16	<1	<2	200	0.085	<1	7.1	<2	7000	<0.5	73000	NM	<2	25	<1	<0.1	2100	<0.1	<2	<2	1.3	<2	110
	11-05-13	150	<1	5.0	16	<1	<2	200	0.07	<1	7.3	<2	7100	<0.5	74000	NM	<2	30	<1	<0.1	2100	<0.1	<2	<2	1.3	<2	110
	12-10-14	550	<1	4.4	17	1.1	<2	200	0.14	<1	50	<2	11000	<0.5	88000	<0.013	<2	62	<1	<0.1	2400	<0.1	<2	<2	1.2	<2	34
	12-3-15	96	<1.0	4.7	16	<1.0	<2.0	200	0.076	<1.0	8.1	<2.0	5100	<0.50	68000	<0.013	<2.0	25	<1.0	<0.10	2100	<0.10	<2.0	<2.0	1.6	<2.0	<5.0
	11-25-16	42	<1.0	7.2	18	<1.0	<2.0	210	0.046	<1.0	2.4	<2.0	3500	9.6	37000	<0.013	<2.0	12	<1.0	<0.10	1600	<0.10	<2.0	<2.0	2	<2.0	<5.0
	12-13-17	89	<10	<10	15	<10	<20	<500	<0.10	<10	8.7	<20	4300	<5.0	63000	<0.013	<20	31	<10	<1.0	1900	<1.0	<20	<20	1.7	<20	<50
	12/10/18[FD]	750	<1.0	3.6	17	1.3	<2.0	190	0.14	<1.0	59	<2.0	6900	<0.50	84000	<0.013	<2.0	73	<1.0	<0.10	2100	<0.10	<2.0	<2.0	1.4	<2.0	42
	12-10-18	720	<1.0	3.6	18	1.3	<2.0	190	0.13	<1.0	59	<2.0	6800	<0.50	84000	<0.013	<2.0	72	<1.0	<0.10	2100	<0.10	<2.0	<2.0	1.5	<2.0	41
	12-2-19	56	<1.0	3.9	17	<1.0	<2.0	200	0.11	<1.0	4.9	<0.50	3500	<0.50	51000	<0.013	<2.0	20	<0.50	<0.10	1800	<0.10	<2.0	<2.0	2.1	2.0	<5.0
	11-26-20	140	<1.0	2.8	17	<1.0	<2.0	190	0.074	<1.0	20	<0.50	5200	<0.50	69000	<0.013	<2.0	34	<0.50	<0.10	2000	<0.10	<2.0	<2.0	1.8	<2.0	<5.0
	2021-12-01[FD]	280	<1.0	3.1	18	0.54	<2.0	180	0.077	<1.0	30	<0.50	5200	<0.50	72000	0.013	<2.0	48	<0.50	<0.10	2000	<0.10	<2.0	<2.0	1.7	<2.0	12
	12-01-21	280	<1.0	3	18	0.53	<2.0	190	0.081	<1.0	30	<0.50	5300	<0.50	72,000	<0.013[13]	<2.0	48	<0.50	<0.10	2000	<0.10	<2.0	<2.0	1.7	<2.0	12
SCU11-001-MWA (1.94 m)	03-29-13	37	<1	0.73	240	<0.5	<2	<100	0.11	<1	<1	<2	<100	<1	150	0.021	<4	<3	1.6	<0.1	2700	<0.8	<20	<3	3.6	4.5	14
	07-17-13	<5	<1	<1	244	<1	<2	<50	0.019	<1	<0.4	<2	<50	<0.5	292	NM	3.8	<2	<1	<0.1	3250	<0.1	<2	<2	3.47	<2	<5
	10-24-13	120	<1	<1	28	<1	<2	160	0.03	<1	<0.40	<2.0	97	<0.50	170	NM	7.3	<2	4.6	<0.1	2300	<0.1	<2	4.8	0.60	<2	<5
	12-15-14	13	<1	<1	230	<1	<2	56	0.59	<1	<0.4	<2	<50	<0.5	440	<0.013	3.7	<2	<1	<0.1	3700	<0.1	<2	<2	3.9	<2	5.3
	12-11-15	6.6	4	1.3	130	<1.0	<2.0	<50	0.022	<1.0	0.42	<2.0	<50	<0.50	1900	<0.013	<2.0	<2.0	<1.0	<0.10	1000	<0.10	<2.0	<2.0	0.22	<2.0	20
	11-23-16	8.9	<1.0	1.6	280	<1.0	<2.0	<50	0.013	<1.0	<0.40	<2.0	170	0.59	680	<0.013	<2.0	<2.0	<1.0	<0.10	3000	<0.10	<2.0	<2.0	0.22	<2.0	<5.0
	12-13-17	6.3	<1.0	2.0	350	<1.0	<2.0	<50	0.021	<1.0	<0.40	<2.0	200	<0.50	510	<0.013	<2.0	<2.0	<1.0	0.15	2100	<0.10	<2.0	<2.0	0.50	<2.0	<5.0
	12-10-18	<5.0	<1.0	7.1	710	<1.0	<2.0	63	0.029	<1.0	0.42	<2.0	640	<0.50	1200	<0.013	5.4	<2.0	<1.0	<0.10	4200	<0.10	<2.0	<2.0	2.3	<2.0	10
	12-05-19	6.7	<1.0	1.1	260	<1.0	<2.0	<50	0.026	<1.0	<0.40	0.85	860	<0.50	490	<0.013	<2.0	<2.0	<0.50	<0.10	1300	<0.10	<2.0	<2.0	<0.10	<2.0	5.3
	11-25-20	11	<1.0	1.6	660	<1.0	<2.0	70	0.012	<1.0	<0.40	<0.50	880	<0.50	1000	<0.013	<2.0	<2.0	<0.50	<0.10	3900	<0.10	<2.0	<2.0	0.14	<2.0	<5.0
	12-2-21	<5.0	<1.0	1.3	690	<0.10	<2.0	62	0.02	<1.0	<0.40	<0.50	2200	<0.50	1000	<0.013	<2.0	<2.0	<0.50	<0.10	4200	<0.10	<2.0	<2.0	0.14	<2.0	<5.0
SCU11-001-MWB (1.97 m)	03-29-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	<0.013	NM	NM	NM	NM	NM	NM	NM	NM	NM	<2.0	NM
	03-29-13	8.6	<1	<0.6	22	<0.5	<2	140	<0.017	<1	<1	<2	100	<1	60	<0.013	28	<3	<1	<0.1	1700	<0.8	<20	<3	2.2	3.3	<5
	07-17-13	139	<1	<1	27.9	<1	<2	164	<0.017	<1	<0.4	<2	200	<0.5	154	NM	37.3	<2	<1	<0.1	2190	<0.1	<2	2.1	0.57	<2	9
	10-24-13	18	<1	1.6	370	<1	<2	57	<0.01	<1	<0.4	<2	<50	<0.50	1000	NM	4.9	<2	<1	<0.1	3500	<0.1	<2	<2	3.9	<2	<5
	12-15-14[FD]	21	<1	<1	36	<1	<2	<50	0.16	<1	<0.4	<2	130	<0.5	500	<0.013	<2	<2	<1	<0.1	530	<0.1	<2	<2	<0.1	<2	8.2
	12-15-14	18	<1	<1	36	<1	<2	<50	0.12	<1	<0.4	<2	130	<0.5	510	<0.013	<2	<2	<1	<0.1	540	<0.1	<2	<2	<0.1	<2	7.3
	12-11-15	23	<1.0	<1.0	18	<1.0	<2.0	<50	0.011	<1.0	<0.40	<2.0	1900	<0.50	160	<0.013	<2.0	<2.0	<1.0	<0.10	250	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	11-23-16	23	<1.0	<1.0	31	<1.0	<2.0	<50	<0.010	<1.0	<0.40	<2.0	330	<0.50	240	<0.013	<2.0	<2.0	<1.0	<0.10	420	<0.10	<2.0	<2.0	<0.10	<2.0	11
	12-13-17	19	<1.0	<1.0	77	<1.0	<2.0	<50	<0.010	<1.0	<0.40	<2.0	380	<0.50	520	<0.013	<2.0	<2.0	<1.0	<0.10	1200	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12-05-18	25	<1.0	<1.0	53	<1.0	<2.0	<50	0.059	<1.0	<0.40	<2.0	610	<0.50	340	<0.013	<2.0	<2.0	<1.0	<0.10	750	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12-5-19[FD]	8.6	<1.0	<1.0	40	<1.0	<2.0	<50	<0.010	<1.0	<0.40	<0.50	4200	<0.50	700	<0.013	<2.0	<2.0	<0.50	<0.10	240	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12-05-19	8.8	<1.0	<1.0	40	<1.0	<2.0	<50	<0.010	<1.0	<0.40	<0.50	4200	<0.50	710	<0.013	<2.0	<2.0	<0.50	<0.10	240	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	11-25-20	5.6	<1.0	<1.0	34	<1.0	<2.0	<50	0.1	<1.0	<0.40	<0.50	340	<0.50	840	<0.013	<2.0	<2.0	<0.50	<0.10	530	<0.10	<2.0	<2.0	0.11	<2.0	13
	12-2-21	9.6	<1.0	<1.0	31	<0.10	<2.0	<50	0.016	<1.0	<0.40	2.6	670	<0.50	460	< 0.013[13]	<2.0	<2.0	<0.50	<0.10	440	<0.10	<2.0	<2.0	<0.10	<2.0	45
SCU7-001-MW (1.75 m)	12-12-14	12	<1	<1	51	<1	<2	<50	0.18	<1	<0.4	<2	<50	<0.5	160	<0.013	<2	<2	<1	<0.1	6100	<0.1	<2	<2	6.6	<2	6.7
	12-10-15	<5.0	<1.0	<1.0	69	<1.0	<2.0	<50	0.078	<1.0	<0.40	<2.0	<50	<0.50	79	<0.013	<2.0	<2.0	<1.0	<0.10	5200	<0.10	<2.0	<2.0	5.2	<2.0	<5.0
	12-02-16	8.1	<1.0	<1.0	62	<1.0	<2.0	<50	1.3	<1.0	<0.40	<2.0	<50	<0.50	69	<0.013	<2.0	<2.0	<1.0	<0.10	6900	<0.10	<2.0	<2.0	5.8	<2.0	<5.0
	12-15-17	<50	<10	<10	33	<10	<20	<500	0.19	<10	<4.0	<20	<500	<5.0	820	<0.013	<20	<20	<10	<1.0	9800	<1.0	<20	<20	5.7	<20	<50
	12-07-18	<5.0	<1.0	<1.0	23	<1.0	<2.0	<50	0.091	<1.0	<0.40	<2.0	65	<0.50	2500	<0.013	<2.0	2.2	<1.0	<0.10	12000	<0.10	<2.0	<2.0	2.9	<2.0	<5.0
	12-05-19	<5.0	<1.0	1.2	39	<1.0	<2.0	<50	0.038	<1.0	<0.40	<0.50	130	<0.50	3100	<0.013	<2.0	<2.0	<0.50	<0.10	12000	<0.10	<2.0	<2.0	2.0	<2.0	<5.0
	11-25-20	7.2	<1.0	1.7	20	<1.0	<2.0	<50	0.011	<1.0	0.43	<0.50	240	<0.50	4800	<0.013	<2.0	2.1	<0.50	<0.10	15000	<0.10	<2.0	<2.0	1.9	<2.0	<5.0
	12-2-21	<5.0	<1.0	2.5	17	<0.10	<2.0	<50	0.012	<1.0	0.8	<0.50	400	<0.50	5500	< 0.013[13]	<2.0	2.3	<0.50	<0.10	14000	<0.10	<2.0	<2.0	1.8	<2.0	<5.0
SCU7-003-MW (1.02 m)	03-29-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	03-29-13	<5	<1.0	0.72	16	<0.5	<2.0	<100	0.26	<1.0	1.1	<2.0	<100	<1.0	3200	0.013	<4	<3	<1	<0.10	610	<0.8	<20	<3	0.19	<2.0	72
	07-17-13[L]	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	07-17-13	5.2	<1.0	<1.0	17.5	<1.0	<2.0	99	0.213	<1.0	0.77	12.3	354	<0.5	2820	NM	<2.0	<2.0	<1.0	<0.10	586	<0.10	<2.0	<2.0	0.35	<2.0	93.2
	11-07-13	11	<1.0	<1.0	19	<1.0	<2.0	100	0.22	<1.0	0.80	4.3	360	<0.5	2400	NM	<2.0	<2.0	<1.0	<0.10	550	<0.10	<2.0	<2.0	0.38	<2.0	65
	12-12-14	10	<1	<1	17	<1	<2	100	0.31	<1	0.69	<2	190	<0.5	2400	<0.013	<2	<2	<1	<0.1	530	<0.1	<2	<2	0.28	<2	10
	12-10-15	7.4	<1.0	<1.0	19	<1.0	<2.0	110	0.32	<1.0	0.96	<2.0	380	<0.50	3300	<0.013	<2.0	<2.0	<1.0	<0.10	650	<0.10	<2.0	<2.0	0.27	<2.0	6.6
	11-30-16	6.6	<1.0	1.1	22	<1.0	<2.0	98	0.1	<1.0	1.2	<2.0	1100	<0.50	2900	<0.013	<2.0	<2.0	<1.0	<0.10	560	<0.10	<2.0	<2.0	0.26	<2.0	11
	12-15-17	<5.0	<1.0	<1.0	23	<1.0	<2.0	92	0.25	<1.0	0.88	<2.0	410	<0.50	2600	<0.013	<2.0	<2.0	<1.0	<0.10	560	<0.10	<2.0	<2.0	0.23	<2.0	<5.0
	12-11-18	<5.0	<1.0	<1.0	22	<1.0	<2.0	91	0.39	<1.0	0.80	<2.0	260	<0.50	2300	<0.013	<2.0	<2.0	<1.0	<0.10	520	<0.10	<2.0	<2.0	0.18	<2.0	8.3
	12-5-19	5.2	<1.0	6.3	75	<1.0	<2.0	76	0.04	<1.0	1.7	<0.50	1800	<0.50	3600	<0.013	<2.0	<2.0	<0.50	<0.10	600	<0.10	<2.0	<2.0	0.16	<2.0	23
	11-25-20	9.6	<1.0	1.9	43	<1.0	<2.0	86	0.057	<1.0	1.3	<0.50	870	<0.50	3200	<0.013	<2.0	<2.0	<0.50	<0.10	610	<0.1	<2.0	<2.0	0.14	<2.0	8.3
	12-3-21	26	<1.0	1.6	27	<0.10	<2.0	77	0.20	<1.0	0.71	<0.50	270	<0.50	1600	<0.013[13]	<2.0	<2.0	<0.50	<0.10	460	<0.10	<2.0	<2.0	0.16	<2.0	25

NOTES:

FD - Field Duplicate
L - Lab Duplicate
NM - Not measured or not analyzed; lab duplicates do not analyze for all parameters.
mg/L - milligrams per litre
µg/L - micrograms per litre
- No applicable guideline criteria.
1 - There are no Nova Scotia Environment Environmental Quality Standards for inorganic parameters in groundwater on a site with Coarse-Grained Soil, Non-potable Groundwater Commercial/Industrial land use) 2021.
2 - Ontario Ministry of Environment, Conservation and Parks Table 3 Full Depth Generic Site Condition Standards in a Non-potable Groundwater 2011.
3 - COTS-001-MWA could not be sampled during the December 2014 event due to insufficient water. COTS-001-MWB added to the LTMM program in 2015 in place of COTS-001-MWA.
4 - During the 2015 groundwater monitoring program, MCWS-009-MW was found to be damaged beyond repair and was subsequently decommissioned.
5 - Bold and Shaded Exceeds MECP Table 3 Standards
6 - This summary is to used in conjunction with, not as a replacement of, the Laboratory Certificates of Analysis, which contain QA/QC information.
7 - Although sodium concentrations are above the MDE standard, this standard was not intended for use in a marine (saltwater) environment. The concentration of sodium is natural as marine waters have sodium concentrations of 10,000,000 ug/L or higher. Sodium is not associated with contamination or remediation at the site.
8 - pH: Linear range exceedance. Extended linearity confirmed.
9 - Elevated reporting limit due to turbidity.
10 - A possible seal failure was suspected in MCES-001-MWB.
11 - Elevated reporting limit due to blank performance.
12 - Elevated reporting limit due to sample matrix.
13 - Mercury analyzed past recommended hold time.

Appendix B

Mann-Kendall Tables

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO:	CODT-008-MWB								
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Anthracene	0.011	0.002	0.00013	0.043	0.00019	0.00015	0.00004	0.000086	0.000055		
	23-Oct-13	15-Dec-14	10-Dec-15	30-Nov-16	7-Dec-17	5-Dec-18	28-Nov-19	24-Nov-20	2-Dec-21		
Row 1: Compare to Event 1:		-1	-1	1	-1	-1	-1	-1	-1	0	-6
Row 2: Compare to Event 2:			-1	1	-1	-1	-1	-1	-1	0	-5
Row 3: Compare to Event 3:				1	1	1	-1	-1	-1	0	0
Row 4: Compare to Event 4:					-1	-1	-1	-1	-1	0	-5
Row 5: Compare to Event 5:						-1	-1	-1	-1	0	-4
Row 6: Compare to Event 6:							-1	-1	-1	0	-3
Row 7: Compare to Event 7:								1	1	0	2
Row 8: Compare to Event 8:									-1	0	-1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.00001 mg/L

Mann-Kendall (S) Statistic = **-22**

Confidence Level Chart

S Value	Total No. of Sampling Events						
	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22						X	
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
X	Trend Is Present (≥90% Confidence)
X	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO:	CODT-008-MWB								
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Benzo(a)pyrene	0.0026	0.000032	0.0012	0.0025	0.00022	0.00011	0.000037	0.000054	0.00005		
	23-Oct-13	15-Dec-14	10-Dec-15	30-Nov-16	7-Dec-17	5-Dec-18	28-Nov-19	24-Nov-20	2-Dec-21		
Row 1: Compare to Event 1:		-1	-1	-1	-1	-1	-1	-1	-1	0	-8
Row 2: Compare to Event 2:			1	1	1	1	1	1	1	0	7
Row 3: Compare to Event 3:				1	-1	-1	-1	-1	-1	0	-4
Row 4: Compare to Event 4:					-1	-1	-1	-1	-1	0	-5
Row 5: Compare to Event 5:						-1	-1	-1	-1	0	-4
Row 6: Compare to Event 6:							-1	-1	-1	0	-3
Row 7: Compare to Event 7:								1	1	0	2
Row 8: Compare to Event 8:									-1	0	-1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.00001 mg/L

Mann-Kendall (S) Statistic = **-16**

Confidence Level Chart

S Value	Total No. of Sampling Events						
	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16						X	
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
X	Trend Is Present (≥90% Confidence)
X	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO:	CODT-008-MWB								
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Chrysene	0.0046	0.000058	0.00096	0.006	0.00029	0.00017	0.00005	0.000072	0.000063		
	23-Oct-13	15-Dec-14	10-Dec-15	30-Nov-16	7-Dec-17	5-Dec-18	28-Nov-19	24-Nov-20	2-Dec-21		
Row 1: Compare to Event 1:		-1	-1	1	-1	-1	-1	-1	-1	0	-6
Row 2: Compare to Event 2:			1	1	1	1	-1	1	1	0	5
Row 3: Compare to Event 3:				1	-1	-1	-1	-1	-1	0	-4
Row 4: Compare to Event 4:					-1	-1	-1	-1	-1	0	-5
Row 5: Compare to Event 5:						-1	-1	-1	-1	0	-4
Row 6: Compare to Event 6:							-1	-1	-1	0	-3
Row 7: Compare to Event 7:								1	1	0	2
Row 8: Compare to Event 8:									-1	0	-1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.00001 mg/L

Mann-Kendall (S) Statistic = **-16**

Confidence Level Chart

S Value	Total No. of Sampling Events						
	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16						X	
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
X	Trend Is Present (≥90% Confidence)
X	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME **MONITORING WELL NO: CODT-008-MWB**

	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Indeno(1,2,3-cd)pyrene	0.00064	0.000018	0.00031	0.0025	0.0001	0.000056	0.000013	0.000027	0.000015		
	23-Oct-13	15-Dec-14	10-Dec-15	30-Nov-16	7-Dec-17	5-Dec-18	28-Nov-19	24-Nov-20	2-Dec-21		
Row 1: Compare to Event 1:		-1	-1	1	-1	-1	-1	-1	-1	0	-6
Row 2: Compare to Event 2:			1	1	1	1	-1	1	-1	0	3
Row 3: Compare to Event 3:				1	-1	-1	-1	-1	-1	0	-4
Row 4: Compare to Event 4:					-1	-1	-1	-1	-1	0	-5
Row 5: Compare to Event 5:						-1	-1	-1	-1	0	-4
Row 6: Compare to Event 6:							-1	-1	-1	0	-3
Row 7: Compare to Event 7:								1	1	0	2
Row 8: Compare to Event 8:									-1	0	-1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.00001 mg/L

Mann-Kendall (S) Statistic = **-18**

Confidence Level Chart

S Value	Total No. of Sampling Events						
	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18						X	
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
X	Trend Is Present (≥90% Confidence)
X	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME **MONITORING WELL NO: CODT-008-MWB**

	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Naphthalene	0.0028	0.0001	0.0001	4.1	0.0001	0.00069	0.0002	0.0001	0.0001		
	23-Oct-13	15-Dec-14	10-Dec-15	30-Nov-16	7-Dec-17	5-Dec-18	28-Nov-19	24-Nov-20	2-Dec-21		
Row 1: Compare to Event 1:		-1	-1	1	-1	-1	-1	-1	-1	0	-6
Row 2: Compare to Event 2:			0	1	0	1	1	0	0	0	3
Row 3: Compare to Event 3:				1	0	1	1	0	0	0	3
Row 4: Compare to Event 4:					-1	-1	-1	-1	-1	0	-5
Row 5: Compare to Event 5:						1	1	0	0	0	2
Row 6: Compare to Event 6:							-1	-1	-1	0	-3
Row 7: Compare to Event 7:								-1	-1	0	-2
Row 8: Compare to Event 8:									0	0	0
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.0.00020 mg/L

Mann-Kendall (S) Statistic = -8

Confidence Level Chart

S	Total No. of Sampling Events						
Value	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8						X	
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: CODT-201-MWA										
	Event 1	**Event 2**	**Event 3**	**Event 4**	**Event 5**	**Event 6**	**Event 7**	**Event 8**	**Event 9**	**Event 10**	**Sum Rows**
Anthracene	0.0017	0.0025	0.0023	0.00085	0.0037	0.00049	0.0014	0.0049	0.0017		
	23-Oct-13	15-Dec-14	9-Dec-15	28-Nov-16	5-Dec-17	5-Dec-18	28-Nov-19	23-Nov-20	2-Dec-21		
Row 1: Compare to Event 1:		1	1	-1	1	-1	-1	1	0	0	1
Row 2: Compare to Event 2:			-1	-1	1	-1	-1	1	-1	0	-3
Row 3: Compare to Event 3:				-1	1	-1	-1	1	-1	0	-2
Row 4: Compare to Event 4:					1	-1	1	1	1	0	3
Row 5: Compare to Event 5:						-1	-1	1	-1	0	-2
Row 6: Compare to Event 6:							1	1	1	0	3
Row 7: Compare to Event 7:								1	1	0	2
Row 8: Compare to Event 8:									-1	0	-1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.00001 mg/L

Mann-Kendall (S) Statistic = **1**

Confidence Level Chart

S	**Total No. of Sampling Events**						
Value	4	5	6	7	8	9	10
0							
± 1						X	
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: CODT-201-MWA										
	Event 1	**Event 2**	**Event 3**	**Event 4**	**Event 5**	**Event 6**	**Event 7**	**Event 8**	**Event 9**	**Event 10**	**Sum Rows**
Benzo(a)pyrene	0.0025	0.0037	0.0047	0.0018	0.0069	0.00099	0.0029	0.0097	0.0025		
	23-Oct-13	15-Dec-14	9-Dec-15	28-Nov-16	5-Dec-17	5-Dec-18	28-Nov-19	23-Nov-20	2-Dec-21		
Row 1: Compare to Event 1:		1	1	-1	1	-1	1	1	0	0	3
Row 2: Compare to Event 2:			1	-1	1	-1	-1	1	-1	0	-1
Row 3: Compare to Event 3:				-1	1	-1	-1	1	-1	0	-2
Row 4: Compare to Event 4:					1	-1	1	1	1	0	3
Row 5: Compare to Event 5:						-1	-1	1	-1	0	-2
Row 6: Compare to Event 6:							1	1	1	0	3
Row 7: Compare to Event 7:								1	-1	0	0
Row 8: Compare to Event 8:									-1	0	-1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.00001 mg/L

Mann-Kendall (S) Statistic = **3**

Confidence Level Chart

S	**Total No. of Sampling Events**						
Value	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3						X	
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: CODT-201-MWA										
	Event 1	**Event 2**	**Event 3**	**Event 4**	**Event 5**	**Event 6**	**Event 7**	**Event 8**	**Event 9**	**Event 10**	**Sum Rows**
Chrysene	0.0029	0.0045	0.0051	0.0021	0.0086	0.0014	0.0032	0.014	0.0033		
	23-Oct-13	15-Dec-14	9-Dec-15	28-Nov-16	5-Dec-17	5-Dec-18	28-Nov-19	23-Nov-20	2-Dec-21		
Row 1: Compare to Event 1:		1	1	-1	1	-1	1	1	1	0	4
Row 2: Compare to Event 2:			1	-1	1	-1	-1	1	-1	0	-1
Row 3: Compare to Event 3:				-1	1	-1	-1	1	-1	0	-2
Row 4: Compare to Event 4:					1	-1	1	1	1	0	3
Row 5: Compare to Event 5:						-1	-1	1	-1	0	-2
Row 6: Compare to Event 6:							1	1	1	0	3
Row 7: Compare to Event 7:								1	1	0	2
Row 8: Compare to Event 8:									-1	0	-1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.00001 mg/L

Mann-Kendall (S) Statistic = **6**

Confidence Level Chart

S	**Total No. of Sampling Events**						
Value	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6						X	
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME **MONITORING WELL NO: CODT-201-MWA**

	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Indeno(1,2,3-cd)pyrene	0.0011	0.0015	0.0019	0.00078	0.0029	0.00049	0.00087	0.0039	0.0011		
	23-Oct-13	15-Dec-14	9-Dec-15	28-Nov-16	5-Dec-17	5-Dec-18	28-Nov-19	23-Nov-20	2-Dec-21		
Row 1: Compare to Event 1:		1	1	-1	1	-1	-1	1	0	0	1
Row 2: Compare to Event 2:			1	-1	1	-1	-1	1	-1	0	-1
Row 3: Compare to Event 3:				-1	1	-1	-1	1	-1	0	-2
Row 4: Compare to Event 4:					1	-1	1	1	1	0	3
Row 5: Compare to Event 5:						-1	-1	1	-1	0	-2
Row 6: Compare to Event 6:							1	1	1	0	3
Row 7: Compare to Event 7:								1	1	0	2
Row 8: Compare to Event 8:									-1	0	-1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.00001 mg/L

Mann-Kendall (S) Statistic = **3**

Confidence Level Chart

S Value	Total No. of Sampling Events 4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3						X	
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME **MONITORING WELL NO: CODT-201-MWC**

	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Anthracene	0.0033	0.0059	0.005	0.0033	0.0045	0.0042	0.0054	0.005	0.0055		
	23-Oct-13	15-Dec-14	9-Dec-15	28-Nov-16	5-Dec-17	5-Dec-18	28-Nov-19	2-Dec-20	13-Dec-21		
Row 1: Compare to Event 1:		1	1	0	1	1	1	1	1	0	7
Row 2: Compare to Event 2:			-1	-1	-1	-1	-1	-1	-1	0	-7
Row 3: Compare to Event 3:				-1	-1	-1	1	0	1	0	-1
Row 4: Compare to Event 4:					1	1	1	1	1	0	5
Row 5: Compare to Event 5:						-1	1	1	1	0	2
Row 6: Compare to Event 6:							1	1	1	0	3
Row 7: Compare to Event 7:								-1	1	0	0
Row 8: Compare to Event 8:									1	0	1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.00001 mg/L

Mann-Kendall (S) Statistic = **10**

Confidence Level Chart

S	Total No. of Sampling Events						
Value	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10						X	
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

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Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME **MONITORING WELL NO: CODT-201-MWC**

	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Chrysene	0.000032	0.000048	0.005	0.000036	0.000042	0.000056	0.000033	0.000073	0.000079		
	23-Oct-13	15-Dec-14	9-Dec-15	28-Nov-16	5-Dec-17	5-Dec-18	28-Nov-19	2-Dec-20	13-Dec-21		
Row 1: Compare to Event 1:		1	1	1	1	1	1	1	1	0	8
Row 2: Compare to Event 2:			1	-1	-1	1	-1	1	1	0	1
Row 3: Compare to Event 3:				-1	-1	-1	-1	-1	-1	0	-6
Row 4: Compare to Event 4:					1	1	-1	1	1	0	3
Row 5: Compare to Event 5:						1	-1	1	1	0	2
Row 6: Compare to Event 6:							-1	1	1	0	1
Row 7: Compare to Event 7:								1	1	0	2
Row 8: Compare to Event 8:									1	0	1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.00001 mg/L

Mann-Kendall (S) Statistic = **12**

Confidence Level Chart

S	Total No. of Sampling Events						
Value	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12						X	
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

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Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: CODT-201-MWC										
	Event 1	**Event 2**	**Event 3**	**Event 4**	**Event 5**	**Event 6**	**Event 7**	**Event 8**	**Event 9**	**Event 10**	**Sum Rows**
Naphthalene	6.3	7.2	9.5	7.5	6.2	7.8	8.3	4.4	7.3		
	23-Oct-13	15-Dec-14	9-Dec-15	28-Nov-16	5-Dec-17	5-Dec-18	28-Nov-19	2-Dec-20	13-Dec-21		
Row 1: Compare to Event 1:		1	1	1	-1	1	1	-1	1	0	4
Row 2: Compare to Event 2:			1	1	-1	1	1	-1	1	0	3
Row 3: Compare to Event 3:				-1	-1	-1	-1	-1	-1	0	-6
Row 4: Compare to Event 4:					-1	1	1	-1	-1	0	-1
Row 5: Compare to Event 5:						1	1	-1	1	0	2
Row 6: Compare to Event 6:							1	-1	-1	0	-1
Row 7: Compare to Event 7:								-1	-1	0	-2
Row 8: Compare to Event 8:									1	0	1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.00001 mg/L

Mann-Kendall (S) Statistic = **0**

Confidence Level Chart

S	**Total No. of Sampling Events**						
Value	4	5	6	7	8	9	10
0						X	
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

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Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO:	CODT-203-MW								
	Event 1	**Event 2**	**Event 3**	**Event 4**	**Event 5**	**Event 6**	**Event 7**	**Event 8**	**Event 9**	**Event 10**	**Sum Rows**
Anthracene	0.0025	0.00055	0.00046	0.00079	0.00027	0.00027	0.0064	0.00054	0.0034		
	23-Oct-13	12-Dec-14	8-Dec-15	23-Nov-16	7-Dec-17	5-Dec-18	28-Nov-19	24-Nov-20	2-Dec-21		
Row 1: Compare to Event 1:		-1	-1	-1	-1	-1	1	-1	1	0	-4
Row 2: Compare to Event 2:			-1	1	-1	-1	1	-1	1	0	-1
Row 3: Compare to Event 3:				1	-1	-1	1	1	1	0	2
Row 4: Compare to Event 4:					-1	-1	1	-1	1	0	-1
Row 5: Compare to Event 5:						0	1	1	1	0	3
Row 6: Compare to Event 6:							1	1	1	0	3
Row 7: Compare to Event 7:								-1	-1	0	-2
Row 8: Compare to Event 8:									1	0	1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.00001 mg/L

Mann-Kendall (S) Statistic = **1**

Confidence Level Chart

S	**Total No. of Sampling Events**						
Value	4	5	6	7	8	9	10
0							
± 1						X	
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
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± 30							
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± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO:	CODT-203-MW								
	Event 1	**Event 2**	**Event 3**	**Event 4**	**Event 5**	**Event 6**	**Event 7**	**Event 8**	**Event 9**	**Event 10**	**Sum Rows**
Benzo(a)pyrene	0.0011	0.00069	0.00061	0.0015	0.00024	0.00027	0.0097	0.00053	0.0048		
	23-Oct-13	12-Dec-14	8-Dec-15	23-Nov-16	7-Dec-17	5-Dec-18	28-Nov-19	24-Nov-20	2-Dec-21		
Row 1: Compare to Event 1:		-1	-1	1	-1	-1	1	-1	1	0	-2
Row 2: Compare to Event 2:			-1	1	-1	-1	1	-1	1	0	-1
Row 3: Compare to Event 3:				1	-1	-1	1	-1	1	0	0
Row 4: Compare to Event 4:					-1	-1	1	-1	1	0	-1
Row 5: Compare to Event 5:						1	1	1	1	0	4
Row 6: Compare to Event 6:							1	1	1	0	3
Row 7: Compare to Event 7:								-1	-1	0	-2
Row 8: Compare to Event 8:									1	0	1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.00001 mg/L

Mann-Kendall (S) Statistic = **2**

Confidence Level Chart

S	**Total No. of Sampling Events**						
Value	4	5	6	7	8	9	10
0							
± 1							
± 2						X	
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME **MONITORING WELL NO:** CODT-203-MW

	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Chrysene	0.0012	0.00083	0.00073	0.0016	0.00035	0.0004	0.011	0.00072	0.0006		
	23-Oct-13	12-Dec-14	8-Dec-15	23-Nov-16	7-Dec-17	5-Dec-18	28-Nov-19	24-Nov-20	2-Dec-21		
Row 1: Compare to Event 1:		-1	-1	1	-1	-1	1	-1	-1	0	-4
Row 2: Compare to Event 2:			-1	1	-1	-1	1	-1	-1	0	-3
Row 3: Compare to Event 3:				1	-1	-1	1	-1	-1	0	-2
Row 4: Compare to Event 4:					-1	-1	1	-1	-1	0	-3
Row 5: Compare to Event 5:						1	1	1	1	0	4
Row 6: Compare to Event 6:							1	1	1	0	3
Row 7: Compare to Event 7:								-1	-1	0	-2
Row 8: Compare to Event 8:									-1	0	-1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.00001 mg/L

Mann-Kendall (S) Statistic = **-8**

Confidence Level Chart

S	Total No. of Sampling Events						
Value	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8						X	
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME **MONITORING WELL NO:** **CODT-203-MW**

	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Indeno(1,2,3-cd)pyrene	0.00029	0.00028	0.00029	0.00064	0.0001	0.00011	0.0033	0.00019	0.0019		
	23-Oct-13	12-Dec-14	8-Dec-15	23-Nov-16	7-Dec-17	5-Dec-18	28-Nov-19	24-Nov-20	2-Dec-21		
Row 1: Compare to Event 1:		-1	0	1	-1	-1	1	-1	1	0	-1
Row 2: Compare to Event 2:			1	1	-1	-1	1	-1	1	0	1
Row 3: Compare to Event 3:				1	-1	-1	1	-1	1	0	0
Row 4: Compare to Event 4:					-1	-1	1	-1	1	0	-1
Row 5: Compare to Event 5:						1	1	1	1	0	4
Row 6: Compare to Event 6:							1	1	1	0	3
Row 7: Compare to Event 7:								-1	-1	0	-2
Row 8: Compare to Event 8:									1	0	1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.00001 mg/L

Mann-Kendall (S) Statistic = **5**

Confidence Level Chart

S Value	Total No. of Sampling Events						
	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5						X	
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: CODT-203-MW										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Naphthalene	0.0015	0.0001	0.0001	0.0001	0.00052	0.0016	0.00039	0.0001	0.0001		
	23-Oct-13	12-Dec-14	8-Dec-15	23-Nov-16	7-Dec-17	5-Dec-18	28-Nov-19	24-Nov-20	2-Dec-21		
Row 1: Compare to Event 1:		-1	-1	-1	-1	1	-1	-1	-1	0	-6
Row 2: Compare to Event 2:			0	0	1	1	1	0	0	0	3
Row 3: Compare to Event 3:				0	1	1	1	0	0	0	3
Row 4: Compare to Event 4:					1	1	1	0	0	0	3
Row 5: Compare to Event 5:						1	-1	-1	-1	0	-2
Row 6: Compare to Event 6:							-1	-1	-1	0	-3
Row 7: Compare to Event 7:								-1	-1	0	-2
Row 8: Compare to Event 8:									0	0	0
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.00001 mg/L

Mann-Kendall (S) Statistic = **-4**

Confidence Level Chart

S	Total No. of Sampling Events						
Value	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4						X	
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

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Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: MCES-006-MW										
	Event 1	**Event 2**	**Event 3**	**Event 4**	**Event 5**	**Event 6**	**Event 7**	**Event 8**	**Event 9**	**Event 10**	**Sum Rows**
pH	7.61	8.91	9.44	7.95	7.86	9.15	10.3	9.02	9.41		
	5-Nov-13	10-Dec-14	3-Dec-15	2-Dec-16	13-Dec-17	28-Nov-18	2-Dec-19	26-Nov-20	8-Dec-21		
Row 1: Compare to Event 1:		1	1	1	1	1	1	1	1	0	8
Row 2: Compare to Event 2:			1	-1	-1	1	1	1	1	0	3
Row 3: Compare to Event 3:				-1	-1	-1	1	-1	-1	0	-4
Row 4: Compare to Event 4:					-1	1	1	1	1	0	3
Row 5: Compare to Event 5:						1	1	1	1	0	4
Row 6: Compare to Event 6:							1	-1	1	0	1
Row 7: Compare to Event 7:								-1	-1	0	-2
Row 8: Compare to Event 8:									1	0	1
Row 9: Compare to Event 9:										0	0

Mann-Kendall (S) Statistic = **14**

Confidence Level Chart

S	**Total No. of Sampling Events**						
Value	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14						X	
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
X	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
X	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

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Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME **MONITORING WELL NO: MCES-006-MW**

	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
SO4	34	70	88	48	35	64	83	62	62		
	5-Nov-13	10-Dec-14	3-Dec-15	2-Dec-16	13-Dec-17	28-Nov-18	2-Dec-19	26-Nov-20	8-Dec-21		
Row 1: Compare to Event 1:		1	1	1	1	1	1	1	1	0	8
Row 2: Compare to Event 2:			1	-1	-1	-1	1	-1	-1	0	-3
Row 3: Compare to Event 3:				-1	-1	-1	-1	-1	-1	0	-6
Row 4: Compare to Event 4:					-1	1	1	1	1	0	3
Row 5: Compare to Event 5:						1	1	1	1	0	4
Row 6: Compare to Event 6:							1	-1	-1	0	-1
Row 7: Compare to Event 7:								-1	-1	0	-2
Row 8: Compare to Event 8:									0	0	0
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.001 mg/L

Mann-Kendall (S) Statistic = **3**

Confidence Level Chart

S	Total No. of Sampling Events						
Value	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3						X	
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

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20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME **MONITORING WELL NO: MCES-006-MW**

	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
TDS	390	260	260	220	200	200	220	200	190		
	5-Nov-13	10-Dec-14	3-Dec-15	2-Dec-16	13-Dec-17	28-Nov-18	2-Dec-19	26-Nov-20	8-Dec-21		
Row 1: Compare to Event 1:		-1	-1	-1	-1	-1	-1	-1	-1	0	-8
Row 2: Compare to Event 2:			0	-1	-1	-1	-1	-1	-1	0	-6
Row 3: Compare to Event 3:				-1	-1	-1	-1	-1	-1	0	-6
Row 4: Compare to Event 4:					-1	-1	0	-1	-1	0	-4
Row 5: Compare to Event 5:						0	1	0	-1	0	0
Row 6: Compare to Event 6:							1	0	-1	0	0
Row 7: Compare to Event 7:								-1	-1	0	-2
Row 8: Compare to Event 8:									-1	0	-1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.001 mg/L

Mann-Kendall (S) Statistic = **-27**

Confidence Level Chart

S Value	Total No. of Sampling Events 4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27						X	
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
X	Trend Is Present (≥90% Confidence)
X	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

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20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME **MONITORING WELL NO: MCES-006-MW**

	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Selenium	0.0005	0.0029	0.0033	0.0005	0.0017	0.0015	0.0022	0.0042	0.0016		
	5-Nov-13	10-Dec-14	3-Dec-15	2-Dec-16	13-Dec-17	28-Nov-18	2-Dec-19	26-Nov-20	8-Dec-21		
Row 1: Compare to Event 1:		1	1	0	1	1	1	1	1	0	7
Row 2: Compare to Event 2:			1	-1	-1	-1	-1	1	-1	0	-3
Row 3: Compare to Event 3:				-1	-1	-1	-1	1	-1	0	-4
Row 4: Compare to Event 4:					1	1	1	1	1	0	5
Row 5: Compare to Event 5:						-1	1	1	-1	0	0
Row 6: Compare to Event 6:							1	1	1	0	3
Row 7: Compare to Event 7:								1	-1	0	0
Row 8: Compare to Event 8:									-1	0	-1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.001 mg/L

Mann-Kendall (S) Statistic = **7**

Confidence Level Chart

S	Total No. of Sampling Events						
Value	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7						X	
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X — No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)

Trend Is Present (≥90% Confidence)

S < 0 Diminishing Plume

S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

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Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME **MONITORING WELL NO: MCES-001-MWA**

	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
pH	11.8	11.9	11.8	11.9	12	12	11.9	12.1			
	24-Jul-13	10-Dec-14	2-Dec-15	25-Nov-16	12-Dec-17	28-Nov-18	2-Dec-19	7-Dec-21			
Row 1: Compare to Event 1:		1	0	1	1	1	1	1	0	0	6
Row 2: Compare to Event 2:			-1	0	1	1	0	1	0	0	2
Row 3: Compare to Event 3:				1	1	1	1	1	0	0	5
Row 4: Compare to Event 4:					1	1	0	1	0	0	3
Row 5: Compare to Event 5:						0	-1	1	0	0	0
Row 6: Compare to Event 6:							-1	1	0	0	0
Row 7: Compare to Event 7:								1	0	0	1
Row 8: Compare to Event 8:									0	0	0
Row 9: Compare to Event 9:										0	0

Mann-Kendall (S) Statistic = **17**

Confidence Level Chart

S Value	Total No. of Sampling Events: 4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17					X		
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)	
X	Trend Is Present (≥90% Confidence)	
	S < 0	Diminishing Plume
X	S > 0	Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME **MONITORING WELL NO: MCES-001-MWA**

	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
SO4	160	120	160	190	160	110	130	130			
	24-Jul-13	10-Dec-14	2-Dec-15	25-Nov-16	12-Dec-17	28-Nov-18	2-Dec-19	7-Dec-21			
Row 1: Compare to Event 1:		-1	0	1	0	-1	-1	-1	0	0	-3
Row 2: Compare to Event 2:			1	1	1	-1	1	1	0	0	4
Row 3: Compare to Event 3:				1	0	-1	-1	-1	0	0	-2
Row 4: Compare to Event 4:					-1	-1	-1	-1	0	0	-4
Row 5: Compare to Event 5:						-1	-1	-1	0	0	-3
Row 6: Compare to Event 6:							1	1	0	0	2
Row 7: Compare to Event 7:								0	0	0	0
Row 8: Compare to Event 8:									0	0	0
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.001 mg/L

Mann-Kendall (S) Statistic = **-6**

Confidence Level Chart

S	Total No. of Sampling Events						
Value	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6					X		
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME **MONITORING WELL NO: MCES-001-MWA**

	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
TDS	542	730	540	730	560	580	570	770			
	24-Jul-13	10-Dec-14	2-Dec-15	25-Nov-16	12-Dec-17	28-Nov-18	2-Dec-19	7-Dec-21			
Row 1: Compare to Event 1:		1	-1	1	1	1	1	1	0	0	5
Row 2: Compare to Event 2:			-1	0	-1	-1	-1	1	0	0	-3
Row 3: Compare to Event 3:				1	1	1	1	1	0	0	5
Row 4: Compare to Event 4:					-1	-1	-1	1	0	0	-2
Row 5: Compare to Event 5:						1	1	1	0	0	3
Row 6: Compare to Event 6:							-1	1	0	0	0
Row 7: Compare to Event 7:								1	0	0	1
Row 8: Compare to Event 8:									0	0	0
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.001 mg/L

Mann-Kendall (S) Statistic = **9**

Confidence Level Chart

S	Total No. of Sampling Events						
Value	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9					X		
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME **MONITORING WELL NO: MCES-001-MWA**

	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Selenium	0.0016	0.0018	0.0015	0.0019	0.0018	0.0015	0.0016	0.0017			
	24-Jul-13	10-Dec-14	2-Dec-15	25-Nov-16	12-Dec-17	28-Nov-18	2-Dec-19	7-Dec-21			
Row 1: Compare to Event 1:		1	-1	1	1	-1	0	1	0	0	2
Row 2: Compare to Event 2:			-1	1	0	-1	-1	-1	0	0	-3
Row 3: Compare to Event 3:				1	1	0	1	1	0	0	4
Row 4: Compare to Event 4:					-1	-1	-1	-1	0	0	-4
Row 5: Compare to Event 5:						-1	-1	-1	0	0	-3
Row 6: Compare to Event 6:							1	1	0	0	2
Row 7: Compare to Event 7:								1	0	0	1
Row 8: Compare to Event 8:									0	0	0
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.001 mg/L

Mann-Kendall (S) Statistic = **-1**

Confidence Level Chart

S	**Total No. of Sampling Events**						
Value	4	5	6	7	8	9	10
0							
± 1					X		
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

X	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: MCES-201-MWB										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
pH	7.32	7.4	7.49	7.42	7.47	11.9	12	7.5	12.1		
	14-Nov-13	10-Dec-14	2-Dec-15	25-Nov-16	12-Dec-17	28-Nov-18	2-Dec-19	10-Dec-20	7-Dec-21		
Row 1: Compare to Event 1:		1	1	1	1	1	1	1	1	0	8
Row 2: Compare to Event 2:			1	1	1	1	1	1	1	0	7
Row 3: Compare to Event 3:				-1	-1	1	1	1	1	0	2
Row 4: Compare to Event 4:					1	1	1	1	1	0	5
Row 5: Compare to Event 5:						1	1	1	1	0	4
Row 6: Compare to Event 6:							1	-1	1	0	1
Row 7: Compare to Event 7:								-1	1	0	0
Row 8: Compare to Event 8:									1	0	1
Row 9: Compare to Event 9:										0	0

Mann-Kendall (S) Statistic = **28**

Confidence Level Chart

S Value	Total No. of Sampling Events						
	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28						X	
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)
X	Trend Is Present (≥90% Confidence)
	S < 0 Diminishing Plume
X	S > 0 Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME **MONITORING WELL NO: MCES-201-MWB**

	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
SO4	10	6.7	1	1	1	94	96	34	140		
	14-Nov-13	10-Dec-14	2-Dec-15	25-Nov-16	12-Dec-17	28-Nov-18	2-Dec-19	10-Dec-20	7-Dec-21		
Row 1: Compare to Event 1:		-1	-1	-1	-1	1	1	1	1	0	0
Row 2: Compare to Event 2:			-1	-1	-1	1	1	1	1	0	1
Row 3: Compare to Event 3:				0	0	1	1	1	1	0	4
Row 4: Compare to Event 4:					0	1	1	1	1	0	4
Row 5: Compare to Event 5:						1	1	1	1	0	4
Row 6: Compare to Event 6:							1	-1	1	0	1
Row 7: Compare to Event 7:								-1	1	0	0
Row 8: Compare to Event 8:									1	0	1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.001 mg/L

Mann-Kendall (S) Statistic = **15**

Confidence Level Chart

S Value	Total No. of Sampling Events: 4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15						X	
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)	
X	Trend Is Present (≥90% Confidence)	
	S < 0	Diminishing Plume
X	S > 0	Expanding Plume

MANN-KENDALL PLUME STABILITY ANALYSIS

OHP & HE

Nova Scotia Lands Inc.

20-2862 - LTMM GROUNDWATER MONITORING EVENT NOVEMBER AND DECEMBER 2021

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: MCES-201-MWB										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
TDS	22000	21000	22000	19000	21000	520	510	8000	730		
	14-Nov-13	10-Dec-14	2-Dec-15	25-Nov-16	12-Dec-17	28-Nov-18	2-Dec-19	10-Dec-20	7-Dec-21		
Row 1: Compare to Event 1:		-1	0	-1	-1	-1	-1	-1	-1	0	-7
Row 2: Compare to Event 2:			1	-1	0	-1	-1	-1	-1	0	-4
Row 3: Compare to Event 3:				-1	-1	-1	-1	-1	-1	0	-6
Row 4: Compare to Event 4:					1	-1	-1	-1	-1	0	-3
Row 5: Compare to Event 5:						-1	-1	-1	-1	0	-4
Row 6: Compare to Event 6:							-1	1	1	0	1
Row 7: Compare to Event 7:								1	1	0	2
Row 8: Compare to Event 8:									-1	0	-1
Row 9: Compare to Event 9:										0	0

1/2 detection limit used for nd, historical data assumed EQL of 0.001 mg/L

Mann-Kendall (S) Statistic = **-22**

Confidence Level Chart

S	Total No. of Sampling Events						
Value	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
± 16							
± 17							
± 18							
± 19							
± 20							
± 21							
± 22						X	
± 23							
± 24	Not Physically possible						
± 25							
± 26							
± 27							
± 28							
± 29							
± 30							
± 31							
± 32							
± 33							
± 34							
± 35							
± 36							
± 37							
± 38							
± 39							
± 40							
± 41							
± 42							
± 43							
± 44							
± 45							

Unshaded area indicates generally stable trend (if CV<1)

Shaded area indicates
Expanding trend if S>0
Declining trend if S<0

Stability Evaulation Results

	No Trend Indicated, Plume Not Dimishing or Expanding (Plume is Stable if CV<1)	
X	Trend Is Present (≥90% Confidence)	
X	S < 0	Diminishing Plume
	S > 0	Expanding Plume

Appendix C

Laboratory Certificates

February 3, 2022

Re: Case Narrative – Hold Time Exceedance for the Analysis of Total Mercury in Environmental Media (soils and waters)

The analysis of total mercury in environmental samples is a routine test for compliance with provincial and federal regulations in Canada. The hold time, defined as the elapsed time between sample collection and commencement of laboratory analysis, is found in provincial regulations[1] and federal (CCME) guidelines[2]. It is 28 days for both soils and waters throughout. Soil samples are unpreserved, while waters are preserved (with either HCl or BrCl) and can either be field filtered (for dissolved phase impact) or unfiltered (for total analysis). In all cases, the references for the published hold time is SW-846 (Chapter 3, 2007) of the EPA[3], as well as EPA method 1631[4] for analysis of mercury.

EPA's Guidance document for implementation of method 1631[5] indicates the holding time was reduced from 6 months (in the pre-2002 versions of the method) to 28 days (latest revision, 2002). The rationale for this change was that no reference was identified to support the stability of mercury in environmental samples for 6 months. However, the guidance document also doesn't reference any studies to support a hold time of 28 days.

More recently, studies have reported total mercury stability for at least 300 days[6] from time of collection, for water samples stored at 0.4-0.5% acidity. Furthermore, a 2018 study[7] showed no statistically significant differences between results of soil and peat samples analyzed upwards of 10 years apart, while stored under standard laboratory conditions (sealed jars, < 6C).

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[1] Ontario Ministry of Environment, Conservation and Parks, Laboratory Services Branch. 2021. Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act and Excess Soil Quality.
British Columbia Ministry of Environment, Environmental Laboratory Technical Advisory Committee. 2020. B.C. Environmental Laboratory Manual – Sample Preservation and Holding Time Requirements.
[2] Canadian Council of Ministers of the Environment. 2016. Guidance Manual for Environmental Site Characterization in Support of Environmental and Human Health Risk Assessment – Volume 4: Analytical Methods.
[3] United States Environmental Protection Agency. 2018. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods Compendium, Chapter 3: Inorganic Analytes.
[4] United States Environmental Protection Agency. 2002. Method 1631, Revision E: Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Fluorescence Spectrometry.
[5] United States Environmental Protection Agency. 2001. Guidance for Implementation and Use of EPA Method 1631 for the Determination of Low-Level Mercury (40 CFR part 136)
[6] Parker J. L., Bloom N. S. 2005. Preservation and storage techniques for low-level aqueous mercury speciation. Science of the Total Environment. 337:253-263.
[7] Navratil T., Burns D. A., Novakova T., Kana J., Rohovec J., Roll M., Ettler V. Stability of mercury concentration measurements in archived soil and peat samples. Chemosphere. 208:707-711.

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Conclusion

Given the information provided by recent literature, it is Bureau Veritas' professional opinion that analysis of total mercury on properly preserved and stored samples beyond the published hold time of 28 days would not have any significant impact on the analytical data.

Sincerely,

Bureau Veritas Laboratories

Virgil Guran, M.A.Sc., C.Chem., EP
Consulting Scientist, Site Assessment & Remediation
Environmental Services

Terry Obal, Ph.D., C.Chem.
Chief Science Advisor
Environmental Services

Your Project #: 20-2863
Site Location: OHP/HE
Your C.O.C. #: D58820

Attention: Nadine Wambolt

Dillon Consulting Limited
275 Charlotte St
Sydney, NS
CANADA B1P 1C6

Report Date: 2022/01/12
Report #: R6959194
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1Z7047
Received: 2021/12/13, 16:55

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Carbonate, Bicarbonate and Hydroxide (1)	1	N/A	2021/12/31	N/A	SM 23 4500-CO2 D
Alkalinity (1)	1	N/A	2022/01/04	ATL SOP 00013	EPA 310.2 R1974 m
Benzo(b/j)fluoranthene Sum (water) (1)	1	N/A	2021/12/29	N/A	Auto Calc.
Chloride (1)	1	N/A	2022/01/04	ATL SOP 00014	SM 23 4500-Cl- E m
Colour (1)	1	N/A	2022/01/04	ATL SOP 00020	SM 23 2120C m
Conductance - water (1)	1	N/A	2021/12/30	ATL SOP 00004	SM 23 2510B m
TEH in Water (PIRI) (1)	1	2021/12/20	2021/12/22	ATL SOP 00113	Atl. RBCA v3.1 m
Hardness (calculated as CaCO3) (1)	1	N/A	2021/12/28	ATL SOP 00048	Auto Calc
Mercury - Total (CVAA,LL) (1)	1	2022/01/11	2022/01/11	ATL SOP 00026	EPA 245.1 R3 m
Metals Water Diss. MS (as rec'd) (1)	1	N/A	2021/12/24	ATL SOP 00058	EPA 6020B R2 m
Ion Balance (% Difference) (1)	1	N/A	2022/01/11	N/A	Auto Calc.
Anion and Cation Sum (1)	1	N/A	2022/01/03	N/A	Auto Calc.
Nitrogen Ammonia - water (1)	1	N/A	2021/12/23	ATL SOP 00015	EPA 350.1 R2 m
Nitrogen - Nitrate + Nitrite (1)	1	N/A	2021/12/30	ATL SOP 00016	USGS I-2547-11m
Nitrogen - Nitrite (1)	1	N/A	2022/01/04	ATL SOP 00017	SM 23 4500-NO2- B m
Nitrogen - Nitrate (as N) (1)	1	N/A	2022/01/11	ATL SOP 00018	ASTM D3867-16
PAH in Water by GC/MS (SIM) (1)	1	2021/12/16	2021/12/29	ATL SOP 00103	EPA 8270E R6 m
pH (1, 2)	1	N/A	2021/12/30	ATL SOP 00003	SM 23 4500-H+ B m
Phosphorus - ortho (1)	1	N/A	2022/01/04	ATL SOP 00021	SM 23 4500-P E m
Sat. pH and Langelier Index (@ 20C) (1)	1	N/A	2022/01/11	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 4C) (1)	1	N/A	2022/01/11	ATL SOP 00049	Auto Calc.
Reactive Silica (1)	1	N/A	2022/01/04	ATL SOP 00022	EPA 366.0 m
Sulphate (1)	1	N/A	2022/01/04	ATL SOP 00023	ASTM D516-16 m
Total Dissolved Solids (TDS calc) (1)	1	N/A	2022/01/11	N/A	Auto Calc.
Organic carbon - Total (TOC) (1, 3)	1	N/A	2021/12/22	ATL SOP 00203	SM 23 5310B m
ModTPH (T1) Calc. for Water (1)	1	N/A	2021/12/22	N/A	Atl. RBCA v3 m
Turbidity (1)	1	N/A	2021/12/30	ATL SOP 00011	EPA 180.1 R2 m
VPH in Water (PIRI) (1)	1	N/A	2021/12/18	ATL SOP 00130	Atl. RBCA v3.1 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

Your Project #: 20-2863
Site Location: OHP/HE
Your C.O.C. #: D58820

Attention: Nadine Wambolt

Dillon Consulting Limited
275 Charlotte St
Sydney, NS
CANADA B1P 1C6

Report Date: 2022/01/12
Report #: R6959194
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1Z7047
Received: 2021/12/13, 16:55

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) The APHA Standard Method require pH to be analyzed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the APHA Standard Method holding time.
(3) TOC / DOC present in the sample should be considered as non-purgeable TOC / DOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Natalie MacAskill, Key Account Specialist
Email: Natalie.MacAskill@bureauveritas.com
Phone# (902)567-1255 Ext:17
==========
This report has been generated and distributed using a secure automated process.
BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas Job #: C1Z7047
Report Date: 2022/01/12

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OHP/HE
Sampler Initials: BT

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RKK047		
Sampling Date		2021/12/13		
COC Number		D58820		
	UNITS	CODT-201-MWC	RDL	QC Batch
Calculated Parameters				
Anion Sum	me/L	5.60	N/A	7738157
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	200	1.0	7738154
Calculated TDS	mg/L	300	1.0	7738161
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.8	1.0	7738154
Cation Sum	me/L	5.21	N/A	7738157
Hardness (CaCO3)	mg/L	110	1.0	7738155
Ion Balance (% Difference)	%	3.61	N/A	7738156
Langelier Index (@ 20C)	N/A	0.416		7738159
Langelier Index (@ 4C)	N/A	0.167		7738160
Nitrate (N)	mg/L	<0.050	0.050	7738158
Saturation pH (@ 20C)	N/A	7.56		7738159
Saturation pH (@ 4C)	N/A	7.81		7738160
Inorganics				
Total Alkalinity (Total as CaCO3)	mg/L	200	25	7753583
Dissolved Chloride (Cl-)	mg/L	51	1.0	7753584
Colour	TCU	6.5	5.0	7753587
Nitrate + Nitrite (N)	mg/L	<0.050	0.050	7753589
Nitrite (N)	mg/L	<0.010	0.010	7753590
Nitrogen (Ammonia Nitrogen)	mg/L	0.52	0.050	7750639
Total Organic Carbon (C)	mg/L	12	0.50	7747683
Orthophosphate (P)	mg/L	<0.010	0.010	7753588
pH	pH	7.97		7759109
Reactive Silica (SiO2)	mg/L	11	0.50	7753586
Dissolved Sulphate (SO4)	mg/L	6.5	2.0	7753585
Turbidity	NTU	4.6	0.10	7759561
Conductivity	uS/cm	500	1.0	7759107

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Bureau Veritas Job #: C1Z7047
Report Date: 2022/01/12

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OHP/HE
Sampler Initials: BT

MERCURY BY COLD VAPOUR AA (WATER)

Bureau Veritas ID		RKK047		
Sampling Date		2021/12/13		
COC Number		D58820		
	UNITS	CODT-201-MWC	RDL	QC Batch
Metals				
Total Mercury (Hg)	ug/L	<0.013 (1)	0.013	7772947

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Mercury analyzed past recommended hold time.

Bureau Veritas Laboratories 465 George St., Unit G, Sydney, NS, B1P 1K5 Tel:902 567 1255 Toll Free: 888 535 7770 Fax: 902 539 6504 www.bvlabs.com

ELEMENTS BY ICP/MS (WATER)

Bureau Veritas ID		RKK047		
Sampling Date		2021/12/13		
COC Number		D58820		
	UNITS	CODT-201-MWC	RDL	QC Batch
Metals				
Dissolved Aluminum (Al)	ug/L	5.5	5.0	7747778
Dissolved Antimony (Sb)	ug/L	<1.0	1.0	7747778
Dissolved Arsenic (As)	ug/L	4.7	1.0	7747778
Dissolved Barium (Ba)	ug/L	470	1.0	7747778
Dissolved Beryllium (Be)	ug/L	<0.10	0.10	7747778
Dissolved Bismuth (Bi)	ug/L	<2.0	2.0	7747778
Dissolved Boron (B)	ug/L	74	50	7747778
Dissolved Cadmium (Cd)	ug/L	<0.010	0.010	7747778
Dissolved Calcium (Ca)	ug/L	37000	100	7747778
Dissolved Chromium (Cr)	ug/L	<1.0	1.0	7747778
Dissolved Cobalt (Co)	ug/L	<0.40	0.40	7747778
Dissolved Copper (Cu)	ug/L	<0.50	0.50	7747778
Dissolved Iron (Fe)	ug/L	<50	50	7747778
Dissolved Lead (Pb)	ug/L	<0.50	0.50	7747778
Dissolved Magnesium (Mg)	ug/L	4400	100	7747778
Dissolved Manganese (Mn)	ug/L	690	2.0	7747778
Dissolved Molybdenum (Mo)	ug/L	<2.0	2.0	7747778
Dissolved Nickel (Ni)	ug/L	<2.0	2.0	7747778
Dissolved Phosphorus (P)	ug/L	<100	100	7747778
Dissolved Potassium (K)	ug/L	2300	100	7747778
Dissolved Selenium (Se)	ug/L	2.6	0.50	7747778
Dissolved Silver (Ag)	ug/L	<0.10	0.10	7747778
Dissolved Sodium (Na)	ug/L	67000	100	7747778
Dissolved Strontium (Sr)	ug/L	540	2.0	7747778
Dissolved Thallium (Tl)	ug/L	<0.10	0.10	7747778
Dissolved Tin (Sn)	ug/L	<2.0	2.0	7747778
Dissolved Titanium (Ti)	ug/L	<2.0	2.0	7747778
Dissolved Uranium (U)	ug/L	<0.10	0.10	7747778
Dissolved Vanadium (V)	ug/L	<2.0	2.0	7747778
Dissolved Zinc (Zn)	ug/L	7.5	5.0	7747778

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID		RKK047		
Sampling Date		2021/12/13		
COC Number		D58820		
	UNITS	CODT-201-MWC	RDL	QC Batch
Polyaromatic Hydrocarbons				
1-Methylnaphthalene	ug/L	710 (1)	1.0	7745968
2-Methylnaphthalene	ug/L	470 (1)	1.0	7745968
Acenaphthene	ug/L	270 (1)	0.20	7745968
Acenaphthylene	ug/L	8.7	0.010	7745968
Anthracene	ug/L	5.5	0.010	7745968
Benzo(a)anthracene	ug/L	0.10	0.010	7745968
Benzo(a)pyrene	ug/L	<0.020 (2)	0.020	7745968
Benzo(b)fluoranthene	ug/L	<0.010	0.010	7745968
Benzo(b/j)fluoranthene	ug/L	<0.020	0.020	7738187
Benzo(g,h,i)perylene	ug/L	<0.010	0.010	7745968
Benzo(j)fluoranthene	ug/L	<0.010	0.010	7745968
Benzo(k)fluoranthene	ug/L	<0.010	0.010	7745968
Chrysene	ug/L	0.079	0.010	7745968
Dibenzo(a,h)anthracene	ug/L	<0.010	0.010	7745968
Fluoranthene	ug/L	4.2	0.010	7745968
Fluorene	ug/L	110 (1)	0.20	7745968
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	0.010	7745968
Naphthalene	ug/L	7300 (1)	20	7745968
Perylene	ug/L	<0.010	0.010	7745968
Phenanthrene	ug/L	75 (1)	0.20	7745968
Pyrene	ug/L	2.0	0.010	7745968
Surrogate Recovery (%)				
D10-Anthracene	%	96		7745968
D14-Terphenyl	%	92		7745968
D8-Acenaphthylene	%	113		7745968

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Elevated PAH RDL(s) due to sample dilution.
(2) Elevated PAH RDL(s) due to matrix / co-extractive interference.

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Bureau Veritas Job #: C1Z7047
Report Date: 2022/01/12

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OHP/HE
Sampler Initials: BT

ATLANTIC RBCA HYDROCARBONS (WATER)

Bureau Veritas ID		RKK047		
Sampling Date		2021/12/13		
COC Number		D58820		
	UNITS	CODT-201-MWC	RDL	QC Batch
Petroleum Hydrocarbons				
Benzene	mg/L	0.097	0.0010	7738363
Toluene	mg/L	0.19	0.0010	7738363
Ethylbenzene	mg/L	0.14	0.0010	7738363
Total Xylenes	mg/L	0.56	0.0020	7738363
C6 - C10 (less BTEX)	mg/L	0.56	0.090	7738363
>C10-C16 Hydrocarbons	mg/L	13	0.50	7741384
>C16-C21 Hydrocarbons	mg/L	<0.50	0.50	7741384
>C21-<C32 Hydrocarbons	mg/L	<0.90	0.90	7741384
Modified TPH (Tier1)	mg/L	14	0.90	7738189
Reached Baseline at C32	mg/L	Yes	N/A	7741384
Hydrocarbon Resemblance	mg/L	COMMENT (1)	N/A	7741384
Surrogate Recovery (%)				
Isobutylbenzene - Extractable	%	84		7741384
n-Dotriacontane - Extractable	%	125 (2)		7741384
Isobutylbenzene - Volatile	%	110		7738363

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) One product in the gas/fuel oil range.
(2) Elevated TEH RDL(s) due to sample dilution.

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GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7738363	THL	Matrix Spike	Isobutylbenzene - Volatile	2021/12/18		113	%	70 - 130
			Benzene	2021/12/18		97	%	70 - 130
			Toluene	2021/12/18		96	%	70 - 130
			Ethylbenzene	2021/12/18		99	%	70 - 130
			Total Xylenes	2021/12/18		98	%	70 - 130
7738363	THL	Spiked Blank	Isobutylbenzene - Volatile	2021/12/18		112	%	70 - 130
			Benzene	2021/12/18		100	%	70 - 130
			Toluene	2021/12/18		103	%	70 - 130
			Ethylbenzene	2021/12/18		107	%	70 - 130
			Total Xylenes	2021/12/18		106	%	70 - 130
7738363	THL	Method Blank	Isobutylbenzene - Volatile	2021/12/18		111	%	70 - 130
			Benzene	2021/12/18	<0.0010		mg/L	
			Toluene	2021/12/18	<0.0010		mg/L	
			Ethylbenzene	2021/12/18	<0.0010		mg/L	
			Total Xylenes	2021/12/18	<0.0020		mg/L	
			C6 - C10 (less BTEX)	2021/12/18	<0.090		mg/L	
7738363	THL	RPD	Benzene	2021/12/18	NC		%	40
			Toluene	2021/12/18	NC		%	40
			Ethylbenzene	2021/12/18	NC		%	40
			Total Xylenes	2021/12/18	NC		%	40
			C6 - C10 (less BTEX)	2021/12/18	NC		%	40
7741384	MSK	Matrix Spike	Isobutylbenzene - Extractable	2021/12/20		113	%	70 - 130
			n-Dotriacontane - Extractable	2021/12/20		70	%	70 - 130
			>C10-C16 Hydrocarbons	2021/12/20		82	%	70 - 130
			>C16-C21 Hydrocarbons	2021/12/20		75	%	70 - 130
			>C21-<C32 Hydrocarbons	2021/12/20		72	%	70 - 130
7741384	MSK	Spiked Blank	Isobutylbenzene - Extractable	2021/12/20		113	%	70 - 130
			n-Dotriacontane - Extractable	2021/12/20		111	%	70 - 130
			>C10-C16 Hydrocarbons	2021/12/20		108	%	70 - 130
			>C16-C21 Hydrocarbons	2021/12/20		105	%	70 - 130
			>C21-<C32 Hydrocarbons	2021/12/20		117	%	70 - 130
7741384	MSK	Method Blank	Isobutylbenzene - Extractable	2021/12/21		85	%	70 - 130
			n-Dotriacontane - Extractable	2021/12/21		83	%	70 - 130
			>C10-C16 Hydrocarbons	2021/12/21	<0.050		mg/L	
			>C16-C21 Hydrocarbons	2021/12/21	<0.050		mg/L	
			>C21-<C32 Hydrocarbons	2021/12/21	<0.090		mg/L	
7741384	MSK	RPD [RKK047-04]	>C10-C16 Hydrocarbons	2021/12/22	8.2		%	40
			>C16-C21 Hydrocarbons	2021/12/22	NC		%	40
			>C21-<C32 Hydrocarbons	2021/12/22	NC		%	40
7745968	KKE	Matrix Spike	D10-Anthracene	2021/12/25		65	%	50 - 130
			D14-Terphenyl	2021/12/25		99	%	50 - 130
			D8-Acenaphthylene	2021/12/25		84	%	50 - 130
			1-Methylnaphthalene	2021/12/25		112	%	50 - 130
			2-Methylnaphthalene	2021/12/25		112	%	50 - 130
			Acenaphthene	2021/12/25		122	%	50 - 130
			Acenaphthylene	2021/12/25		122	%	50 - 130
			Anthracene	2021/12/25		116	%	50 - 130
			Benzo(a)anthracene	2021/12/25		117	%	50 - 130
			Benzo(a)pyrene	2021/12/25		87	%	50 - 130
			Benzo(b)fluoranthene	2021/12/25		115	%	50 - 130
			Benzo(g,h,i)perylene	2021/12/25		99	%	50 - 130
			Benzo(j)fluoranthene	2021/12/25		118	%	50 - 130
			Benzo(k)fluoranthene	2021/12/25		110	%	50 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Chrysene	2021/12/25		126	%	50 - 130
			Dibenzo(a,h)anthracene	2021/12/25		81	%	50 - 130
			Fluoranthene	2021/12/25		121	%	50 - 130
			Fluorene	2021/12/25		119	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2021/12/25		83	%	50 - 130
			Naphthalene	2021/12/25		116	%	50 - 130
			Perylene	2021/12/25		112	%	50 - 130
			Phenanthrene	2021/12/25		121	%	50 - 130
			Pyrene	2021/12/25		124	%	50 - 130
7745968	KKE	Spiked Blank	D10-Anthracene	2021/12/25		96	%	50 - 130
			D14-Terphenyl	2021/12/25		100	%	50 - 130
			D8-Acenaphthylene	2021/12/25		99	%	50 - 130
			1-Methylnaphthalene	2021/12/25		108	%	50 - 130
			2-Methylnaphthalene	2021/12/25		108	%	50 - 130
			Acenaphthene	2021/12/25		118	%	50 - 130
			Acenaphthylene	2021/12/25		119	%	50 - 130
			Anthracene	2021/12/25		112	%	50 - 130
			Benzo(a)anthracene	2021/12/25		109	%	50 - 130
			Benzo(a)pyrene	2021/12/25		83	%	50 - 130
			Benzo(b)fluoranthene	2021/12/25		109	%	50 - 130
			Benzo(g,h,i)perylene	2021/12/25		93	%	50 - 130
			Benzo(j)fluoranthene	2021/12/25		113	%	50 - 130
			Benzo(k)fluoranthene	2021/12/25		85	%	50 - 130
			Chrysene	2021/12/25		123	%	50 - 130
			Dibenzo(a,h)anthracene	2021/12/25		66	%	50 - 130
			Fluoranthene	2021/12/25		116	%	50 - 130
			Fluorene	2021/12/25		113	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2021/12/25		77	%	50 - 130
			Naphthalene	2021/12/25		112	%	50 - 130
			Perylene	2021/12/25		108	%	50 - 130
			Phenanthrene	2021/12/25		121	%	50 - 130
			Pyrene	2021/12/25		118	%	50 - 130
7745968	KKE	Method Blank	D10-Anthracene	2021/12/25		98	%	50 - 130
			D14-Terphenyl	2021/12/25		100	%	50 - 130
			D8-Acenaphthylene	2021/12/25		95	%	50 - 130
			1-Methylnaphthalene	2021/12/25	<0.050		ug/L	
			2-Methylnaphthalene	2021/12/25	<0.050		ug/L	
			Acenaphthene	2021/12/25	<0.010		ug/L	
			Acenaphthylene	2021/12/25	<0.010		ug/L	
			Anthracene	2021/12/25	<0.010		ug/L	
			Benzo(a)anthracene	2021/12/25	<0.010		ug/L	
			Benzo(a)pyrene	2021/12/25	<0.010		ug/L	
			Benzo(b)fluoranthene	2021/12/25	<0.010		ug/L	
			Benzo(g,h,i)perylene	2021/12/25	<0.010		ug/L	
			Benzo(j)fluoranthene	2021/12/25	<0.010		ug/L	
			Benzo(k)fluoranthene	2021/12/25	<0.010		ug/L	
			Chrysene	2021/12/25	<0.010		ug/L	
			Dibenzo(a,h)anthracene	2021/12/25	<0.010		ug/L	
			Fluoranthene	2021/12/25	<0.010		ug/L	
			Fluorene	2021/12/25	<0.010		ug/L	
			Indeno(1,2,3-cd)pyrene	2021/12/25	<0.010		ug/L	
			Naphthalene	2021/12/25	<0.20		ug/L	
			Perylene	2021/12/25	<0.010		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Phenanthrene	2021/12/25	<0.010		ug/L	
			Pyrene	2021/12/25	<0.010		ug/L	
7745968	KKE	RPD	1-Methylnaphthalene	2021/12/25	3.1		%	40
			2-Methylnaphthalene	2021/12/25	36		%	40
			Acenaphthene	2021/12/25	3.3		%	40
			Acenaphthylene	2021/12/25	6.4		%	40
			Anthracene	2021/12/25	134 (1)		%	40
			Benzo(a)anthracene	2021/12/25	7.1		%	40
			Benzo(a)pyrene	2021/12/25	NC		%	40
			Benzo(b)fluoranthene	2021/12/25	NC		%	40
			Benzo(g,h,i)perylene	2021/12/25	NC		%	40
			Benzo(j)fluoranthene	2021/12/25	NC		%	40
			Benzo(k)fluoranthene	2021/12/25	NC		%	40
			Chrysene	2021/12/25	6.3		%	40
			Dibenzo(a,h)anthracene	2021/12/25	NC		%	40
			Fluoranthene	2021/12/25	4.4		%	40
			Fluorene	2021/12/25	0.67		%	40
			Indeno(1,2,3-cd)pyrene	2021/12/25	NC		%	40
			Naphthalene	2021/12/25	112 (1)		%	40
			Perylene	2021/12/25	NC		%	40
			Phenanthrene	2021/12/25	6.3		%	40
			Pyrene	2021/12/25	4.1		%	40
7747683	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/22		97	%	85 - 115
7747683	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/22		99	%	80 - 120
7747683	NGI	Method Blank	Total Organic Carbon (C)	2021/12/22	<0.50		mg/L	
7747683	NGI	RPD	Total Organic Carbon (C)	2021/12/22	3.5		%	15
7747778	BAN	Matrix Spike	Dissolved Aluminum (Al)	2021/12/22		101	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/22		100	%	80 - 120
			Dissolved Arsenic (As)	2021/12/22		94	%	80 - 120
			Dissolved Barium (Ba)	2021/12/22		93	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/22		96	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/22		96	%	80 - 120
			Dissolved Boron (B)	2021/12/22		95	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/22		98	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/22		99	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/22		96	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/22		94	%	80 - 120
			Dissolved Copper (Cu)	2021/12/22		95	%	80 - 120
			Dissolved Iron (Fe)	2021/12/22		100	%	80 - 120
			Dissolved Lead (Pb)	2021/12/22		97	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/22		102	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/22		96	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/22		98	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/22		96	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/22		105	%	80 - 120
			Dissolved Potassium (K)	2021/12/22		100	%	80 - 120
			Dissolved Selenium (Se)	2021/12/22		99	%	80 - 120
			Dissolved Silver (Ag)	2021/12/22		94	%	80 - 120
			Dissolved Sodium (Na)	2021/12/22		100	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/22		95	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/22		98	%	80 - 120
			Dissolved Tin (Sn)	2021/12/22		99	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/22		97	%	80 - 120

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Uranium (U)	2021/12/22		102	%	80 - 120
			Dissolved Vanadium (V)	2021/12/22		97	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/22		99	%	80 - 120
7747778	BAN	Spiked Blank	Dissolved Aluminum (Al)	2021/12/22		110	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/22		98	%	80 - 120
			Dissolved Arsenic (As)	2021/12/22		93	%	80 - 120
			Dissolved Barium (Ba)	2021/12/22		93	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/22		95	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/22		98	%	80 - 120
			Dissolved Boron (B)	2021/12/22		95	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/22		96	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/22		100	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/22		96	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/22		95	%	80 - 120
			Dissolved Copper (Cu)	2021/12/22		97	%	80 - 120
			Dissolved Iron (Fe)	2021/12/22		100	%	80 - 120
			Dissolved Lead (Pb)	2021/12/22		97	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/22		103	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/22		97	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/22		100	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/22		97	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/22		106	%	80 - 120
			Dissolved Potassium (K)	2021/12/22		101	%	80 - 120
			Dissolved Selenium (Se)	2021/12/22		98	%	80 - 120
			Dissolved Silver (Ag)	2021/12/22		94	%	80 - 120
			Dissolved Sodium (Na)	2021/12/22		100	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/22		96	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/22		99	%	80 - 120
			Dissolved Tin (Sn)	2021/12/22		96	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/22		98	%	80 - 120
			Dissolved Uranium (U)	2021/12/22		103	%	80 - 120
			Dissolved Vanadium (V)	2021/12/22		96	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/22		100	%	80 - 120
7747778	BAN	Method Blank	Dissolved Aluminum (Al)	2021/12/22	<5.0		ug/L	
			Dissolved Antimony (Sb)	2021/12/22	<1.0		ug/L	
			Dissolved Arsenic (As)	2021/12/22	<1.0		ug/L	
			Dissolved Barium (Ba)	2021/12/22	<1.0		ug/L	
			Dissolved Beryllium (Be)	2021/12/22	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2021/12/22	<2.0		ug/L	
			Dissolved Boron (B)	2021/12/22	<50		ug/L	
			Dissolved Cadmium (Cd)	2021/12/22	<0.010		ug/L	
			Dissolved Calcium (Ca)	2021/12/22	<100		ug/L	
			Dissolved Chromium (Cr)	2021/12/22	<1.0		ug/L	
			Dissolved Cobalt (Co)	2021/12/22	<0.40		ug/L	
			Dissolved Copper (Cu)	2021/12/22	<0.50		ug/L	
			Dissolved Iron (Fe)	2021/12/22	<50		ug/L	
			Dissolved Lead (Pb)	2021/12/22	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2021/12/22	<100		ug/L	
			Dissolved Manganese (Mn)	2021/12/22	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2021/12/22	<2.0		ug/L	
			Dissolved Nickel (Ni)	2021/12/22	<2.0		ug/L	
			Dissolved Phosphorus (P)	2021/12/22	<100		ug/L	
			Dissolved Potassium (K)	2021/12/22	<100		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Selenium (Se)	2021/12/22	<0.50		ug/L	
			Dissolved Silver (Ag)	2021/12/22	<0.10		ug/L	
			Dissolved Sodium (Na)	2021/12/22	<100		ug/L	
			Dissolved Strontium (Sr)	2021/12/22	<2.0		ug/L	
			Dissolved Thallium (Tl)	2021/12/22	<0.10		ug/L	
			Dissolved Tin (Sn)	2021/12/22	<2.0		ug/L	
			Dissolved Titanium (Ti)	2021/12/22	<2.0		ug/L	
			Dissolved Uranium (U)	2021/12/22	<0.10		ug/L	
			Dissolved Vanadium (V)	2021/12/22	<2.0		ug/L	
			Dissolved Zinc (Zn)	2021/12/22	<5.0		ug/L	
7747778	BAN	RPD	Dissolved Aluminum (Al)	2021/12/22	0.28		%	20
			Dissolved Antimony (Sb)	2021/12/22	NC		%	20
			Dissolved Arsenic (As)	2021/12/22	NC		%	20
			Dissolved Barium (Ba)	2021/12/22	5.8		%	20
			Dissolved Beryllium (Be)	2021/12/22	5.4		%	20
			Dissolved Bismuth (Bi)	2021/12/22	NC		%	20
			Dissolved Boron (B)	2021/12/22	NC		%	20
			Dissolved Cadmium (Cd)	2021/12/22	4.6		%	20
			Dissolved Calcium (Ca)	2021/12/22	0.032		%	20
			Dissolved Chromium (Cr)	2021/12/22	NC		%	20
			Dissolved Cobalt (Co)	2021/12/22	NC		%	20
			Dissolved Copper (Cu)	2021/12/22	NC		%	20
			Dissolved Iron (Fe)	2021/12/22	NC		%	20
			Dissolved Lead (Pb)	2021/12/22	NC		%	20
			Dissolved Magnesium (Mg)	2021/12/22	1.4		%	20
			Dissolved Manganese (Mn)	2021/12/22	2.2		%	20
			Dissolved Molybdenum (Mo)	2021/12/22	NC		%	20
			Dissolved Nickel (Ni)	2021/12/22	NC		%	20
			Dissolved Phosphorus (P)	2021/12/22	NC		%	20
			Dissolved Potassium (K)	2021/12/22	0.28		%	20
			Dissolved Selenium (Se)	2021/12/22	NC		%	20
			Dissolved Silver (Ag)	2021/12/22	NC		%	20
			Dissolved Sodium (Na)	2021/12/22	0.75		%	20
			Dissolved Strontium (Sr)	2021/12/22	2.7		%	20
			Dissolved Thallium (Tl)	2021/12/22	NC		%	20
			Dissolved Tin (Sn)	2021/12/22	NC		%	20
			Dissolved Titanium (Ti)	2021/12/22	NC		%	20
			Dissolved Uranium (U)	2021/12/22	NC		%	20
			Dissolved Vanadium (V)	2021/12/22	NC		%	20
			Dissolved Zinc (Zn)	2021/12/22	NC		%	20
7750639	MCN	Matrix Spike	Nitrogen (Ammonia Nitrogen)	2021/12/23		103	%	80 - 120
7750639	MCN	Spiked Blank	Nitrogen (Ammonia Nitrogen)	2021/12/23		109	%	80 - 120
7750639	MCN	Method Blank	Nitrogen (Ammonia Nitrogen)	2021/12/23	<0.050		mg/L	
7750639	MCN	RPD	Nitrogen (Ammonia Nitrogen)	2021/12/23	NC		%	20
7753583	EMT	Matrix Spike	Total Alkalinity (Total as CaCO3)	2022/01/04		101	%	80 - 120
7753583	EMT	Spiked Blank	Total Alkalinity (Total as CaCO3)	2022/01/04		110	%	80 - 120
7753583	EMT	Method Blank	Total Alkalinity (Total as CaCO3)	2022/01/04	<5.0		mg/L	
7753583	EMT	RPD	Total Alkalinity (Total as CaCO3)	2022/01/04	12		%	20
7753584	EMT	Matrix Spike	Dissolved Chloride (Cl-)	2022/01/04		96	%	80 - 120
7753584	EMT	Spiked Blank	Dissolved Chloride (Cl-)	2022/01/04		93	%	80 - 120
7753584	EMT	Method Blank	Dissolved Chloride (Cl-)	2022/01/04	<1.0		mg/L	
7753584	EMT	RPD	Dissolved Chloride (Cl-)	2022/01/04	1.2		%	20
7753585	EMT	Matrix Spike	Dissolved Sulphate (SO4)	2022/01/04		97	%	80 - 120

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7753585	EMT	Spiked Blank	Dissolved Sulphate (SO4)	2022/01/04		95	%	80 - 120
7753585	EMT	Method Blank	Dissolved Sulphate (SO4)	2022/01/04	<2.0		mg/L	
7753585	EMT	RPD	Dissolved Sulphate (SO4)	2022/01/04	0.92		%	20
7753586	EMT	Matrix Spike	Reactive Silica (SiO2)	2022/01/04		90	%	80 - 120
7753586	EMT	Spiked Blank	Reactive Silica (SiO2)	2022/01/04		97	%	80 - 120
7753586	EMT	Method Blank	Reactive Silica (SiO2)	2022/01/04	<0.50		mg/L	
7753586	EMT	RPD	Reactive Silica (SiO2)	2022/01/04	14		%	20
7753587	EMT	Spiked Blank	Colour	2022/01/04		96	%	80 - 120
7753587	EMT	Method Blank	Colour	2022/01/04	<5.0		TCU	
7753587	EMT	RPD	Colour	2022/01/04	NC		%	20
7753588	EMT	Matrix Spike	Orthophosphate (P)	2022/01/04		NC	%	80 - 120
7753588	EMT	Spiked Blank	Orthophosphate (P)	2022/01/04		103	%	80 - 120
7753588	EMT	Method Blank	Orthophosphate (P)	2022/01/04	<0.010		mg/L	
7753588	EMT	RPD	Orthophosphate (P)	2022/01/04	1.0		%	20
7753589	EMT	Matrix Spike	Nitrate + Nitrite (N)	2021/12/30		106	%	80 - 120
7753589	EMT	Spiked Blank	Nitrate + Nitrite (N)	2021/12/30		108	%	80 - 120
7753589	EMT	Method Blank	Nitrate + Nitrite (N)	2021/12/30	<0.050		mg/L	
7753589	EMT	RPD	Nitrate + Nitrite (N)	2021/12/30	9.7		%	20
7753590	EMT	Matrix Spike	Nitrite (N)	2022/01/04		95	%	80 - 120
7753590	EMT	Spiked Blank	Nitrite (N)	2022/01/04		100	%	80 - 120
7753590	EMT	Method Blank	Nitrite (N)	2022/01/04	<0.010		mg/L	
7753590	EMT	RPD	Nitrite (N)	2022/01/04	NC		%	20
7759107	SHW	Spiked Blank	Conductivity	2021/12/30		98	%	80 - 120
7759107	SHW	Method Blank	Conductivity	2021/12/30	1.2, RDL=1.0		uS/cm	
7759107	SHW	RPD	Conductivity	2021/12/30	0.81		%	10
7759109	SHW	Spiked Blank	pH	2021/12/30		100	%	97 - 103
7759109	SHW	RPD	pH	2021/12/30	0.81		%	N/A
7759561	SHW	QC Standard	Turbidity	2021/12/30		99	%	80 - 120
7759561	SHW	Spiked Blank	Turbidity	2021/12/30		105	%	80 - 120
7759561	SHW	Method Blank	Turbidity	2021/12/30	<0.10		NTU	
7759561	SHW	RPD	Turbidity	2021/12/30	NC		%	20
7772947	FJO	Matrix Spike	Total Mercury (Hg)	2022/01/11		97	%	80 - 120
7772947	FJO	Spiked Blank	Total Mercury (Hg)	2022/01/11		98	%	80 - 120
7772947	FJO	Method Blank	Total Mercury (Hg)	2022/01/11	<0.013		ug/L	
7772947	FJO	RPD	Total Mercury (Hg)	2022/01/11	4.2		%	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate: results are outside acceptance limit. Insufficient sample for repeat analysis.

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Bureau Veritas Job #: C1Z7047
Report Date: 2022/01/12

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OHP/HE
Sampler Initials: BT

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Colleen Acker, B.Sc, Scientific Service Specialist

Rosemarie MacDonald, Scientific Specialist (Organics)

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For Service Group specific validation please refer to the Validation Signature Page.

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Your Project #: 20-2863
Site#: OH PARK / HARBOURSIDE EAST
Site Location: OH PARK / HARBOURSIDE EAST

Attention: Nadine Wambolt

Dillon Consulting Limited
275 Charlotte St
Sydney, NS
CANADA B1P 1C6

Report Date: 2022/01/21
Report #: R6971570
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1AG221
Received: 2021/12/08, 16:50

Sample Matrix: Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Carbonate, Bicarbonate and Hydroxide (1)	7	N/A	2022/01/13	N/A	SM 23 4500-CO2 D
Alkalinity (1)	5	N/A	2021/12/20	ATL SOP 00013	EPA 310.2 R1974 m
Alkalinity (1)	2	N/A	2021/12/21	ATL SOP 00013	EPA 310.2 R1974 m
Benzo(b/j)fluoranthene Sum (water) (1)	7	N/A	2021/12/30	N/A	Auto Calc.
Chloride (1)	5	N/A	2021/12/20	ATL SOP 00014	SM 23 4500-Cl- E m
Chloride (1)	2	N/A	2021/12/21	ATL SOP 00014	SM 23 4500-Cl- E m
Colour (1)	5	N/A	2021/12/20	ATL SOP 00020	SM 23 2120C m
Colour (1)	2	N/A	2021/12/21	ATL SOP 00020	SM 23 2120C m
Conductance - water (1)	1	N/A	2021/12/16	ATL SOP 00004	SM 23 2510B m
Conductance - water (1)	6	N/A	2021/12/17	ATL SOP 00004	SM 23 2510B m
Hardness (calculated as CaCO3) (1)	3	N/A	2022/01/04	ATL SOP 00048	Auto Calc
Hardness (calculated as CaCO3) (1)	2	N/A	2022/01/05	ATL SOP 00048	Auto Calc
Hardness (calculated as CaCO3) (1)	2	N/A	2022/01/06	ATL SOP 00048	Auto Calc
Mercury - Total (CVAA,LL) (1)	1	2022/01/10	2022/01/10	ATL SOP 00026	EPA 245.1 R3 m
Mercury - Total (CVAA,LL) (1)	1	2022/01/11	2022/01/11	ATL SOP 00026	EPA 245.1 R3 m
Mercury - Total (CVAA,LL) (1)	1	2022/01/12	2022/01/12	ATL SOP 00026	EPA 245.1 R3 m
Mercury - Total (CVAA,LL) (1)	4	2022/01/05	2022/01/05	ATL SOP 00026	EPA 245.1 R3 m
Metals Water Diss. MS (as rec'd) (1)	2	N/A	2022/01/04	ATL SOP 00058	EPA 6020B R2 m
Metals Water Diss. MS (as rec'd) (1)	2	N/A	2022/01/05	ATL SOP 00058	EPA 6020B R2 m
Metals Water Diss. MS (as rec'd) (1)	3	N/A	2021/12/31	ATL SOP 00058	EPA 6020B R2 m
Ion Balance (% Difference) (1)	2	N/A	2022/01/13	N/A	Auto Calc.
Ion Balance (% Difference) (1)	5	N/A	2022/01/14	N/A	Auto Calc.
Anion and Cation Sum (1)	7	N/A	2022/01/13	N/A	Auto Calc.
Nitrogen Ammonia - water (1)	4	N/A	2021/12/17	ATL SOP 00015	EPA 350.1 R2 m
Nitrogen Ammonia - water (1)	2	N/A	2021/12/21	ATL SOP 00015	EPA 350.1 R2 m
Nitrogen Ammonia - water (1)	1	N/A	2021/12/22	ATL SOP 00015	EPA 350.1 R2 m
Nitrogen - Nitrate + Nitrite (1)	7	N/A	2021/12/21	ATL SOP 00016	USGS I-2547-11m
Nitrogen - Nitrite (1)	5	N/A	2021/12/20	ATL SOP 00017	SM 23 4500-NO2- B m
Nitrogen - Nitrite (1)	2	N/A	2021/12/21	ATL SOP 00017	SM 23 4500-NO2- B m
Nitrogen - Nitrate (as N) (1)	2	N/A	2022/01/10	ATL SOP 00018	ASTM D3867-16
Nitrogen - Nitrate (as N) (1)	5	N/A	2022/01/14	ATL SOP 00018	ASTM D3867-16
PAH in Water by GC/MS (SIM) (1)	3	2021/12/15	2021/12/25	ATL SOP 00103	EPA 8270E R6 m

Your Project #: 20-2863
Site#: OH PARK / HARBOURSIDE EAST
Site Location: OH PARK / HARBOURSIDE EAST

Attention: Nadine Wambolt

Dillon Consulting Limited
275 Charlotte St
Sydney, NS
CANADA B1P 1C6

Report Date: 2022/01/21
Report #: R6971570
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1AG221
Received: 2021/12/08, 16:50

Sample Matrix: Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
PAH in Water by GC/MS (SIM) (1)	4	2021/12/15	2021/12/26	ATL SOP 00103	EPA 8270E R6 m
pH (1, 2)	1	N/A	2021/12/16	ATL SOP 00003	SM 23 4500-H+ B m
pH (1, 2)	6	N/A	2021/12/17	ATL SOP 00003	SM 23 4500-H+ B m
Phosphorus - ortho (1)	5	N/A	2021/12/20	ATL SOP 00021	SM 23 4500-P E m
Phosphorus - ortho (1)	2	N/A	2021/12/21	ATL SOP 00021	SM 23 4500-P E m
Sat. pH and Langelier Index (@ 20C) (1)	2	N/A	2022/01/13	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 20C) (1)	5	N/A	2022/01/14	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 4C) (1)	2	N/A	2022/01/13	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 4C) (1)	5	N/A	2022/01/14	ATL SOP 00049	Auto Calc.
Reactive Silica (1)	5	N/A	2021/12/20	ATL SOP 00022	EPA 366.0 m
Reactive Silica (1)	2	N/A	2021/12/21	ATL SOP 00022	EPA 366.0 m
Sulphate (1)	4	N/A	2021/12/20	ATL SOP 00023	ASTM D516-16 m
Sulphate (1)	3	N/A	2021/12/21	ATL SOP 00023	ASTM D516-16 m
Total Dissolved Solids (TDS calc) (1)	1	N/A	2022/01/10	N/A	Auto Calc.
Total Dissolved Solids (TDS calc) (1)	1	N/A	2022/01/13	N/A	Auto Calc.
Total Dissolved Solids (TDS calc) (1)	5	N/A	2022/01/14	N/A	Auto Calc.
Organic carbon - Total (TOC) (1, 3)	3	N/A	2021/12/17	ATL SOP 00203	SM 23 5310B m
Organic carbon - Total (TOC) (1, 3)	4	N/A	2021/12/20	ATL SOP 00203	SM 23 5310B m
Turbidity (1)	7	N/A	2021/12/17	ATL SOP 00011	EPA 180.1 R2 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless

Your Project #: 20-2863
Site#: OH PARK / HARBOURSIDE EAST
Site Location: OH PARK / HARBOURSIDE EAST

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CANADA B1P 1C6

Report Date: 2022/01/21
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Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1AG221
Received: 2021/12/08, 16:50

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Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) The APHA Standard Method require pH to be analyzed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the APHA Standard Method holding time.
(3) TOC / DOC present in the sample should be considered as non-purgeable TOC / DOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Natalie MacAskill, Key Account Specialist
Email: Natalie.MacAskill@bureauveritas.com
Phone# (902)567-1255 Ext:17
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Bureau Veritas Job #: C1AG221
Report Date: 2022/01/21

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RNC121		RNC122			RNC123		
Sampling Date		2021/12/08		2021/12/08			2021/12/08 11:40		
Sample #		DEC08-59		DEC08-60			DEC08-61		
	UNITS	COSCW-001-MWA	QC Batch	COSCW-001-MWB	RDL	QC Batch	MCES-006-MW	RDL	QC Batch
Calculated Parameters									
Anion Sum	me/L	4.99	7759333	5.99	N/A	7759333	2.98	N/A	7759333
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	190	7759325	260	1.0	7759325	56	1.0	7759325
Calculated TDS	mg/L	280	7759338	310	1.0	7759338	190	1.0	7759338
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.2	7759325	2.1	1.0	7759325	14	1.0	7759325
Cation Sum	me/L	5.08	7759333	5.73	N/A	7759333	2.95	N/A	7759333
Hardness (CaCO3)	mg/L	220	7759330	260	1.0	7759330	130	1.0	7759330
Ion Balance (% Difference)	%	0.890	7759331	2.22	N/A	7759331	0.510	N/A	7759331
Langelier Index (@ 20C)	N/A	0.556	7759335	0.829		7759335	1.47		7759335
Langelier Index (@ 4C)	N/A	0.306	7759337	0.580		7759337	1.22		7759337
Nitrate (N)	mg/L	<0.050	7759198	<0.050	0.050	7759198	0.48	0.050	7759198
Saturation pH (@ 20C)	N/A	7.25	7759335	7.10		7759335	7.94		7759335
Saturation pH (@ 4C)	N/A	7.50	7759337	7.35		7759337	8.19		7759337
Inorganics									
Total Alkalinity (Total as CaCO3)	mg/L	190	7779086	260	25	7772359	71	5.0	7779086
Dissolved Chloride (Cl-)	mg/L	10	7779091	9.3	1.0	7772362	8.7	1.0	7779091
Colour	TCU	<5.0	7779094	<5.0	5.0	7772365	19	5.0	7779094
Nitrate + Nitrite (N)	mg/L	<0.050	7779096	<0.050	0.050	7772368	0.56	0.050	7779096
Nitrite (N)	mg/L	<0.010	7779098	<0.010	0.010	7772369	0.088	0.010	7779098
Nitrogen (Ammonia Nitrogen)	mg/L	<0.050	7762168	<0.050	0.050	7762168	0.60	0.050	7762168
Total Organic Carbon (C)	mg/L	1.0	7734660	2.1	0.50	7734697	6.4	0.50	7734660
Orthophosphate (P)	mg/L	<0.010	7779095	<0.010	0.010	7772367	0.023	0.010	7779095
pH	pH	7.81	7734584	7.93		7734584	9.41		7734584
Reactive Silica (SiO2)	mg/L	11	7779093	13	0.50	7772364	10	0.50	7779093
Dissolved Sulphate (SO4)	mg/L	39	7779092	21	2.0	7772363	62	2.0	7779092
Turbidity	NTU	2.7	7735015	0.64	0.10	7735015	1.1	0.10	7735015
Conductivity	uS/cm	470	7734583	500	1.0	7734583	280	1.0	7734583

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Bureau Veritas Job #: C1AG221
Report Date: 2022/01/21

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RNC124			RNC125			RNC126		
Sampling Date		2021/12/08 12:45			2021/12/08			2021/12/08		
Sample #		DEC08-62			DEC08-63			DEC08-64		
	UNITS	MSES-006-MW	RDL	QC Batch	MSES-004-MW	RDL	QC Batch	MCWS-113-MWB	RDL	QC Batch
Calculated Parameters										
Anion Sum	me/L	47.6	N/A	7759333	13.6	N/A	7759333	7.97	N/A	7759333
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	350	1.0	7759325	200	1.0	7759325	310	1.0	7759325
Calculated TDS	mg/L	3000	1.0	7759338	840	1.0	7759338	420	1.0	7759338
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	7759325	<1.0	1.0	7759325	1.8	1.0	7759325
Cation Sum	me/L	44.8	N/A	7759333	13.7	N/A	7759333	7.84	N/A	7759333
Hardness (CaCO3)	mg/L	1900	1.0	7759330	640	1.0	7759330	250	1.0	7759330
Ion Balance (% Difference)	%	3.12	N/A	7759331	0.150	N/A	7759331	0.820	N/A	7759331
Langelier Index (@ 20C)	N/A	0.674		7759335	0.647		7759335	0.722		7759335
Langelier Index (@ 4C)	N/A	0.432		7759337	0.401		7759337	0.473		7759337
Nitrate (N)	mg/L	<0.050	0.050	7759198	<0.050	0.050	7759198	<0.050	0.050	7759198
Saturation pH (@ 20C)	N/A	6.50		7759335	6.92		7759335	7.07		7759335
Saturation pH (@ 4C)	N/A	6.74		7759337	7.17		7759337	7.32		7759337
Inorganics										
Total Alkalinity (Total as CaCO3)	mg/L	350	25	7779086	200	25	7779086	310	25	7779086
Dissolved Chloride (Cl-)	mg/L	80	1.0	7779091	13	1.0	7779091	59	1.0	7779091
Colour	TCU	<5.0	5.0	7779094	<5.0	5.0	7779094	8.0	5.0	7779094
Nitrate + Nitrite (N)	mg/L	<0.050	0.050	7779096	<0.050	0.050	7779096	<0.050	0.050	7779096
Nitrite (N)	mg/L	<0.010	0.010	7779098	<0.010	0.010	7779098	<0.010	0.010	7779098
Nitrogen (Ammonia Nitrogen)	mg/L	0.17	0.050	7762168	1.9	0.050	7772657	1.6	0.050	7772657
Total Organic Carbon (C)	mg/L	1.0	0.50	7734660	3.9	0.50	7741033	8.2 (1)	5.0	7734697
Orthophosphate (P)	mg/L	<0.010	0.010	7779095	<0.010	0.010	7779095	<0.010	0.010	7779095
pH	pH	7.18		7731916	7.57		7734584	7.79		7734584
Reactive Silica (SiO2)	mg/L	12	0.50	7779093	5.8	0.50	7779093	9.8	0.50	7779093
Dissolved Sulphate (SO4)	mg/L	1800	100	7779092	440	10	7779092	<2.0	2.0	7779092
Turbidity	NTU	7.2	0.10	7735015	23	0.10	7735577	13	0.10	7735577
Conductivity	uS/cm	3400	1.0	7731914	1200	1.0	7734583	740	1.0	7734583

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Elevated reporting limit due to sample matrix.

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Bureau Veritas Job #: C1AG221
Report Date: 2022/01/21

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RNC154		
Sampling Date		2021/12/08		
Sample #		DEC08-65		
	UNITS	MCWS-310-MW	RDL	QC Batch
Calculated Parameters				
Anion Sum	me/L	6.86	N/A	7759333
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	220	1.0	7759325
Calculated TDS	mg/L	370	1.0	7759338
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.8	1.0	7759325
Cation Sum	me/L	6.55	N/A	7759333
Hardness (CaCO3)	mg/L	230	1.0	7759330
Ion Balance (% Difference)	%	2.31	N/A	7759331
Langelier Index (@ 20C)	N/A	0.720		7759335
Langelier Index (@ 4C)	N/A	0.471		7759337
Nitrate (N)	mg/L	0.88	0.050	7759198
Saturation pH (@ 20C)	N/A	7.23		7759335
Saturation pH (@ 4C)	N/A	7.48		7759337
Inorganics				
Total Alkalinity (Total as CaCO3)	mg/L	220	25	7772359
Dissolved Chloride (Cl-)	mg/L	52	1.0	7772362
Colour	TCU	<5.0	5.0	7772365
Nitrate + Nitrite (N)	mg/L	0.88	0.050	7772368
Nitrite (N)	mg/L	<0.010	0.010	7772369
Nitrogen (Ammonia Nitrogen)	mg/L	<0.050	0.050	7772657
Total Organic Carbon (C)	mg/L	1.1	0.50	7741033
Orthophosphate (P)	mg/L	<0.010	0.010	7772367
pH	pH	7.95		7734584
Reactive Silica (SiO2)	mg/L	8.7	0.50	7772364
Dissolved Sulphate (SO4)	mg/L	44	2.0	7772363
Turbidity	NTU	3.4	0.10	7735577
Conductivity	uS/cm	640	1.0	7734583

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Bureau Veritas Job #: C1AG221
Report Date: 2022/01/21

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

MERCURY BY COLD VAPOUR AA (WATER)

Bureau Veritas ID		RNC121	RNC122	RNC123	RNC124		
Sampling Date		2021/12/08	2021/12/08	2021/12/08 11:40	2021/12/08 12:45		
Sample #		DEC08-59	DEC08-60	DEC08-61	DEC08-62		
	UNITS	COSCW-001-MWA	COSCW-001-MWB	MCES-006-MW	MSES-006-MW	RDL	QC Batch
Metals							
Total Mercury (Hg)	ug/L	<0.013	<0.013	<0.013	<0.013	0.013	7763841

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		RNC125		RNC126		RNC154		
Sampling Date		2021/12/08		2021/12/08		2021/12/08		
Sample #		DEC08-63		DEC08-64		DEC08-65		
	UNITS	MSES-004-MW	QC Batch	MCWS-113-MWB	QC Batch	MCWS-310-MW	RDL	QC Batch
Metals								
Total Mercury (Hg)	ug/L	<0.013 (1)	7772532	<0.013 (1)	7772542	0.013 (1)	0.013	7767168

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Mercury analyzed past recommended hold time.

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ELEMENTS BY ICP/MS (WATER)

Bureau Veritas ID		RNC121	RNC122		RNC123		RNC124		
Sampling Date		2021/12/08	2021/12/08		2021/12/08 11:40		2021/12/08 12:45		
Sample #		DEC08-59	DEC08-60		DEC08-61		DEC08-62		
	UNITS	COSCW-001-MWA	COSCW-001-MWB	QC Batch	MCES-006-MW	RDL	MSES-006-MW	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	ug/L	7.6	5.3	7761164	120	5.0	14	5.0	7762792
Dissolved Antimony (Sb)	ug/L	<1.0	<1.0	7761164	<1.0	1.0	<1.0	1.0	7762792
Dissolved Arsenic (As)	ug/L	<1.0	<1.0	7761164	9.1	1.0	1.1	1.0	7762792
Dissolved Barium (Ba)	ug/L	47	130	7761164	85	1.0	12	1.0	7762792
Dissolved Beryllium (Be)	ug/L	<0.10	<0.10	7761164	<0.10	0.10	<0.10	0.10	7762792
Dissolved Bismuth (Bi)	ug/L	<2.0	<2.0	7761164	<2.0	2.0	<2.0	2.0	7762792
Dissolved Boron (B)	ug/L	<50	<50	7761164	<50	50	310	50	7762792
Dissolved Cadmium (Cd)	ug/L	0.023	0.013	7761164	<0.010	0.010	0.22	0.010	7762792
Dissolved Calcium (Ca)	ug/L	75000	80000	7761164	50000	100	460000	100	7762792
Dissolved Chromium (Cr)	ug/L	<1.0	<1.0	7761164	<1.0	1.0	<1.0	1.0	7762792
Dissolved Cobalt (Co)	ug/L	<0.40	<0.40	7761164	<0.40	0.40	3.0	0.40	7762792
Dissolved Copper (Cu)	ug/L	<0.50	1.4	7761164	5.9	0.50	<0.50	0.50	7762792
Dissolved Iron (Fe)	ug/L	<50	66	7761164	<50	50	1000	50	7762792
Dissolved Lead (Pb)	ug/L	<0.50	<0.50	7761164	<0.50	0.50	<0.50	0.50	7762792
Dissolved Magnesium (Mg)	ug/L	8500	15000	7761164	1100	100	190000	1000	7762792
Dissolved Manganese (Mn)	ug/L	110	120	7761164	380	2.0	46000	20	7762792
Dissolved Molybdenum (Mo)	ug/L	<2.0	<2.0	7761164	3.5	2.0	<2.0	2.0	7762792
Dissolved Nickel (Ni)	ug/L	<2.0	<2.0	7761164	<2.0	2.0	8.0	2.0	7762792
Dissolved Phosphorus (P)	ug/L	<100	<100	7761164	<100	100	<100	100	7762792
Dissolved Potassium (K)	ug/L	1400	1800	7761164	2800	100	12000	100	7762792
Dissolved Selenium (Se)	ug/L	<0.50	<0.50	7761164	1.6	0.50	<0.50	0.50	7762792
Dissolved Silver (Ag)	ug/L	<0.10	<0.10	7761164	<0.10	0.10	<0.10	0.10	7762792
Dissolved Sodium (Na)	ug/L	14000	11000	7761164	5900	100	130000	100	7762792
Dissolved Strontium (Sr)	ug/L	520	870	7761164	390	2.0	3600	2.0	7762792
Dissolved Thallium (Tl)	ug/L	<0.10	<0.10	7761164	<0.10	0.10	<0.10	0.10	7762792
Dissolved Tin (Sn)	ug/L	<2.0	<2.0	7761164	<2.0	2.0	<2.0	2.0	7762792
Dissolved Titanium (Ti)	ug/L	<2.0	<2.0	7761164	<2.0	2.0	<2.0	2.0	7762792
Dissolved Uranium (U)	ug/L	0.63	2.8	7761164	0.20	0.10	4.5	0.10	7762792
Dissolved Vanadium (V)	ug/L	<2.0	<2.0	7761164	58	2.0	<2.0	2.0	7762792
Dissolved Zinc (Zn)	ug/L	<5.0	<5.0	7761164	6.9	5.0	5.6	5.0	7762792

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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ELEMENTS BY ICP/MS (WATER)

Bureau Veritas ID		RNC125	RNC126		RNC154		
Sampling Date		2021/12/08	2021/12/08		2021/12/08		
Sample #		DEC08-63	DEC08-64		DEC08-65		
	UNITS	MSES-004-MW	MCWS-113-MWB	QC Batch	MCWS-310-MW	RDL	QC Batch
Metals							
Dissolved Aluminum (Al)	ug/L	42	5.7	7762792	7.4	5.0	7761181
Dissolved Antimony (Sb)	ug/L	<1.0	<1.0	7762792	<1.0	1.0	7761181
Dissolved Arsenic (As)	ug/L	5.3	<1.0	7762792	<1.0	1.0	7761181
Dissolved Barium (Ba)	ug/L	12	190	7762792	78	1.0	7761181
Dissolved Beryllium (Be)	ug/L	<0.10	<0.10	7762792	<0.10	0.10	7761181
Dissolved Bismuth (Bi)	ug/L	<2.0	<2.0	7762792	<2.0	2.0	7761181
Dissolved Boron (B)	ug/L	75	310	7762792	100	50	7761181
Dissolved Cadmium (Cd)	ug/L	<0.010	0.022	7762792	0.012	0.010	7761181
Dissolved Calcium (Ca)	ug/L	200000	77000	7762792	74000	100	7761181
Dissolved Chromium (Cr)	ug/L	<1.0	<1.0	7762792	<1.0	1.0	7761181
Dissolved Cobalt (Co)	ug/L	<0.40	<0.40	7762792	<0.40	0.40	7761181
Dissolved Copper (Cu)	ug/L	<0.50	<0.50	7762792	<0.50	0.50	7761181
Dissolved Iron (Fe)	ug/L	2900	1800	7762792	<50	50	7761181
Dissolved Lead (Pb)	ug/L	<0.50	<0.50	7762792	<0.50	0.50	7761181
Dissolved Magnesium (Mg)	ug/L	35000	13000	7762792	9700	100	7761181
Dissolved Manganese (Mn)	ug/L	1100	3300	7762792	<2.0	2.0	7761181
Dissolved Molybdenum (Mo)	ug/L	<2.0	<2.0	7762792	<2.0	2.0	7761181
Dissolved Nickel (Ni)	ug/L	<2.0	<2.0	7762792	<2.0	2.0	7761181
Dissolved Phosphorus (P)	ug/L	<100	230	7762792	<100	100	7761181
Dissolved Potassium (K)	ug/L	2600	6900	7762792	3600	100	7761181
Dissolved Selenium (Se)	ug/L	<0.50	<0.50	7762792	<0.50	0.50	7761181
Dissolved Silver (Ag)	ug/L	<0.10	<0.10	7762792	<0.10	0.10	7761181
Dissolved Sodium (Na)	ug/L	14000	59000	7762792	45000	100	7761181
Dissolved Strontium (Sr)	ug/L	310	340	7762792	2100	2.0	7761181
Dissolved Thallium (Tl)	ug/L	<0.10	<0.10	7762792	<0.10	0.10	7761181
Dissolved Tin (Sn)	ug/L	<2.0	<2.0	7762792	<2.0	2.0	7761181
Dissolved Titanium (Ti)	ug/L	<2.0	<2.0	7762792	<2.0	2.0	7761181
Dissolved Uranium (U)	ug/L	2.0	<0.10	7762792	0.89	0.10	7761181
Dissolved Vanadium (V)	ug/L	<2.0	<2.0	7762792	<2.0	2.0	7761181
Dissolved Zinc (Zn)	ug/L	<5.0	<5.0	7762792	<5.0	5.0	7761181

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID		RNC121	RNC122		RNC123		RNC124		
Sampling Date		2021/12/08	2021/12/08		2021/12/08 11:40		2021/12/08 12:45		
Sample #		DEC08-59	DEC08-60		DEC08-61		DEC08-62		
	UNITS	COSCW-001-MWA	COSCW-001-MWB	RDL	MCES-006-MW	RDL	MSES-006-MW	RDL	QC Batch
Polyaromatic Hydrocarbons									
1-Methylnaphthalene	ug/L	<0.050	<0.050	0.050	<0.050	0.050	0.35	0.050	7745968
2-Methylnaphthalene	ug/L	<0.050	<0.050	0.050	<0.050	0.050	<0.050	0.050	7745968
Acenaphthene	ug/L	<0.010	<0.010	0.010	4.0	0.010	0.82	0.010	7745968
Acenaphthylene	ug/L	<0.010	<0.010	0.010	0.10	0.010	0.92	0.010	7745968
Anthracene	ug/L	<0.010	<0.010	0.010	0.13	0.010	<0.010	0.010	7745968
Benzo(a)anthracene	ug/L	<0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	7745968
Benzo(a)pyrene	ug/L	<0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	7745968
Benzo(b)fluoranthene	ug/L	<0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	7745968
Benzo(b/j)fluoranthene	ug/L	<0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	7757297
Benzo(g,h,i)perylene	ug/L	<0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	7745968
Benzo(j)fluoranthene	ug/L	<0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	7745968
Benzo(k)fluoranthene	ug/L	<0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	7745968
Chrysene	ug/L	<0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	7745968
Dibenzo(a,h)anthracene	ug/L	<0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	7745968
Fluoranthene	ug/L	<0.010	<0.010	0.010	0.15	0.010	0.030	0.010	7745968
Fluorene	ug/L	<0.010	<0.010	0.010	<0.70 (1)	0.70	0.14	0.010	7745968
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	7745968
Naphthalene	ug/L	<0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	7745968
Perylene	ug/L	<0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	7745968
Phenanthrene	ug/L	<0.010	<0.010	0.010	0.27	0.010	<0.030 (1)	0.030	7745968
Pyrene	ug/L	<0.010	<0.010	0.010	0.097	0.010	0.020	0.010	7745968
Surrogate Recovery (%)									
D10-Anthracene	%	97	102		86		95		7745968
D14-Terphenyl	%	102	112		101		99		7745968
D8-Acenaphthylene	%	101	101		56		101		7745968

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Elevated PAH RDL(s) due to matrix / co-extractive interference.

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SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID		RNC125		RNC126		RNC154		
Sampling Date		2021/12/08		2021/12/08		2021/12/08		
Sample #		DEC08-63		DEC08-64		DEC08-65		
	UNITS	MSES-004-MW	RDL	MCWS-113-MWB	RDL	MCWS-310-MW	RDL	QC Batch
Polyaromatic Hydrocarbons								
1-Methylnaphthalene	ug/L	<0.050	0.050	<0.070	0.070	<0.050	0.050	7745968
2-Methylnaphthalene	ug/L	<0.050	0.050	<0.070	0.070	<0.050	0.050	7745968
Acenaphthene	ug/L	<0.010	0.010	<0.020	0.020	<0.010	0.010	7745968
Acenaphthylene	ug/L	<0.010	0.010	<0.020	0.020	<0.010	0.010	7745968
Anthracene	ug/L	<0.010	0.010	<0.020	0.020	<0.010	0.010	7745968
Benzo(a)anthracene	ug/L	<0.010	0.010	<0.020	0.020	<0.010	0.010	7745968
Benzo(a)pyrene	ug/L	<0.010	0.010	<0.020	0.020	<0.010	0.010	7745968
Benzo(b)fluoranthene	ug/L	<0.010	0.010	<0.020	0.020	<0.010	0.010	7745968
Benzo(b/j)fluoranthene	ug/L	<0.020	0.020	<0.040	0.040	<0.020	0.020	7757297
Benzo(g,h,i)perylene	ug/L	<0.010	0.010	<0.020	0.020	<0.010	0.010	7745968
Benzo(j)fluoranthene	ug/L	<0.010	0.010	<0.020	0.020	<0.010	0.010	7745968
Benzo(k)fluoranthene	ug/L	<0.010	0.010	<0.020	0.020	<0.010	0.010	7745968
Chrysene	ug/L	<0.010	0.010	<0.020	0.020	<0.010	0.010	7745968
Dibenzo(a,h)anthracene	ug/L	<0.010	0.010	<0.020	0.020	<0.010	0.010	7745968
Fluoranthene	ug/L	<0.010	0.010	<0.020	0.020	<0.010	0.010	7745968
Fluorene	ug/L	<0.010	0.010	<0.020	0.020	<0.010	0.010	7745968
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	0.010	<0.020	0.020	<0.010	0.010	7745968
Naphthalene	ug/L	<0.20	0.20	<0.25	0.25	<0.20	0.20	7745968
Perylene	ug/L	<0.010	0.010	<0.020	0.020	<0.010	0.010	7745968
Phenanthrene	ug/L	0.014	0.010	<0.020	0.020	<0.010	0.010	7745968
Pyrene	ug/L	<0.010	0.010	0.11	0.020	<0.010	0.010	7745968
Surrogate Recovery (%)								
D10-Anthracene	%	95		31 (1)		88		7745968
D14-Terphenyl	%	97		86 (2)		91		7745968
D8-Acenaphthylene	%	93		11 (1)		89		7745968

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) PAH surrogate(s) not within acceptance limits. Insufficient sample to repeat.
(2) Elevated PAH RDL(s) due to limited sample.

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GENERAL COMMENTS

Sample RNC123 [MCES-006-MW] : ortho-Phosphate > Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7731914	SHW	Spiked Blank	Conductivity	2021/12/16		99	%	80 - 120
7731914	SHW	Method Blank	Conductivity	2021/12/16	1.1, RDL=1.0		uS/cm	
7731914	SHW	RPD	Conductivity	2021/12/16	9.5		%	10
7731916	SHW	Spiked Blank	pH	2021/12/16		100	%	97 - 103
7731916	SHW	RPD	pH	2021/12/16	2.1		%	N/A
7734583	SHW	Spiked Blank	Conductivity	2021/12/17		100	%	80 - 120
7734583	SHW	Method Blank	Conductivity	2021/12/17	1.2, RDL=1.0		uS/cm	
7734583	SHW	RPD [RNC122-01]	Conductivity	2021/12/17	1.2		%	10
7734584	SHW	Spiked Blank	pH	2021/12/17		100	%	97 - 103
7734584	SHW	RPD [RNC122-01]	pH	2021/12/17	1.3		%	N/A
7734660	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/17		96	%	85 - 115
7734660	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/17		100	%	80 - 120
7734660	NGI	Method Blank	Total Organic Carbon (C)	2021/12/17	<0.50		mg/L	
7734660	NGI	RPD	Total Organic Carbon (C)	2021/12/17	0.38		%	15
7734697	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/20		96	%	85 - 115
7734697	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/20		96	%	80 - 120
7734697	NGI	Method Blank	Total Organic Carbon (C)	2021/12/20	<0.50		mg/L	
7734697	NGI	RPD	Total Organic Carbon (C)	2021/12/20	0.045		%	15
7735015	SHW	QC Standard	Turbidity	2021/12/17		98	%	80 - 120
7735015	SHW	Spiked Blank	Turbidity	2021/12/17		104	%	80 - 120
7735015	SHW	Method Blank	Turbidity	2021/12/17	<0.10		NTU	
7735015	SHW	RPD	Turbidity	2021/12/17	10		%	20
7735577	SHW	QC Standard	Turbidity	2021/12/17		100	%	80 - 120
7735577	SHW	Spiked Blank	Turbidity	2021/12/17		105	%	80 - 120
7735577	SHW	Method Blank	Turbidity	2021/12/17	<0.10		NTU	
7735577	SHW	RPD	Turbidity	2021/12/17	3.4		%	20
7741033	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/20		96	%	85 - 115
7741033	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/20		99	%	80 - 120
7741033	NGI	Method Blank	Total Organic Carbon (C)	2021/12/20	<0.50		mg/L	
7741033	NGI	RPD	Total Organic Carbon (C)	2021/12/20	1.2		%	15
7745968	KKE	Matrix Spike	D10-Anthracene	2021/12/25		65	%	50 - 130
			D14-Terphenyl	2021/12/25		99	%	50 - 130
			D8-Acenaphthylene	2021/12/25		84	%	50 - 130
			1-Methylnaphthalene	2021/12/25		112	%	50 - 130
			2-Methylnaphthalene	2021/12/25		112	%	50 - 130
			Acenaphthene	2021/12/25		122	%	50 - 130
			Acenaphthylene	2021/12/25		122	%	50 - 130
			Anthracene	2021/12/25		116	%	50 - 130
			Benzo(a)anthracene	2021/12/25		117	%	50 - 130
			Benzo(a)pyrene	2021/12/25		87	%	50 - 130
			Benzo(b)fluoranthene	2021/12/25		115	%	50 - 130
			Benzo(g,h,i)perylene	2021/12/25		99	%	50 - 130
			Benzo(j)fluoranthene	2021/12/25		118	%	50 - 130
			Benzo(k)fluoranthene	2021/12/25		110	%	50 - 130
			Chrysene	2021/12/25		126	%	50 - 130
			Dibenzo(a,h)anthracene	2021/12/25		81	%	50 - 130
			Fluoranthene	2021/12/25		121	%	50 - 130
			Fluorene	2021/12/25		119	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2021/12/25		83	%	50 - 130
			Naphthalene	2021/12/25		116	%	50 - 130
			Perylene	2021/12/25		112	%	50 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Phenanthrene	2021/12/25		121	%	50 - 130
			Pyrene	2021/12/25		124	%	50 - 130
7745968	KKE	Spiked Blank	D10-Anthracene	2021/12/25		96	%	50 - 130
			D14-Terphenyl	2021/12/25		100	%	50 - 130
			D8-Acenaphthylene	2021/12/25		99	%	50 - 130
			1-Methylnaphthalene	2021/12/25		108	%	50 - 130
			2-Methylnaphthalene	2021/12/25		108	%	50 - 130
			Acenaphthene	2021/12/25		118	%	50 - 130
			Acenaphthylene	2021/12/25		119	%	50 - 130
			Anthracene	2021/12/25		112	%	50 - 130
			Benzo(a)anthracene	2021/12/25		109	%	50 - 130
			Benzo(a)pyrene	2021/12/25		83	%	50 - 130
			Benzo(b)fluoranthene	2021/12/25		109	%	50 - 130
			Benzo(g,h,i)perylene	2021/12/25		93	%	50 - 130
			Benzo(j)fluoranthene	2021/12/25		113	%	50 - 130
			Benzo(k)fluoranthene	2021/12/25		85	%	50 - 130
			Chrysene	2021/12/25		123	%	50 - 130
			Dibenzo(a,h)anthracene	2021/12/25		66	%	50 - 130
			Fluoranthene	2021/12/25		116	%	50 - 130
			Fluorene	2021/12/25		113	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2021/12/25		77	%	50 - 130
			Naphthalene	2021/12/25		112	%	50 - 130
			Perylene	2021/12/25		108	%	50 - 130
			Phenanthrene	2021/12/25		121	%	50 - 130
			Pyrene	2021/12/25		118	%	50 - 130
7745968	KKE	Method Blank	D10-Anthracene	2021/12/25		98	%	50 - 130
			D14-Terphenyl	2021/12/25		100	%	50 - 130
			D8-Acenaphthylene	2021/12/25		95	%	50 - 130
			1-Methylnaphthalene	2021/12/25	<0.050		ug/L	
			2-Methylnaphthalene	2021/12/25	<0.050		ug/L	
			Acenaphthene	2021/12/25	<0.010		ug/L	
			Acenaphthylene	2021/12/25	<0.010		ug/L	
			Anthracene	2021/12/25	<0.010		ug/L	
			Benzo(a)anthracene	2021/12/25	<0.010		ug/L	
			Benzo(a)pyrene	2021/12/25	<0.010		ug/L	
			Benzo(b)fluoranthene	2021/12/25	<0.010		ug/L	
			Benzo(g,h,i)perylene	2021/12/25	<0.010		ug/L	
			Benzo(j)fluoranthene	2021/12/25	<0.010		ug/L	
			Benzo(k)fluoranthene	2021/12/25	<0.010		ug/L	
			Chrysene	2021/12/25	<0.010		ug/L	
			Dibenzo(a,h)anthracene	2021/12/25	<0.010		ug/L	
			Fluoranthene	2021/12/25	<0.010		ug/L	
			Fluorene	2021/12/25	<0.010		ug/L	
			Indeno(1,2,3-cd)pyrene	2021/12/25	<0.010		ug/L	
			Naphthalene	2021/12/25	<0.20		ug/L	
			Perylene	2021/12/25	<0.010		ug/L	
			Phenanthrene	2021/12/25	<0.010		ug/L	
			Pyrene	2021/12/25	<0.010		ug/L	
7745968	KKE	RPD	1-Methylnaphthalene	2021/12/25	3.1		%	40
			2-Methylnaphthalene	2021/12/25	36		%	40
			Acenaphthene	2021/12/25	3.3		%	40
			Acenaphthylene	2021/12/25	6.4		%	40
			Anthracene	2021/12/25	134 (1)		%	40

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Benzo(a)anthracene	2021/12/25	7.1		%	40
			Benzo(a)pyrene	2021/12/25	NC		%	40
			Benzo(b)fluoranthene	2021/12/25	NC		%	40
			Benzo(g,h,i)perylene	2021/12/25	NC		%	40
			Benzo(j)fluoranthene	2021/12/25	NC		%	40
			Benzo(k)fluoranthene	2021/12/25	NC		%	40
			Chrysene	2021/12/25	6.3		%	40
			Dibenzo(a,h)anthracene	2021/12/25	NC		%	40
			Fluoranthene	2021/12/25	4.4		%	40
			Fluorene	2021/12/25	0.67		%	40
			Indeno(1,2,3-cd)pyrene	2021/12/25	NC		%	40
			Naphthalene	2021/12/25	112 (1)		%	40
			Perylene	2021/12/25	NC		%	40
			Phenanthrene	2021/12/25	6.3		%	40
			Pyrene	2021/12/25	4.1		%	40
7761164	BAN	Matrix Spike	Dissolved Aluminum (Al)	2021/12/31		102	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/31		102	%	80 - 120
			Dissolved Arsenic (As)	2021/12/31		100	%	80 - 120
			Dissolved Barium (Ba)	2021/12/31		104	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/31		103	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/31		101	%	80 - 120
			Dissolved Boron (B)	2021/12/31		96	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/31		102	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/31		102	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/31		102	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/31		102	%	80 - 120
			Dissolved Copper (Cu)	2021/12/31		103	%	80 - 120
			Dissolved Iron (Fe)	2021/12/31		99	%	80 - 120
			Dissolved Lead (Pb)	2021/12/31		106	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/31		105	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/31		104	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/31		103	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/31		105	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/31		107	%	80 - 120
			Dissolved Potassium (K)	2021/12/31		103	%	80 - 120
			Dissolved Selenium (Se)	2021/12/31		104	%	80 - 120
			Dissolved Silver (Ag)	2021/12/31		103	%	80 - 120
			Dissolved Sodium (Na)	2021/12/31		105	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/31		103	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/31		101	%	80 - 120
			Dissolved Tin (Sn)	2021/12/31		102	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/31		108	%	80 - 120
			Dissolved Uranium (U)	2021/12/31		107	%	80 - 120
			Dissolved Vanadium (V)	2021/12/31		107	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/31		103	%	80 - 120
7761164	BAN	Spiked Blank	Dissolved Aluminum (Al)	2021/12/31		104	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/31		101	%	80 - 120
			Dissolved Arsenic (As)	2021/12/31		97	%	80 - 120
			Dissolved Barium (Ba)	2021/12/31		100	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/31		100	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/31		99	%	80 - 120
			Dissolved Boron (B)	2021/12/31		98	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/31		101	%	80 - 120

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Calcium (Ca)	2021/12/31		103	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/31		100	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/31		100	%	80 - 120
			Dissolved Copper (Cu)	2021/12/31		102	%	80 - 120
			Dissolved Iron (Fe)	2021/12/31		103	%	80 - 120
			Dissolved Lead (Pb)	2021/12/31		102	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/31		105	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/31		104	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/31		103	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/31		102	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/31		105	%	80 - 120
			Dissolved Potassium (K)	2021/12/31		102	%	80 - 120
			Dissolved Selenium (Se)	2021/12/31		101	%	80 - 120
			Dissolved Silver (Ag)	2021/12/31		100	%	80 - 120
			Dissolved Sodium (Na)	2021/12/31		102	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/31		102	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/31		99	%	80 - 120
			Dissolved Tin (Sn)	2021/12/31		101	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/31		104	%	80 - 120
			Dissolved Uranium (U)	2021/12/31		103	%	80 - 120
			Dissolved Vanadium (V)	2021/12/31		103	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/31		101	%	80 - 120
7761164	BAN	Method Blank	Dissolved Aluminum (Al)	2021/12/31	<5.0		ug/L	
			Dissolved Antimony (Sb)	2021/12/31	<1.0		ug/L	
			Dissolved Arsenic (As)	2021/12/31	<1.0		ug/L	
			Dissolved Barium (Ba)	2021/12/31	<1.0		ug/L	
			Dissolved Beryllium (Be)	2021/12/31	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2021/12/31	<2.0		ug/L	
			Dissolved Boron (B)	2021/12/31	<50		ug/L	
			Dissolved Cadmium (Cd)	2021/12/31	<0.010		ug/L	
			Dissolved Calcium (Ca)	2021/12/31	<100		ug/L	
			Dissolved Chromium (Cr)	2021/12/31	<1.0		ug/L	
			Dissolved Cobalt (Co)	2021/12/31	<0.40		ug/L	
			Dissolved Copper (Cu)	2021/12/31	<0.50		ug/L	
			Dissolved Iron (Fe)	2021/12/31	<50		ug/L	
			Dissolved Lead (Pb)	2021/12/31	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2021/12/31	<100		ug/L	
			Dissolved Manganese (Mn)	2021/12/31	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2021/12/31	<2.0		ug/L	
			Dissolved Nickel (Ni)	2021/12/31	<2.0		ug/L	
			Dissolved Phosphorus (P)	2021/12/31	<100		ug/L	
			Dissolved Potassium (K)	2021/12/31	<100		ug/L	
			Dissolved Selenium (Se)	2021/12/31	<0.50		ug/L	
			Dissolved Silver (Ag)	2021/12/31	<0.10		ug/L	
			Dissolved Sodium (Na)	2021/12/31	<100		ug/L	
			Dissolved Strontium (Sr)	2021/12/31	<2.0		ug/L	
			Dissolved Thallium (Tl)	2021/12/31	<0.10		ug/L	
			Dissolved Tin (Sn)	2021/12/31	<2.0		ug/L	
			Dissolved Titanium (Ti)	2021/12/31	<2.0		ug/L	
			Dissolved Uranium (U)	2021/12/31	<0.10		ug/L	
			Dissolved Vanadium (V)	2021/12/31	<2.0		ug/L	
			Dissolved Zinc (Zn)	2021/12/31	<5.0		ug/L	
7761164	BAN	RPD	Dissolved Aluminum (Al)	2022/01/05	5.2		%	20

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Antimony (Sb)	2022/01/05	NC		%	20
			Dissolved Arsenic (As)	2022/01/05	NC		%	20
			Dissolved Barium (Ba)	2022/01/05	0.88		%	20
			Dissolved Beryllium (Be)	2022/01/05	NC		%	20
			Dissolved Bismuth (Bi)	2022/01/05	NC		%	20
			Dissolved Boron (B)	2022/01/05	NC		%	20
			Dissolved Cadmium (Cd)	2022/01/05	8.8		%	20
			Dissolved Calcium (Ca)	2022/01/05	0.51		%	20
			Dissolved Chromium (Cr)	2022/01/05	NC		%	20
			Dissolved Cobalt (Co)	2022/01/05	3.7		%	20
			Dissolved Iron (Fe)	2022/01/05	0.42		%	20
			Dissolved Lead (Pb)	2022/01/05	NC		%	20
			Dissolved Magnesium (Mg)	2022/01/05	0.34		%	20
			Dissolved Manganese (Mn)	2022/01/05	0.044		%	20
			Dissolved Molybdenum (Mo)	2022/01/05	NC		%	20
			Dissolved Nickel (Ni)	2022/01/05	2.7		%	20
			Dissolved Phosphorus (P)	2022/01/05	NC		%	20
			Dissolved Potassium (K)	2022/01/05	0.82		%	20
			Dissolved Selenium (Se)	2022/01/05	NC		%	20
			Dissolved Silver (Ag)	2022/01/05	NC		%	20
			Dissolved Sodium (Na)	2022/01/05	1.7		%	20
			Dissolved Strontium (Sr)	2022/01/05	2.6		%	20
			Dissolved Thallium (Tl)	2022/01/05	NC		%	20
			Dissolved Tin (Sn)	2022/01/05	NC		%	20
			Dissolved Titanium (Ti)	2022/01/05	NC		%	20
			Dissolved Uranium (U)	2022/01/05	NC		%	20
			Dissolved Vanadium (V)	2022/01/05	NC		%	20
			Dissolved Zinc (Zn)	2022/01/05	5.1		%	20
7761181	BAN	Matrix Spike [RNC154-02]	Dissolved Aluminum (Al)	2021/12/31		101	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/31		101	%	80 - 120
			Dissolved Arsenic (As)	2021/12/31		99	%	80 - 120
			Dissolved Barium (Ba)	2021/12/31		106	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/31		100	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/31		96	%	80 - 120
			Dissolved Boron (B)	2021/12/31		94	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/31		101	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/31		NC	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/31		98	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/31		98	%	80 - 120
			Dissolved Copper (Cu)	2021/12/31		98	%	80 - 120
			Dissolved Iron (Fe)	2021/12/31		100	%	80 - 120
			Dissolved Lead (Pb)	2021/12/31		100	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/31		97	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/31		101	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/31		104	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/31		98	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/31		105	%	80 - 120
			Dissolved Potassium (K)	2021/12/31		100	%	80 - 120
			Dissolved Selenium (Se)	2021/12/31		101	%	80 - 120
			Dissolved Silver (Ag)	2021/12/31		99	%	80 - 120
			Dissolved Sodium (Na)	2021/12/31		NC	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/31		NC	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/31		99	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Tin (Sn)	2021/12/31		101	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/31		102	%	80 - 120
			Dissolved Uranium (U)	2021/12/31		104	%	80 - 120
			Dissolved Vanadium (V)	2021/12/31		102	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/31		99	%	80 - 120
7761181	BAN	Spiked Blank	Dissolved Aluminum (Al)	2021/12/31		104	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/31		100	%	80 - 120
			Dissolved Arsenic (As)	2021/12/31		97	%	80 - 120
			Dissolved Barium (Ba)	2021/12/31		100	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/31		98	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/31		98	%	80 - 120
			Dissolved Boron (B)	2021/12/31		94	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/31		100	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/31		100	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/31		99	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/31		99	%	80 - 120
			Dissolved Copper (Cu)	2021/12/31		100	%	80 - 120
			Dissolved Iron (Fe)	2021/12/31		102	%	80 - 120
			Dissolved Lead (Pb)	2021/12/31		102	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/31		106	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/31		104	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/31		101	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/31		101	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/31		106	%	80 - 120
			Dissolved Potassium (K)	2021/12/31		103	%	80 - 120
			Dissolved Selenium (Se)	2021/12/31		99	%	80 - 120
			Dissolved Silver (Ag)	2021/12/31		98	%	80 - 120
			Dissolved Sodium (Na)	2021/12/31		104	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/31		101	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/31		99	%	80 - 120
			Dissolved Tin (Sn)	2021/12/31		101	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/31		105	%	80 - 120
			Dissolved Uranium (U)	2021/12/31		103	%	80 - 120
			Dissolved Vanadium (V)	2021/12/31		103	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/31		100	%	80 - 120
7761181	BAN	Method Blank	Dissolved Aluminum (Al)	2021/12/31	<5.0		ug/L	
			Dissolved Antimony (Sb)	2021/12/31	<1.0		ug/L	
			Dissolved Arsenic (As)	2021/12/31	<1.0		ug/L	
			Dissolved Barium (Ba)	2021/12/31	<1.0		ug/L	
			Dissolved Beryllium (Be)	2021/12/31	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2021/12/31	<2.0		ug/L	
			Dissolved Boron (B)	2021/12/31	<50		ug/L	
			Dissolved Cadmium (Cd)	2021/12/31	<0.010		ug/L	
			Dissolved Calcium (Ca)	2021/12/31	<100		ug/L	
			Dissolved Chromium (Cr)	2021/12/31	<1.0		ug/L	
			Dissolved Cobalt (Co)	2021/12/31	<0.40		ug/L	
			Dissolved Copper (Cu)	2021/12/31	<0.50		ug/L	
			Dissolved Iron (Fe)	2021/12/31	<50		ug/L	
			Dissolved Lead (Pb)	2021/12/31	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2021/12/31	<100		ug/L	
			Dissolved Manganese (Mn)	2021/12/31	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2021/12/31	<2.0		ug/L	
			Dissolved Nickel (Ni)	2021/12/31	<2.0		ug/L	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Phosphorus (P)	2021/12/31	<100		ug/L	
			Dissolved Potassium (K)	2021/12/31	<100		ug/L	
			Dissolved Selenium (Se)	2021/12/31	<0.50		ug/L	
			Dissolved Silver (Ag)	2021/12/31	<0.10		ug/L	
			Dissolved Sodium (Na)	2021/12/31	<100		ug/L	
			Dissolved Strontium (Sr)	2021/12/31	<2.0		ug/L	
			Dissolved Thallium (Tl)	2021/12/31	<0.10		ug/L	
			Dissolved Tin (Sn)	2021/12/31	<2.0		ug/L	
			Dissolved Titanium (Ti)	2021/12/31	<2.0		ug/L	
			Dissolved Uranium (U)	2021/12/31	<0.10		ug/L	
			Dissolved Vanadium (V)	2021/12/31	<2.0		ug/L	
			Dissolved Zinc (Zn)	2021/12/31	<5.0		ug/L	
7761181	BAN	RPD [RNC154-02]	Dissolved Aluminum (Al)	2021/12/31	3.4		%	20
			Dissolved Antimony (Sb)	2021/12/31	NC		%	20
			Dissolved Arsenic (As)	2021/12/31	NC		%	20
			Dissolved Barium (Ba)	2021/12/31	0.75		%	20
			Dissolved Beryllium (Be)	2021/12/31	NC		%	20
			Dissolved Bismuth (Bi)	2021/12/31	NC		%	20
			Dissolved Boron (B)	2021/12/31	0.21		%	20
			Dissolved Cadmium (Cd)	2021/12/31	11		%	20
			Dissolved Calcium (Ca)	2021/12/31	0.11		%	20
			Dissolved Chromium (Cr)	2021/12/31	NC		%	20
			Dissolved Cobalt (Co)	2021/12/31	NC		%	20
			Dissolved Copper (Cu)	2021/12/31	NC		%	20
			Dissolved Iron (Fe)	2021/12/31	NC		%	20
			Dissolved Lead (Pb)	2021/12/31	NC		%	20
			Dissolved Magnesium (Mg)	2021/12/31	0.44		%	20
			Dissolved Manganese (Mn)	2021/12/31	NC		%	20
			Dissolved Molybdenum (Mo)	2021/12/31	NC		%	20
			Dissolved Nickel (Ni)	2021/12/31	NC		%	20
			Dissolved Phosphorus (P)	2021/12/31	NC		%	20
			Dissolved Potassium (K)	2021/12/31	0.95		%	20
			Dissolved Selenium (Se)	2021/12/31	NC		%	20
			Dissolved Silver (Ag)	2021/12/31	NC		%	20
			Dissolved Sodium (Na)	2021/12/31	0.71		%	20
			Dissolved Strontium (Sr)	2021/12/31	0.39		%	20
			Dissolved Thallium (Tl)	2021/12/31	NC		%	20
			Dissolved Tin (Sn)	2021/12/31	NC		%	20
			Dissolved Titanium (Ti)	2021/12/31	NC		%	20
			Dissolved Uranium (U)	2021/12/31	1.4		%	20
			Dissolved Vanadium (V)	2021/12/31	NC		%	20
			Dissolved Zinc (Zn)	2021/12/31	NC		%	20
7762168	MCN	Matrix Spike	Nitrogen (Ammonia Nitrogen)	2021/12/17		104	%	80 - 120
7762168	MCN	Spiked Blank	Nitrogen (Ammonia Nitrogen)	2021/12/17		104	%	80 - 120
7762168	MCN	Method Blank	Nitrogen (Ammonia Nitrogen)	2021/12/17	<0.050		mg/L	
7762168	MCN	RPD	Nitrogen (Ammonia Nitrogen)	2021/12/17	NC		%	20
7762792	BAN	Matrix Spike	Dissolved Aluminum (Al)	2022/01/04		102	%	80 - 120
			Dissolved Antimony (Sb)	2022/01/04		99	%	80 - 120
			Dissolved Arsenic (As)	2022/01/04		94	%	80 - 120
			Dissolved Barium (Ba)	2022/01/04		92	%	80 - 120
			Dissolved Beryllium (Be)	2022/01/04		99	%	80 - 120
			Dissolved Bismuth (Bi)	2022/01/04		94	%	80 - 120
			Dissolved Boron (B)	2022/01/04		99	%	80 - 120

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Cadmium (Cd)	2022/01/04		94	%	80 - 120
			Dissolved Calcium (Ca)	2022/01/04		98	%	80 - 120
			Dissolved Chromium (Cr)	2022/01/04		95	%	80 - 120
			Dissolved Cobalt (Co)	2022/01/04		96	%	80 - 120
			Dissolved Copper (Cu)	2022/01/04		95	%	80 - 120
			Dissolved Iron (Fe)	2022/01/04		98	%	80 - 120
			Dissolved Lead (Pb)	2022/01/04		95	%	80 - 120
			Dissolved Magnesium (Mg)	2022/01/04		101	%	80 - 120
			Dissolved Manganese (Mn)	2022/01/04		93	%	80 - 120
			Dissolved Molybdenum (Mo)	2022/01/04		100	%	80 - 120
			Dissolved Nickel (Ni)	2022/01/04		94	%	80 - 120
			Dissolved Phosphorus (P)	2022/01/04		104	%	80 - 120
			Dissolved Potassium (K)	2022/01/04		100	%	80 - 120
			Dissolved Selenium (Se)	2022/01/04		96	%	80 - 120
			Dissolved Silver (Ag)	2022/01/04		94	%	80 - 120
			Dissolved Sodium (Na)	2022/01/04		NC	%	80 - 120
			Dissolved Strontium (Sr)	2022/01/04		NC	%	80 - 120
			Dissolved Thallium (Tl)	2022/01/04		96	%	80 - 120
			Dissolved Tin (Sn)	2022/01/04		100	%	80 - 120
			Dissolved Titanium (Ti)	2022/01/04		99	%	80 - 120
			Dissolved Uranium (U)	2022/01/04		100	%	80 - 120
			Dissolved Vanadium (V)	2022/01/04		98	%	80 - 120
			Dissolved Zinc (Zn)	2022/01/04		98	%	80 - 120
7762792	BAN	Spiked Blank	Dissolved Aluminum (Al)	2022/01/04		103	%	80 - 120
			Dissolved Antimony (Sb)	2022/01/04		98	%	80 - 120
			Dissolved Arsenic (As)	2022/01/04		94	%	80 - 120
			Dissolved Barium (Ba)	2022/01/04		95	%	80 - 120
			Dissolved Beryllium (Be)	2022/01/04		97	%	80 - 120
			Dissolved Bismuth (Bi)	2022/01/04		98	%	80 - 120
			Dissolved Boron (B)	2022/01/04		96	%	80 - 120
			Dissolved Cadmium (Cd)	2022/01/04		96	%	80 - 120
			Dissolved Calcium (Ca)	2022/01/04		98	%	80 - 120
			Dissolved Chromium (Cr)	2022/01/04		98	%	80 - 120
			Dissolved Cobalt (Co)	2022/01/04		97	%	80 - 120
			Dissolved Copper (Cu)	2022/01/04		98	%	80 - 120
			Dissolved Iron (Fe)	2022/01/04		100	%	80 - 120
			Dissolved Lead (Pb)	2022/01/04		98	%	80 - 120
			Dissolved Magnesium (Mg)	2022/01/04		103	%	80 - 120
			Dissolved Manganese (Mn)	2022/01/04		100	%	80 - 120
			Dissolved Molybdenum (Mo)	2022/01/04		100	%	80 - 120
			Dissolved Nickel (Ni)	2022/01/04		98	%	80 - 120
			Dissolved Phosphorus (P)	2022/01/04		104	%	80 - 120
			Dissolved Potassium (K)	2022/01/04		103	%	80 - 120
			Dissolved Selenium (Se)	2022/01/04		98	%	80 - 120
			Dissolved Silver (Ag)	2022/01/04		96	%	80 - 120
			Dissolved Sodium (Na)	2022/01/04		101	%	80 - 120
			Dissolved Strontium (Sr)	2022/01/04		99	%	80 - 120
			Dissolved Thallium (Tl)	2022/01/04		98	%	80 - 120
			Dissolved Tin (Sn)	2022/01/04		99	%	80 - 120
			Dissolved Titanium (Ti)	2022/01/04		101	%	80 - 120
			Dissolved Uranium (U)	2022/01/04		100	%	80 - 120
			Dissolved Vanadium (V)	2022/01/04		98	%	80 - 120
			Dissolved Zinc (Zn)	2022/01/04		100	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7762792	BAN	Method Blank	Dissolved Aluminum (Al)	2022/01/04	<5.0		ug/L	
			Dissolved Antimony (Sb)	2022/01/04	<1.0		ug/L	
			Dissolved Arsenic (As)	2022/01/04	<1.0		ug/L	
			Dissolved Barium (Ba)	2022/01/04	<1.0		ug/L	
			Dissolved Beryllium (Be)	2022/01/04	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2022/01/04	<2.0		ug/L	
			Dissolved Boron (B)	2022/01/04	<50		ug/L	
			Dissolved Cadmium (Cd)	2022/01/04	<0.010		ug/L	
			Dissolved Calcium (Ca)	2022/01/04	<100		ug/L	
			Dissolved Chromium (Cr)	2022/01/04	<1.0		ug/L	
			Dissolved Cobalt (Co)	2022/01/04	<0.40		ug/L	
			Dissolved Copper (Cu)	2022/01/04	<0.50		ug/L	
			Dissolved Iron (Fe)	2022/01/04	<50		ug/L	
			Dissolved Lead (Pb)	2022/01/04	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2022/01/04	<100		ug/L	
			Dissolved Manganese (Mn)	2022/01/04	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2022/01/04	<2.0		ug/L	
			Dissolved Nickel (Ni)	2022/01/04	<2.0		ug/L	
			Dissolved Phosphorus (P)	2022/01/04	<100		ug/L	
			Dissolved Potassium (K)	2022/01/04	<100		ug/L	
			Dissolved Selenium (Se)	2022/01/04	<0.50		ug/L	
			Dissolved Silver (Ag)	2022/01/04	<0.10		ug/L	
			Dissolved Sodium (Na)	2022/01/04	<100		ug/L	
			Dissolved Strontium (Sr)	2022/01/04	<2.0		ug/L	
			Dissolved Thallium (Tl)	2022/01/04	<0.10		ug/L	
			Dissolved Tin (Sn)	2022/01/04	<2.0		ug/L	
			Dissolved Titanium (Ti)	2022/01/04	<2.0		ug/L	
			Dissolved Uranium (U)	2022/01/04	<0.10		ug/L	
			Dissolved Vanadium (V)	2022/01/04	<2.0		ug/L	
			Dissolved Zinc (Zn)	2022/01/04	<5.0		ug/L	
7762792	BAN	RPD	Dissolved Aluminum (Al)	2022/01/04	4.1		%	20
			Dissolved Antimony (Sb)	2022/01/04	NC		%	20
			Dissolved Arsenic (As)	2022/01/04	NC		%	20
			Dissolved Barium (Ba)	2022/01/04	2.0		%	20
			Dissolved Beryllium (Be)	2022/01/04	NC		%	20
			Dissolved Bismuth (Bi)	2022/01/04	NC		%	20
			Dissolved Boron (B)	2022/01/04	0.090		%	20
			Dissolved Cadmium (Cd)	2022/01/04	NC		%	20
			Dissolved Calcium (Ca)	2022/01/04	0.79		%	20
			Dissolved Chromium (Cr)	2022/01/04	NC		%	20
			Dissolved Cobalt (Co)	2022/01/04	NC		%	20
			Dissolved Copper (Cu)	2022/01/04	8.6		%	20
			Dissolved Iron (Fe)	2022/01/04	NC		%	20
			Dissolved Lead (Pb)	2022/01/04	NC		%	20
			Dissolved Magnesium (Mg)	2022/01/04	2.6		%	20
			Dissolved Manganese (Mn)	2022/01/04	2.9		%	20
			Dissolved Molybdenum (Mo)	2022/01/04	NC		%	20
			Dissolved Nickel (Ni)	2022/01/04	NC		%	20
			Dissolved Phosphorus (P)	2022/01/04	NC		%	20
			Dissolved Potassium (K)	2022/01/04	0.60		%	20
			Dissolved Selenium (Se)	2022/01/04	NC		%	20
			Dissolved Silver (Ag)	2022/01/04	NC		%	20
			Dissolved Sodium (Na)	2022/01/04	0.89		%	20

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Strontium (Sr)	2022/01/04	0.81		%	20
			Dissolved Thallium (Tl)	2022/01/04	NC		%	20
			Dissolved Tin (Sn)	2022/01/04	NC		%	20
			Dissolved Titanium (Ti)	2022/01/04	NC		%	20
			Dissolved Uranium (U)	2022/01/04	NC		%	20
			Dissolved Vanadium (V)	2022/01/04	NC		%	20
			Dissolved Zinc (Zn)	2022/01/04	NC		%	20
7763841	FJO	Matrix Spike	Total Mercury (Hg)	2022/01/05		105	%	80 - 120
7763841	FJO	Spiked Blank	Total Mercury (Hg)	2022/01/05		92	%	80 - 120
7763841	FJO	Method Blank	Total Mercury (Hg)	2022/01/05	<0.013		ug/L	
7763841	FJO	RPD	Total Mercury (Hg)	2022/01/05	NC (2)		%	20
7767168	FJO	Matrix Spike	Total Mercury (Hg)	2022/01/10		93	%	80 - 120
7767168	FJO	Spiked Blank	Total Mercury (Hg)	2022/01/10		100	%	80 - 120
7767168	FJO	Method Blank	Total Mercury (Hg)	2022/01/10	<0.013		ug/L	
7767168	FJO	RPD	Total Mercury (Hg)	2022/01/10	NC		%	20
7772359	MCN	Matrix Spike	Total Alkalinity (Total as CaCO3)	2021/12/21		86	%	80 - 120
7772359	MCN	Spiked Blank	Total Alkalinity (Total as CaCO3)	2021/12/21		106	%	80 - 120
7772359	MCN	Method Blank	Total Alkalinity (Total as CaCO3)	2021/12/22	<5.0		mg/L	
7772359	MCN	RPD	Total Alkalinity (Total as CaCO3)	2021/12/21	3.6		%	20
7772362	MCN	Matrix Spike	Dissolved Chloride (Cl-)	2021/12/21		97	%	80 - 120
7772362	MCN	Spiked Blank	Dissolved Chloride (Cl-)	2021/12/21		96	%	80 - 120
7772362	MCN	Method Blank	Dissolved Chloride (Cl-)	2021/12/21	<1.0		mg/L	
7772362	MCN	RPD	Dissolved Chloride (Cl-)	2021/12/21	0.63		%	20
7772363	MCN	Matrix Spike	Dissolved Sulphate (SO4)	2021/12/21		93	%	80 - 120
7772363	MCN	Spiked Blank	Dissolved Sulphate (SO4)	2021/12/21		100	%	80 - 120
7772363	MCN	Method Blank	Dissolved Sulphate (SO4)	2021/12/21	<2.0		mg/L	
7772363	MCN	RPD	Dissolved Sulphate (SO4)	2021/12/21	1.1		%	20
7772364	MCN	Matrix Spike	Reactive Silica (SiO2)	2021/12/21		90	%	80 - 120
7772364	MCN	Spiked Blank	Reactive Silica (SiO2)	2021/12/21		94	%	80 - 120
7772364	MCN	Method Blank	Reactive Silica (SiO2)	2021/12/21	<0.50		mg/L	
7772364	MCN	RPD	Reactive Silica (SiO2)	2021/12/21	6.2		%	20
7772365	MCN	Spiked Blank	Colour	2021/12/21		99	%	80 - 120
7772365	MCN	Method Blank	Colour	2021/12/21	<5.0		TCU	
7772365	MCN	RPD	Colour	2021/12/21	NC		%	20
7772367	MCN	Matrix Spike	Orthophosphate (P)	2021/12/21		NC	%	80 - 120
7772367	MCN	Spiked Blank	Orthophosphate (P)	2021/12/21		107	%	80 - 120
7772367	MCN	Method Blank	Orthophosphate (P)	2021/12/21	<0.010		mg/L	
7772367	MCN	RPD	Orthophosphate (P)	2021/12/21	1.2		%	20
7772368	MCN	Matrix Spike	Nitrate + Nitrite (N)	2021/12/21		100	%	80 - 120
7772368	MCN	Spiked Blank	Nitrate + Nitrite (N)	2021/12/21		103	%	80 - 120
7772368	MCN	Method Blank	Nitrate + Nitrite (N)	2021/12/21	<0.050		mg/L	
7772368	MCN	RPD	Nitrate + Nitrite (N)	2021/12/21	4.7		%	20
7772369	MCN	Matrix Spike	Nitrite (N)	2021/12/21		28 (3)	%	80 - 120
7772369	MCN	Spiked Blank	Nitrite (N)	2021/12/21		105	%	80 - 120
7772369	MCN	Method Blank	Nitrite (N)	2021/12/21	<0.010		mg/L	
7772369	MCN	RPD	Nitrite (N)	2021/12/21	NC		%	20
7772532	FJO	Matrix Spike	Total Mercury (Hg)	2022/01/11		93	%	80 - 120
7772532	FJO	Spiked Blank	Total Mercury (Hg)	2022/01/11		93	%	80 - 120
7772532	FJO	Method Blank	Total Mercury (Hg)	2022/01/11	<0.013		ug/L	
7772532	FJO	RPD	Total Mercury (Hg)	2022/01/11	NC		%	20
7772542	FJO	Matrix Spike	Total Mercury (Hg)	2022/01/12		94	%	80 - 120
7772542	FJO	Spiked Blank	Total Mercury (Hg)	2022/01/12		100	%	80 - 120
7772542	FJO	Method Blank	Total Mercury (Hg)	2022/01/12	<0.013		ug/L	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7772542	FJO	RPD	Total Mercury (Hg)	2022/01/12	NC (2)		%	20
7772657	MCN	Matrix Spike	Nitrogen (Ammonia Nitrogen)	2021/12/21		107	%	80 - 120
7772657	MCN	Spiked Blank	Nitrogen (Ammonia Nitrogen)	2021/12/21		107	%	80 - 120
7772657	MCN	Method Blank	Nitrogen (Ammonia Nitrogen)	2021/12/21	<0.050		mg/L	
7772657	MCN	RPD	Nitrogen (Ammonia Nitrogen)	2021/12/21	NC		%	20
7779086	EMT	Matrix Spike	Total Alkalinity (Total as CaCO3)	2021/12/20		82	%	80 - 120
7779086	EMT	Spiked Blank	Total Alkalinity (Total as CaCO3)	2021/12/20		101	%	80 - 120
7779086	EMT	Method Blank	Total Alkalinity (Total as CaCO3)	2021/12/20	<5.0		mg/L	
7779086	EMT	RPD	Total Alkalinity (Total as CaCO3)	2021/12/20	2.7		%	20
7779091	EMT	Matrix Spike	Dissolved Chloride (Cl-)	2021/12/21		NC	%	80 - 120
7779091	EMT	Spiked Blank	Dissolved Chloride (Cl-)	2021/12/20		98	%	80 - 120
7779091	EMT	Method Blank	Dissolved Chloride (Cl-)	2021/12/20	<1.0		mg/L	
7779091	EMT	RPD	Dissolved Chloride (Cl-)	2021/12/21	2.3		%	20
7779092	EMT	Matrix Spike	Dissolved Sulphate (SO4)	2021/12/20		NC	%	80 - 120
7779092	EMT	Spiked Blank	Dissolved Sulphate (SO4)	2021/12/20		98	%	80 - 120
7779092	EMT	Method Blank	Dissolved Sulphate (SO4)	2021/12/20	<2.0		mg/L	
7779092	EMT	RPD	Dissolved Sulphate (SO4)	2021/12/20	0.16		%	20
7779093	EMT	Matrix Spike	Reactive Silica (SiO2)	2021/12/20		82	%	80 - 120
7779093	EMT	Spiked Blank	Reactive Silica (SiO2)	2021/12/20		88	%	80 - 120
7779093	EMT	Method Blank	Reactive Silica (SiO2)	2021/12/20	<0.50		mg/L	
7779093	EMT	RPD	Reactive Silica (SiO2)	2021/12/20	5.7		%	20
7779094	EMT	Spiked Blank	Colour	2021/12/20		96	%	80 - 120
7779094	EMT	Method Blank	Colour	2021/12/20	<5.0		TCU	
7779094	EMT	RPD	Colour	2021/12/20	6.4		%	20
7779095	EMT	Matrix Spike	Orthophosphate (P)	2021/12/20		101	%	80 - 120
7779095	EMT	Spiked Blank	Orthophosphate (P)	2021/12/20		106	%	80 - 120
7779095	EMT	Method Blank	Orthophosphate (P)	2021/12/20	<0.010		mg/L	
7779095	EMT	RPD	Orthophosphate (P)	2021/12/20	NC		%	20
7779096	EMT	Matrix Spike	Nitrate + Nitrite (N)	2021/12/21		97	%	80 - 120
7779096	EMT	Spiked Blank	Nitrate + Nitrite (N)	2021/12/21		99	%	80 - 120
7779096	EMT	Method Blank	Nitrate + Nitrite (N)	2021/12/21	<0.050		mg/L	
7779096	EMT	RPD	Nitrate + Nitrite (N)	2021/12/21	12		%	20
7779098	EMT	Matrix Spike	Nitrite (N)	2021/12/20		106	%	80 - 120
7779098	EMT	Spiked Blank	Nitrite (N)	2021/12/20		102	%	80 - 120
7779098	EMT	Method Blank	Nitrite (N)	2021/12/20	<0.010		mg/L	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7779098	EMT	RPD	Nitrite (N)	2021/12/20	2.2		%	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate: results are outside acceptance limit. Insufficient sample for repeat analysis.

(2) Mercury analyzed past recommended hold time.

(3) Poor spike recovery due to probable matrix interference.

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Bureau Veritas Job #: C1AG221
Report Date: 2022/01/21

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Colleen Acker, B.Sc, Scientific Service Specialist

Rosemarie MacDonald, Scientific Specialist (Organics)

Bureau Veritas Proprietary Software
Logiciel Propriétaire de Bureau Veritas

Automated Statchk

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Your Project #: 20-2863
Site#: OH PARK / HARBOURSIDE EAST
Site Location: OH PARK / HARBOURSIDE EAST

Attention: Nadine Wambolt

Dillon Consulting Limited
275 Charlotte St
Sydney, NS
CANADA B1P 1C6

Report Date: 2022/02/01
Report #: R6985602
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1AF527
Received: 2021/12/08, 10:25

Sample Matrix: Water
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Carbonate, Bicarbonate and Hydroxide (1)	5	N/A	2022/01/02	N/A	SM 23 4500-CO2 D
Carbonate, Bicarbonate and Hydroxide (1)	1	N/A	2022/02/01	N/A	SM 23 4500-CO2 D
Alkalinity (1)	2	N/A	2022/01/24	ATL SOP 00013	EPA 310.2 R1974 m
Alkalinity (1)	1	N/A	2021/12/16	ATL SOP 00013	EPA 310.2 R1974 m
Alkalinity (1)	2	N/A	2021/12/17	ATL SOP 00013	EPA 310.2 R1974 m
Alkalinity (1)	1	N/A	2022/02/01	ATL SOP 00013	EPA 310.2 R1974 m
Benzo(b/j)fluoranthene Sum (water) (1)	6	N/A	2021/12/30	N/A	Auto Calc.
Chloride (1)	5	N/A	2021/12/16	ATL SOP 00014	SM 23 4500-Cl- E m
Chloride (1)	1	N/A	2021/12/21	ATL SOP 00014	SM 23 4500-Cl- E m
Colour (1)	5	N/A	2021/12/16	ATL SOP 00020	SM 23 2120C m
Colour (1)	1	N/A	2021/12/20	ATL SOP 00020	SM 23 2120C m
Conductance - water (1)	6	N/A	2021/12/16	ATL SOP 00004	SM 23 2510B m
Hardness (calculated as CaCO3) (1)	6	N/A	2022/01/04	ATL SOP 00048	Auto Calc
Mercury - Total (CVAA,LL) (1)	4	2022/01/05	2022/01/05	ATL SOP 00026	EPA 245.1 R3 m
Mercury - Total (CVAA,LL) (1)	2	2022/01/06	2022/01/06	ATL SOP 00026	EPA 245.1 R3 m
Metals Water Diss. MS (as rec'd) (1)	6	N/A	2021/12/31	ATL SOP 00058	EPA 6020B R2 m
Ion Balance (% Difference) (1)	6	N/A	2022/01/14	N/A	Auto Calc.
Anion and Cation Sum (1)	6	N/A	2022/01/13	N/A	Auto Calc.
Nitrogen Ammonia - water (1)	6	N/A	2021/12/16	ATL SOP 00015	EPA 350.1 R2 m
Nitrogen - Nitrate + Nitrite (1)	5	N/A	2021/12/16	ATL SOP 00016	USGS I-2547-11m
Nitrogen - Nitrate + Nitrite (1)	1	N/A	2021/12/21	ATL SOP 00016	USGS I-2547-11m
Nitrogen - Nitrite (1)	5	N/A	2021/12/16	ATL SOP 00017	SM 23 4500-NO2- B m
Nitrogen - Nitrite (1)	1	N/A	2021/12/20	ATL SOP 00017	SM 23 4500-NO2- B m
Nitrogen - Nitrate (as N) (1)	6	N/A	2022/01/14	ATL SOP 00018	ASTM D3867-16
PAH in Water by GC/MS (SIM) (1)	6	2021/12/13	2021/12/28	ATL SOP 00103	EPA 8270E R6 m
pH (1, 2)	6	N/A	2021/12/16	ATL SOP 00003	SM 23 4500-H+ B m
Phosphorus - ortho (1)	5	N/A	2021/12/16	ATL SOP 00021	SM 23 4500-P E m
Phosphorus - ortho (1)	1	N/A	2021/12/20	ATL SOP 00021	SM 23 4500-P E m
Sat. pH and Langelier Index (@ 20C) (1)	6	N/A	2022/01/14	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 4C) (1)	6	N/A	2022/01/14	ATL SOP 00049	Auto Calc.
Reactive Silica (1)	5	N/A	2021/12/16	ATL SOP 00022	EPA 366.0 m
Reactive Silica (1)	1	N/A	2021/12/20	ATL SOP 00022	EPA 366.0 m

Your Project #: 20-2863
Site#: OH PARK / HARBOURSIDE EAST
Site Location: OH PARK / HARBOURSIDE EAST

Attention: Nadine Wambolt

Dillon Consulting Limited
275 Charlotte St
Sydney, NS
CANADA B1P 1C6

Report Date: 2022/02/01
Report #: R6985602
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1AF527
Received: 2021/12/08, 10:25

Sample Matrix: Water
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Sulphate (1)	5	N/A	2021/12/16	ATL SOP 00023	ASTM D516-16 m
Sulphate (1)	1	N/A	2021/12/20	ATL SOP 00023	ASTM D516-16 m
Total Dissolved Solids (TDS calc) (1)	6	N/A	2022/01/14	N/A	Auto Calc.
Organic carbon - Total (TOC) (1, 3)	1	N/A	2021/12/14	ATL SOP 00203	SM 23 5310B m
Organic carbon - Total (TOC) (1, 3)	1	N/A	2021/12/16	ATL SOP 00203	SM 23 5310B m
Organic carbon - Total (TOC) (1, 3)	2	N/A	2021/12/17	ATL SOP 00203	SM 23 5310B m
Organic carbon - Total (TOC) (1, 3)	2	N/A	2021/12/20	ATL SOP 00203	SM 23 5310B m
Turbidity (1)	2	N/A	2021/12/15	ATL SOP 00011	EPA 180.1 R2 m
Turbidity (1)	4	N/A	2021/12/16	ATL SOP 00011	EPA 180.1 R2 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) The APHA Standard Method require pH to be analyzed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the APHA Standard Method holding time.

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Your Project #: 20-2863
Site#: OH PARK / HARBOURSIDE EAST
Site Location: OH PARK / HARBOURSIDE EAST

Attention: Nadine Wambolt

Dillon Consulting Limited
275 Charlotte St
Sydney, NS
CANADA B1P 1C6

Report Date: 2022/02/01
Report #: R6985602
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1AF527
Received: 2021/12/08, 10:25

(3) TOC / DOC present in the sample should be considered as non-purgeable TOC / DOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Natalie MacAskill, Key Account Specialist
Email: Natalie.MacAskill@bureauveritas.com
Phone# (902)567-1255 Ext:17

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Bureau Veritas Job #: C1AF527
Report Date: 2022/02/01

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RMM781			RMM782			RMM783		
Sampling Date		2021/12/07			2021/12/07			2021/12/07		
Sample #		DEC08-14			DEC08-15			DEC08-16		
	UNITS	MCWS-306-MWB	RDL	QC Batch	MCWS-307-MWB	RDL	QC Batch	MCWS-309-MW	RDL	QC Batch
Calculated Parameters										
Anion Sum	me/L	8.11	N/A	7759333	14.8	N/A	7759333	7.16	N/A	7759333
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	230	1.0	7759325	320	1.0	7759325	270	1.0	7759325
Calculated TDS	mg/L	480	1.0	7759338	830	1.0	7759338	400	1.0	7759338
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.3	1.0	7759325	2.6	1.0	7759325	1.7	1.0	7759325
Cation Sum	me/L	8.26	N/A	7759333	14.3	N/A	7759333	6.72	N/A	7759333
Hardness (CaCO3)	mg/L	390	1.0	7759330	250	1.0	7759330	26	1.0	7759330
Ion Balance (% Difference)	%	0.920	N/A	7759331	1.75	N/A	7759331	3.17	N/A	7759331
Langelier Index (@ 20C)	N/A	0.801		7759335	0.822		7759335	-0.374		7759335
Langelier Index (@ 4C)	N/A	0.553		7759337	0.575		7759337	-0.623		7759336
Nitrate (N)	mg/L	<0.050	0.050	7759198	<0.050	0.050	7759198	<0.050	0.050	7759198
Saturation pH (@ 20C)	N/A	6.99		7759335	7.11		7759335	8.21		7759335
Saturation pH (@ 4C)	N/A	7.23		7759337	7.35		7759337	8.46		7759336
Inorganics										
Total Alkalinity (Total as CaCO3)	mg/L	230	25	7734731	330	25	7734731	270	25	7734731
Dissolved Chloride (Cl-)	mg/L	9.2	1.0	7734735	230	5.0	7734735	30	1.0	7734735
Colour	TCU	<5.0	5.0	7734730	<5.0	5.0	7734730	19	5.0	7734730
Nitrate + Nitrite (N)	mg/L	<0.050	0.050	7734748	<0.050	0.050	7734748	<0.050	0.050	7734748
Nitrite (N)	mg/L	<0.010	0.010	7734752	<0.010	0.010	7734752	<0.010	0.010	7734752
Nitrogen (Ammonia Nitrogen)	mg/L	0.30	0.050	7762167	0.12	0.050	7762167	1.4	0.050	7762167
Total Organic Carbon (C)	mg/L	2.9	0.50	7757856	1.1	0.50	7734697	13 (1)	5.0	7727070
Orthophosphate (P)	mg/L	<0.010	0.010	7734744	<0.010	0.010	7734744	0.23	0.010	7734744
pH	pH	7.79		7730526	7.93		7730526	7.83		7730526
Reactive Silica (SiO2)	mg/L	15	0.50	7734741	11	0.50	7734741	7.0	0.50	7734741
Dissolved Sulphate (SO4)	mg/L	160	10	7734739	88	2.0	7734739	44	2.0	7734739
Turbidity	NTU	6.3	0.10	7727931	1.9	0.10	7727931	900	1.0	7730654
Conductivity	uS/cm	740	1.0	7730521	1500	1.0	7730521	640	1.0	7730521

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Elevated reporting limit due to turbidity.

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Bureau Veritas Job #: C1AF527
Report Date: 2022/02/01

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RMM784		RMM785		RMM786		
Sampling Date		2021/12/07		2021/12/07		2021/12/07		
Sample #		DEC08-17		DEC08-18		DEC08-19		
	UNITS	MCES-001-MWA	QC Batch	MCES-201-MWB	QC Batch	FD-16	RDL	QC Batch
Calculated Parameters								
Anion Sum	me/L	13.8	7757399	12.3	7757399	12.8	N/A	7757399
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	7757393	<1.0	7757393	<1.0	1.0	7809991
Calculated TDS	mg/L	770	7757403	720	7757403	730	1.0	7757403
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	7757393	<1.0	7757393	<1.0	1.0	7809991
Cation Sum	me/L	14.3	7757399	13.6	7757399	13.4	N/A	7757399
Hardness (CaCO3)	mg/L	610	7759330	550	7759330	540	1.0	7759330
Ion Balance (% Difference)	%	1.60	7757398	4.86	7757398	2.25	N/A	7757398
Langelier Index (@ 20C)	N/A	NC	7757401	NC	7757401	NC		7757401
Langelier Index (@ 4C)	N/A	NC	7757402	NC	7757402	NC		7757402
Nitrate (N)	mg/L	0.11	7759198	<0.050	7759198	<0.050	0.050	7759198
Saturation pH (@ 20C)	N/A	NC	7757401	NC	7757401	NC		7757401
Saturation pH (@ 4C)	N/A	NC	7757402	NC	7757402	NC		7757402
Inorganics								
Total Alkalinity (Total as CaCO3)	mg/L	480	7796055	400	7796055	440	25	7808059
Dissolved Chloride (Cl-)	mg/L	53	7734735	55	7734735	45	1.0	7779091
Colour	TCU	7.3	7734730	<5.0	7734730	<5.0	5.0	7779094
Nitrate + Nitrite (N)	mg/L	0.32	7734748	0.22	7734748	0.16	0.050	7779096
Nitrite (N)	mg/L	0.21	7734752	0.17	7734752	0.24	0.010	7779098
Nitrogen (Ammonia Nitrogen)	mg/L	1.0	7762167	1.1	7762167	1.1	0.050	7762167
Total Organic Carbon (C)	mg/L	2.9	7757856	2.6	7734697	2.8	0.50	7727070
Orthophosphate (P)	mg/L	<0.010	7734744	<0.010	7734744	<0.010	0.010	7779095
pH	pH	12.1 (1)	7730526	12.1 (1)	7730526	12.1 (1)		7730526
Reactive Silica (SiO2)	mg/L	2.9	7734741	3.4	7734741	3.7	0.50	7779093
Dissolved Sulphate (SO4)	mg/L	130	7734739	130	7734739	140	10	7779092
Turbidity	NTU	0.73	7730654	17	7730654	15	0.10	7731444
Conductivity	uS/cm	2200	7730521	2300	7730521	2300	1.0	7730521

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) pH: linear range exceedance. Extended linearity confirmed.

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Bureau Veritas Job #: C1AF527
Report Date: 2022/02/01

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

MERCURY BY COLD VAPOUR AA (WATER)

Bureau Veritas ID		RMM781	RMM782	RMM783	RMM784		
Sampling Date		2021/12/07	2021/12/07	2021/12/07	2021/12/07		
Sample #		DEC08-14	DEC08-15	DEC08-16	DEC08-17		
	UNITS	MCWS-306-MWB	MCWS-307-MWB	MCWS-309-MW	MCES-001-MWA	RDL	QC Batch
Metals							
Total Mercury (Hg)	ug/L	<0.013 (1)	<0.013 (1)	0.030 (1)	<0.013 (1)	0.013	7763835

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Mercury analyzed past recommended hold time.

Bureau Veritas ID		RMM785	RMM786		
Sampling Date		2021/12/07	2021/12/07		
Sample #		DEC08-18	DEC08-19		
	UNITS	MCES-201-MWB	FD-16	RDL	QC Batch
Metals					
Total Mercury (Hg)	ug/L	<0.013 (1)	<0.013 (1)	0.013	7766085

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Mercury analyzed past recommended hold time.

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Bureau Veritas Job #: C1AF527
Report Date: 2022/02/01

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

ELEMENTS BY ICP/MS (WATER)

Bureau Veritas ID		RMM781		RMM782		RMM783	RMM784		
Sampling Date		2021/12/07		2021/12/07		2021/12/07	2021/12/07		
Sample #		DEC08-14		DEC08-15		DEC08-16	DEC08-17		
	UNITS	MCWS-306-MWB	QC Batch	MCWS-307-MWB	QC Batch	MCWS-309-MW	MCES-001-MWA	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	ug/L	9.6	7761164	<5.0	7761186	83	69	5.0	7761181
Dissolved Antimony (Sb)	ug/L	<1.0	7761164	<1.0	7761186	<1.0	<1.0	1.0	7761181
Dissolved Arsenic (As)	ug/L	1.5	7761164	1.0	7761186	6.3	<1.0	1.0	7761181
Dissolved Barium (Ba)	ug/L	52	7761164	34	7761186	13	150	1.0	7761181
Dissolved Beryllium (Be)	ug/L	<0.10	7761164	<0.10	7761186	<0.10	<0.10	0.10	7761181
Dissolved Bismuth (Bi)	ug/L	<2.0	7761164	<2.0	7761186	<2.0	<2.0	2.0	7761181
Dissolved Boron (B)	ug/L	91	7761164	120	7761186	310	<50	50	7761181
Dissolved Cadmium (Cd)	ug/L	0.091	7761164	<0.010	7761186	0.061	<0.010	0.010	7761181
Dissolved Calcium (Ca)	ug/L	130000	7761164	82000	7761186	6500	250000	100	7761181
Dissolved Chromium (Cr)	ug/L	<1.0	7761164	<1.0	7761186	<1.0	4.6	1.0	7761181
Dissolved Cobalt (Co)	ug/L	1.1	7761164	<0.40	7761186	<0.40	<0.40	0.40	7761181
Dissolved Copper (Cu)	ug/L	<0.50	7761164	<0.50	7761186	0.61	5.5	0.50	7761181
Dissolved Iron (Fe)	ug/L	1200	7761164	160	7761186	170	<50	50	7761181
Dissolved Lead (Pb)	ug/L	<0.50	7761164	<0.50	7761186	0.56	2.8	0.50	7761181
Dissolved Magnesium (Mg)	ug/L	14000	7761164	12000	7761186	2500	<100	100	7761181
Dissolved Manganese (Mn)	ug/L	4300	7761164	150	7761186	1200	23	2.0	7761181
Dissolved Molybdenum (Mo)	ug/L	4.9	7761164	<2.0	7761186	2.1	8.8	2.0	7761181
Dissolved Nickel (Ni)	ug/L	3.4	7761164	<2.0	7761186	<2.0	<2.0	2.0	7761181
Dissolved Phosphorus (P)	ug/L	<100	7761164	<100	7761186	340	<100	100	7761181
Dissolved Potassium (K)	ug/L	4200	7761164	2200	7761186	8700	15000	100	7761181
Dissolved Selenium (Se)	ug/L	<0.50	7761164	<0.50	7761186	<0.50	1.7	0.50	7761181
Dissolved Silver (Ag)	ug/L	<0.10	7761164	<0.10	7761186	<0.10	<0.10	0.10	7761181
Dissolved Sodium (Na)	ug/L	7700	7761164	210000	7761186	130000	35000	100	7761181
Dissolved Strontium (Sr)	ug/L	410	7761164	350	7761186	27	1200	2.0	7761181
Dissolved Thallium (Tl)	ug/L	<0.10	7761164	<0.10	7761186	<0.10	<0.10	0.10	7761181
Dissolved Tin (Sn)	ug/L	<2.0	7761164	<2.0	7761186	<2.0	<2.0	2.0	7761181
Dissolved Titanium (Ti)	ug/L	<2.0	7761164	<2.0	7761186	<2.0	<2.0	2.0	7761181
Dissolved Uranium (U)	ug/L	0.94	7761164	1.2	7761186	0.19	<0.10	0.10	7761181
Dissolved Vanadium (V)	ug/L	<2.0	7761164	<2.0	7761186	<2.0	17	2.0	7761181
Dissolved Zinc (Zn)	ug/L	85	7761164	<5.0	7761186	<5.0	<5.0	5.0	7761181

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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ELEMENTS BY ICP/MS (WATER)

Bureau Veritas ID		RMM785	RMM786		
Sampling Date		2021/12/07	2021/12/07		
Sample #		DEC08-18	DEC08-19		
	UNITS	MCES-201-MWB	FD-16	RDL	QC Batch
Metals					
Dissolved Aluminum (Al)	ug/L	46	45	5.0	7761181
Dissolved Antimony (Sb)	ug/L	<1.0	<1.0	1.0	7761181
Dissolved Arsenic (As)	ug/L	<1.0	<1.0	1.0	7761181
Dissolved Barium (Ba)	ug/L	120	120	1.0	7761181
Dissolved Beryllium (Be)	ug/L	<0.10	<0.10	0.10	7761181
Dissolved Bismuth (Bi)	ug/L	<2.0	<2.0	2.0	7761181
Dissolved Boron (B)	ug/L	<50	<50	50	7761181
Dissolved Cadmium (Cd)	ug/L	<0.010	<0.010	0.010	7761181
Dissolved Calcium (Ca)	ug/L	220000	220000	100	7761181
Dissolved Chromium (Cr)	ug/L	2.3	2.1	1.0	7761181
Dissolved Cobalt (Co)	ug/L	<0.40	<0.40	0.40	7761181
Dissolved Copper (Cu)	ug/L	3.5	3.5	0.50	7761181
Dissolved Iron (Fe)	ug/L	<50	<50	50	7761181
Dissolved Lead (Pb)	ug/L	<0.50	<0.50	0.50	7761181
Dissolved Magnesium (Mg)	ug/L	<100	<100	100	7761181
Dissolved Manganese (Mn)	ug/L	<2.0	<2.0	2.0	7761181
Dissolved Molybdenum (Mo)	ug/L	9.3	9.1	2.0	7761181
Dissolved Nickel (Ni)	ug/L	<2.0	<2.0	2.0	7761181
Dissolved Phosphorus (P)	ug/L	<100	<100	100	7761181
Dissolved Potassium (K)	ug/L	14000	14000	100	7761181
Dissolved Selenium (Se)	ug/L	1.6	1.6	0.50	7761181
Dissolved Silver (Ag)	ug/L	<0.10	<0.10	0.10	7761181
Dissolved Sodium (Na)	ug/L	48000	50000	100	7761181
Dissolved Strontium (Sr)	ug/L	1100	1100	2.0	7761181
Dissolved Thallium (Tl)	ug/L	<0.10	<0.10	0.10	7761181
Dissolved Tin (Sn)	ug/L	<2.0	<2.0	2.0	7761181
Dissolved Titanium (Ti)	ug/L	<2.0	<2.0	2.0	7761181
Dissolved Uranium (U)	ug/L	<0.10	<0.10	0.10	7761181
Dissolved Vanadium (V)	ug/L	25	25	2.0	7761181
Dissolved Zinc (Zn)	ug/L	<5.0	<5.0	5.0	7761181

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas Job #: C1AF527
Report Date: 2022/02/01

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID		RMM781	RMM782	RMM783	RMM784	RMM785		
Sampling Date		2021/12/07	2021/12/07	2021/12/07	2021/12/07	2021/12/07		
Sample #		DEC08-14	DEC08-15	DEC08-16	DEC08-17	DEC08-18		
	UNITS	MCWS-306-MWB	MCWS-307-MWB	MCWS-309-MW	MCES-001-MWA	MCES-201-MWB	RDL	QC Batch
Polyaromatic Hydrocarbons								
1-Methylnaphthalene	ug/L	<0.050	<0.050	<0.050	0.081	<0.050	0.050	7759647
2-Methylnaphthalene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	7759647
Acenaphthene	ug/L	0.34	<0.010	0.015	0.032	0.012	0.010	7759647
Acenaphthylene	ug/L	0.27	<0.010	0.076	0.047	0.019	0.010	7759647
Anthracene	ug/L	0.050	<0.010	0.13	<0.010	<0.010	0.010	7759647
Benzo(a)anthracene	ug/L	0.014	<0.010	0.31	<0.010	<0.010	0.010	7759647
Benzo(a)pyrene	ug/L	<0.010	<0.010	0.31	<0.010	<0.010	0.010	7759647
Benzo(b)fluoranthene	ug/L	<0.010	<0.010	0.23	<0.010	<0.010	0.010	7759647
Benzo(b/j)fluoranthene	ug/L	<0.020	<0.020	0.39	<0.020	<0.020	0.020	7757297
Benzo(g,h,i)perylene	ug/L	<0.010	<0.010	0.18	<0.010	<0.010	0.010	7759647
Benzo(j)fluoranthene	ug/L	<0.010	<0.010	0.16	<0.010	<0.010	0.010	7759647
Benzo(k)fluoranthene	ug/L	<0.010	<0.010	0.15	<0.010	<0.010	0.010	7759647
Chrysene	ug/L	0.019	<0.010	0.34	0.011	<0.010	0.010	7759647
Dibenzo(a,h)anthracene	ug/L	<0.010	<0.010	0.052	<0.010	<0.010	0.010	7759647
Fluoranthene	ug/L	0.54	<0.010	0.87	0.068	0.039	0.010	7759647
Fluorene	ug/L	0.14	<0.010	0.090	0.050	0.011	0.010	7759647
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	<0.010	0.17	<0.010	<0.010	0.010	7759647
Naphthalene	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	7759647
Perylene	ug/L	<0.010	<0.010	0.088	<0.010	<0.010	0.010	7759647
Phenanthrene	ug/L	0.025	<0.010	0.44	0.026	0.017	0.010	7759647
Pyrene	ug/L	0.35	<0.010	0.68	0.13	0.078	0.010	7759647
Surrogate Recovery (%)								
D10-Anthracene	%	113	96	94	92	106		7759647
D14-Terphenyl	%	107	97	93 (1)	92	101		7759647
D8-Acenaphthylene	%	108	101	91	97	107		7759647

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) PAH sample contained sediment.

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SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID		RMM786		
Sampling Date		2021/12/07		
Sample #		DEC08-19		
	UNITS	FD-16	RDL	QC Batch
Polyaromatic Hydrocarbons				
1-Methylnaphthalene	ug/L	<0.050	0.050	7759647
2-Methylnaphthalene	ug/L	<0.050	0.050	7759647
Acenaphthene	ug/L	0.011	0.010	7759647
Acenaphthylene	ug/L	0.018	0.010	7759647
Anthracene	ug/L	<0.010	0.010	7759647
Benzo(a)anthracene	ug/L	<0.010	0.010	7759647
Benzo(a)pyrene	ug/L	<0.010	0.010	7759647
Benzo(b)fluoranthene	ug/L	<0.010	0.010	7759647
Benzo(b/j)fluoranthene	ug/L	<0.020	0.020	7757297
Benzo(g,h,i)perylene	ug/L	<0.010	0.010	7759647
Benzo(j)fluoranthene	ug/L	<0.010	0.010	7759647
Benzo(k)fluoranthene	ug/L	<0.010	0.010	7759647
Chrysene	ug/L	<0.010	0.010	7759647
Dibenzo(a,h)anthracene	ug/L	<0.010	0.010	7759647
Fluoranthene	ug/L	0.038	0.010	7759647
Fluorene	ug/L	0.011	0.010	7759647
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	0.010	7759647
Naphthalene	ug/L	<0.20	0.20	7759647
Perylene	ug/L	<0.010	0.010	7759647
Phenanthrene	ug/L	0.016	0.010	7759647
Pyrene	ug/L	0.077	0.010	7759647
Surrogate Recovery (%)				
D10-Anthracene	%	96		7759647
D14-Terphenyl	%	95		7759647
D8-Acenaphthylene	%	100		7759647

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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GENERAL COMMENTS

Sample RMM786 [FD-16] : NOX < NO2 : Both values fall within the method uncertainty for duplicates and are likely equivalent.
Poor RCAp Ion Balance due to sample matrix.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7727070	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/16		99	%	85 - 115
7727070	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/16		102	%	80 - 120
7727070	NGI	Method Blank	Total Organic Carbon (C)	2021/12/16	<0.50		mg/L	
7727070	NGI	RPD	Total Organic Carbon (C)	2021/12/16	NC (1)		%	15
7727931	SHW	QC Standard	Turbidity	2021/12/15		101	%	80 - 120
7727931	SHW	Spiked Blank	Turbidity	2021/12/15		104	%	80 - 120
7727931	SHW	Method Blank	Turbidity	2021/12/15	<0.10		NTU	
7727931	SHW	RPD	Turbidity	2021/12/15	NC		%	20
7730521	SHW	Spiked Blank	Conductivity	2021/12/16		100	%	80 - 120
7730521	SHW	Method Blank	Conductivity	2021/12/16	1.5, RDL=1.0		uS/cm	
7730521	SHW	RPD	Conductivity	2021/12/16	0.85		%	10
7730526	SHW	Spiked Blank	pH	2021/12/16		100	%	97 - 103
7730526	SHW	RPD	pH	2021/12/16	0.26		%	N/A
7730654	SHW	QC Standard	Turbidity	2021/12/16		102	%	80 - 120
7730654	SHW	Spiked Blank	Turbidity	2021/12/16		105	%	80 - 120
7730654	SHW	Method Blank	Turbidity	2021/12/16	<0.10		NTU	
7730654	SHW	RPD	Turbidity	2021/12/16	2.9		%	20
7731444	SHW	QC Standard	Turbidity	2021/12/16		102	%	80 - 120
7731444	SHW	Spiked Blank	Turbidity	2021/12/16		105	%	80 - 120
7731444	SHW	Method Blank	Turbidity	2021/12/16	<0.10		NTU	
7731444	SHW	RPD	Turbidity	2021/12/16	2.3		%	20
7734697	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/20		96	%	85 - 115
7734697	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/20		96	%	80 - 120
7734697	NGI	Method Blank	Total Organic Carbon (C)	2021/12/20	<0.50		mg/L	
7734697	NGI	RPD	Total Organic Carbon (C)	2021/12/20	0.045		%	15
7734730	EMT	Spiked Blank	Colour	2021/12/16		106	%	80 - 120
7734730	EMT	Method Blank	Colour	2021/12/16	<5.0		TCU	
7734730	EMT	RPD	Colour	2021/12/16	0.85		%	20
7734731	EMT	Matrix Spike	Total Alkalinity (Total as CaCO3)	2021/12/16		99	%	80 - 120
7734731	EMT	Spiked Blank	Total Alkalinity (Total as CaCO3)	2021/12/16		98	%	80 - 120
7734731	EMT	Method Blank	Total Alkalinity (Total as CaCO3)	2021/12/16	<5.0		mg/L	
7734731	EMT	RPD	Total Alkalinity (Total as CaCO3)	2021/12/16	1.2		%	20
7734735	EMT	Matrix Spike	Dissolved Chloride (Cl-)	2021/12/16		87	%	80 - 120
7734735	EMT	Spiked Blank	Dissolved Chloride (Cl-)	2021/12/16		96	%	80 - 120
7734735	EMT	Method Blank	Dissolved Chloride (Cl-)	2021/12/16	<1.0		mg/L	
7734735	EMT	RPD	Dissolved Chloride (Cl-)	2021/12/16	2.1		%	20
7734739	EMT	Matrix Spike	Dissolved Sulphate (SO4)	2021/12/16		106	%	80 - 120
7734739	EMT	Spiked Blank	Dissolved Sulphate (SO4)	2021/12/16		93	%	80 - 120
7734739	EMT	Method Blank	Dissolved Sulphate (SO4)	2021/12/16	<2.0		mg/L	
7734739	EMT	RPD	Dissolved Sulphate (SO4)	2021/12/16	0.052		%	20
7734741	EMT	Matrix Spike	Reactive Silica (SiO2)	2021/12/16		91	%	80 - 120
7734741	EMT	Spiked Blank	Reactive Silica (SiO2)	2021/12/16		95	%	80 - 120
7734741	EMT	Method Blank	Reactive Silica (SiO2)	2021/12/16	<0.50		mg/L	
7734741	EMT	RPD	Reactive Silica (SiO2)	2021/12/16	0.028		%	20
7734744	EMT	Matrix Spike	Orthophosphate (P)	2021/12/16		95	%	80 - 120
7734744	EMT	Spiked Blank	Orthophosphate (P)	2021/12/16		101	%	80 - 120
7734744	EMT	Method Blank	Orthophosphate (P)	2021/12/16	<0.010		mg/L	
7734744	EMT	RPD	Orthophosphate (P)	2021/12/16	NC		%	20
7734748	EMT	Matrix Spike	Nitrate + Nitrite (N)	2021/12/16		46 (2)	%	80 - 120
7734748	EMT	Spiked Blank	Nitrate + Nitrite (N)	2021/12/16		104	%	80 - 120
7734748	EMT	Method Blank	Nitrate + Nitrite (N)	2021/12/16	<0.050		mg/L	
7734748	EMT	RPD	Nitrate + Nitrite (N)	2021/12/16	NC		%	20

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7734752	EMT	Matrix Spike	Nitrite (N)	2021/12/16		87	%	80 - 120
7734752	EMT	Spiked Blank	Nitrite (N)	2021/12/16		101	%	80 - 120
7734752	EMT	Method Blank	Nitrite (N)	2021/12/16	<0.010		mg/L	
7734752	EMT	RPD	Nitrite (N)	2021/12/16	NC		%	20
7757856	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/17		98	%	85 - 115
7757856	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/17		100	%	80 - 120
7757856	NGI	Method Blank	Total Organic Carbon (C)	2021/12/17	<0.50		mg/L	
7757856	NGI	RPD	Total Organic Carbon (C)	2021/12/17	11		%	15
7759647	LGE	Matrix Spike	D10-Anthracene	2021/12/28		100	%	50 - 130
			D14-Terphenyl	2021/12/28		102	%	50 - 130
			D8-Acenaphthylene	2021/12/28		100	%	50 - 130
			1-Methylnaphthalene	2021/12/28		94	%	50 - 130
			2-Methylnaphthalene	2021/12/28		97	%	50 - 130
			Acenaphthene	2021/12/28		102	%	50 - 130
			Acenaphthylene	2021/12/28		93	%	50 - 130
			Anthracene	2021/12/28		97	%	50 - 130
			Benzo(a)anthracene	2021/12/28		87	%	50 - 130
			Benzo(a)pyrene	2021/12/28		95	%	50 - 130
			Benzo(b)fluoranthene	2021/12/28		97	%	50 - 130
			Benzo(g,h,i)perylene	2021/12/28		99	%	50 - 130
			Benzo(j)fluoranthene	2021/12/28		100	%	50 - 130
			Benzo(k)fluoranthene	2021/12/28		100	%	50 - 130
			Chrysene	2021/12/28		104	%	50 - 130
			Dibenzo(a,h)anthracene	2021/12/28		94	%	50 - 130
			Fluoranthene	2021/12/28		96	%	50 - 130
			Fluorene	2021/12/28		100	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2021/12/28		94	%	50 - 130
			Naphthalene	2021/12/28		101	%	50 - 130
			Perylene	2021/12/28		99	%	50 - 130
			Phenanthrene	2021/12/28		105	%	50 - 130
			Pyrene	2021/12/28		99	%	50 - 130
7759647	LGE	Spiked Blank	D10-Anthracene	2021/12/28		97	%	50 - 130
			D14-Terphenyl	2021/12/28		96	%	50 - 130
			D8-Acenaphthylene	2021/12/28		95	%	50 - 130
			1-Methylnaphthalene	2021/12/28		93	%	50 - 130
			2-Methylnaphthalene	2021/12/28		95	%	50 - 130
			Acenaphthene	2021/12/28		101	%	50 - 130
			Acenaphthylene	2021/12/28		90	%	50 - 130
			Anthracene	2021/12/28		94	%	50 - 130
			Benzo(a)anthracene	2021/12/28		85	%	50 - 130
			Benzo(a)pyrene	2021/12/28		93	%	50 - 130
			Benzo(b)fluoranthene	2021/12/28		97	%	50 - 130
			Benzo(g,h,i)perylene	2021/12/28		92	%	50 - 130
			Benzo(j)fluoranthene	2021/12/28		97	%	50 - 130
			Benzo(k)fluoranthene	2021/12/28		93	%	50 - 130
			Chrysene	2021/12/28		101	%	50 - 130
			Dibenzo(a,h)anthracene	2021/12/28		80	%	50 - 130
			Fluoranthene	2021/12/28		94	%	50 - 130
			Fluorene	2021/12/28		97	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2021/12/28		87	%	50 - 130
			Naphthalene	2021/12/28		99	%	50 - 130
			Perylene	2021/12/28		97	%	50 - 130
			Phenanthrene	2021/12/28		104	%	50 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Pyrene	2021/12/28		96	%	50 - 130
7759647	LGE	Method Blank	D10-Anthracene	2021/12/28		106	%	50 - 130
			D14-Terphenyl	2021/12/28		108	%	50 - 130
			D8-Acenaphthylene	2021/12/28		103	%	50 - 130
			1-Methylnaphthalene	2021/12/28	<0.050		ug/L	
			2-Methylnaphthalene	2021/12/28	<0.050		ug/L	
			Acenaphthene	2021/12/28	<0.010		ug/L	
			Acenaphthylene	2021/12/28	<0.010		ug/L	
			Anthracene	2021/12/28	<0.010		ug/L	
			Benzo(a)anthracene	2021/12/28	<0.010		ug/L	
			Benzo(a)pyrene	2021/12/28	<0.010		ug/L	
			Benzo(b)fluoranthene	2021/12/28	<0.010		ug/L	
			Benzo(g,h,i)perylene	2021/12/28	<0.010		ug/L	
			Benzo(j)fluoranthene	2021/12/28	<0.010		ug/L	
			Benzo(k)fluoranthene	2021/12/28	<0.010		ug/L	
			Chrysene	2021/12/28	<0.010		ug/L	
			Dibenzo(a,h)anthracene	2021/12/28	<0.010		ug/L	
			Fluoranthene	2021/12/28	<0.010		ug/L	
			Fluorene	2021/12/28	<0.010		ug/L	
			Indeno(1,2,3-cd)pyrene	2021/12/28	<0.010		ug/L	
			Naphthalene	2021/12/28	<0.20		ug/L	
			Perylene	2021/12/28	<0.010		ug/L	
			Phenanthrene	2021/12/28	<0.010		ug/L	
			Pyrene	2021/12/28	<0.010		ug/L	
7759647	LGE	RPD	1-Methylnaphthalene	2021/12/28	NC		%	40
			2-Methylnaphthalene	2021/12/28	NC		%	40
			Acenaphthene	2021/12/28	NC		%	40
			Acenaphthylene	2021/12/28	NC		%	40
			Anthracene	2021/12/28	NC		%	40
			Benzo(a)anthracene	2021/12/28	NC		%	40
			Benzo(a)pyrene	2021/12/28	NC		%	40
			Benzo(b)fluoranthene	2021/12/28	NC		%	40
			Benzo(g,h,i)perylene	2021/12/28	NC		%	40
			Benzo(j)fluoranthene	2021/12/28	NC		%	40
			Benzo(k)fluoranthene	2021/12/28	NC		%	40
			Chrysene	2021/12/28	NC		%	40
			Dibenzo(a,h)anthracene	2021/12/28	NC		%	40
			Fluoranthene	2021/12/28	NC		%	40
			Fluorene	2021/12/28	NC		%	40
			Indeno(1,2,3-cd)pyrene	2021/12/28	NC		%	40
			Naphthalene	2021/12/28	NC		%	40
			Perylene	2021/12/28	NC		%	40
			Phenanthrene	2021/12/28	NC		%	40
			Pyrene	2021/12/28	NC		%	40
7761164	BAN	Matrix Spike	Dissolved Aluminum (Al)	2021/12/31		102	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/31		102	%	80 - 120
			Dissolved Arsenic (As)	2021/12/31		100	%	80 - 120
			Dissolved Barium (Ba)	2021/12/31		104	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/31		103	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/31		101	%	80 - 120
			Dissolved Boron (B)	2021/12/31		96	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/31		102	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/31		102	%	80 - 120

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Chromium (Cr)	2021/12/31		102	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/31		102	%	80 - 120
			Dissolved Copper (Cu)	2021/12/31		103	%	80 - 120
			Dissolved Iron (Fe)	2021/12/31		99	%	80 - 120
			Dissolved Lead (Pb)	2021/12/31		106	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/31		105	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/31		104	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/31		103	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/31		105	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/31		107	%	80 - 120
			Dissolved Potassium (K)	2021/12/31		103	%	80 - 120
			Dissolved Selenium (Se)	2021/12/31		104	%	80 - 120
			Dissolved Silver (Ag)	2021/12/31		103	%	80 - 120
			Dissolved Sodium (Na)	2021/12/31		105	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/31		103	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/31		101	%	80 - 120
			Dissolved Tin (Sn)	2021/12/31		102	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/31		108	%	80 - 120
			Dissolved Uranium (U)	2021/12/31		107	%	80 - 120
			Dissolved Vanadium (V)	2021/12/31		107	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/31		103	%	80 - 120
7761164	BAN	Spiked Blank	Dissolved Aluminum (Al)	2021/12/31		104	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/31		101	%	80 - 120
			Dissolved Arsenic (As)	2021/12/31		97	%	80 - 120
			Dissolved Barium (Ba)	2021/12/31		100	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/31		100	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/31		99	%	80 - 120
			Dissolved Boron (B)	2021/12/31		98	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/31		101	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/31		103	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/31		100	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/31		100	%	80 - 120
			Dissolved Copper (Cu)	2021/12/31		102	%	80 - 120
			Dissolved Iron (Fe)	2021/12/31		103	%	80 - 120
			Dissolved Lead (Pb)	2021/12/31		102	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/31		105	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/31		104	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/31		103	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/31		102	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/31		105	%	80 - 120
			Dissolved Potassium (K)	2021/12/31		102	%	80 - 120
			Dissolved Selenium (Se)	2021/12/31		101	%	80 - 120
			Dissolved Silver (Ag)	2021/12/31		100	%	80 - 120
			Dissolved Sodium (Na)	2021/12/31		102	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/31		102	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/31		99	%	80 - 120
			Dissolved Tin (Sn)	2021/12/31		101	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/31		104	%	80 - 120
			Dissolved Uranium (U)	2021/12/31		103	%	80 - 120
			Dissolved Vanadium (V)	2021/12/31		103	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/31		101	%	80 - 120
7761164	BAN	Method Blank	Dissolved Aluminum (Al)	2021/12/31	<5.0		ug/L	
			Dissolved Antimony (Sb)	2021/12/31	<1.0		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Arsenic (As)	2021/12/31	<1.0		ug/L	
			Dissolved Barium (Ba)	2021/12/31	<1.0		ug/L	
			Dissolved Beryllium (Be)	2021/12/31	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2021/12/31	<2.0		ug/L	
			Dissolved Boron (B)	2021/12/31	<50		ug/L	
			Dissolved Cadmium (Cd)	2021/12/31	<0.010		ug/L	
			Dissolved Calcium (Ca)	2021/12/31	<100		ug/L	
			Dissolved Chromium (Cr)	2021/12/31	<1.0		ug/L	
			Dissolved Cobalt (Co)	2021/12/31	<0.40		ug/L	
			Dissolved Copper (Cu)	2021/12/31	<0.50		ug/L	
			Dissolved Iron (Fe)	2021/12/31	<50		ug/L	
			Dissolved Lead (Pb)	2021/12/31	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2021/12/31	<100		ug/L	
			Dissolved Manganese (Mn)	2021/12/31	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2021/12/31	<2.0		ug/L	
			Dissolved Nickel (Ni)	2021/12/31	<2.0		ug/L	
			Dissolved Phosphorus (P)	2021/12/31	<100		ug/L	
			Dissolved Potassium (K)	2021/12/31	<100		ug/L	
			Dissolved Selenium (Se)	2021/12/31	<0.50		ug/L	
			Dissolved Silver (Ag)	2021/12/31	<0.10		ug/L	
			Dissolved Sodium (Na)	2021/12/31	<100		ug/L	
			Dissolved Strontium (Sr)	2021/12/31	<2.0		ug/L	
			Dissolved Thallium (Tl)	2021/12/31	<0.10		ug/L	
			Dissolved Tin (Sn)	2021/12/31	<2.0		ug/L	
			Dissolved Titanium (Ti)	2021/12/31	<2.0		ug/L	
			Dissolved Uranium (U)	2021/12/31	<0.10		ug/L	
			Dissolved Vanadium (V)	2021/12/31	<2.0		ug/L	
			Dissolved Zinc (Zn)	2021/12/31	<5.0		ug/L	
7761164	BAN	RPD	Dissolved Aluminum (Al)	2022/01/05	5.2		%	20
			Dissolved Antimony (Sb)	2022/01/05	NC		%	20
			Dissolved Arsenic (As)	2022/01/05	NC		%	20
			Dissolved Barium (Ba)	2022/01/05	0.88		%	20
			Dissolved Beryllium (Be)	2022/01/05	NC		%	20
			Dissolved Bismuth (Bi)	2022/01/05	NC		%	20
			Dissolved Boron (B)	2022/01/05	NC		%	20
			Dissolved Cadmium (Cd)	2022/01/05	8.8		%	20
			Dissolved Calcium (Ca)	2022/01/05	0.51		%	20
			Dissolved Chromium (Cr)	2022/01/05	NC		%	20
			Dissolved Cobalt (Co)	2022/01/05	3.7		%	20
			Dissolved Iron (Fe)	2022/01/05	0.42		%	20
			Dissolved Lead (Pb)	2022/01/05	NC		%	20
			Dissolved Magnesium (Mg)	2022/01/05	0.34		%	20
			Dissolved Manganese (Mn)	2022/01/05	0.044		%	20
			Dissolved Molybdenum (Mo)	2022/01/05	NC		%	20
			Dissolved Nickel (Ni)	2022/01/05	2.7		%	20
			Dissolved Phosphorus (P)	2022/01/05	NC		%	20
			Dissolved Potassium (K)	2022/01/05	0.82		%	20
			Dissolved Selenium (Se)	2022/01/05	NC		%	20
			Dissolved Silver (Ag)	2022/01/05	NC		%	20
			Dissolved Sodium (Na)	2022/01/05	1.7		%	20
			Dissolved Strontium (Sr)	2022/01/05	2.6		%	20
			Dissolved Thallium (Tl)	2022/01/05	NC		%	20
			Dissolved Tin (Sn)	2022/01/05	NC		%	20

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Titanium (Ti)	2022/01/05	NC		%	20
			Dissolved Uranium (U)	2022/01/05	NC		%	20
			Dissolved Vanadium (V)	2022/01/05	NC		%	20
			Dissolved Zinc (Zn)	2022/01/05	5.1		%	20
7761181	BAN	Matrix Spike	Dissolved Aluminum (Al)	2021/12/31		101	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/31		101	%	80 - 120
			Dissolved Arsenic (As)	2021/12/31		99	%	80 - 120
			Dissolved Barium (Ba)	2021/12/31		106	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/31		100	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/31		96	%	80 - 120
			Dissolved Boron (B)	2021/12/31		94	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/31		101	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/31		NC	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/31		98	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/31		98	%	80 - 120
			Dissolved Copper (Cu)	2021/12/31		98	%	80 - 120
			Dissolved Iron (Fe)	2021/12/31		100	%	80 - 120
			Dissolved Lead (Pb)	2021/12/31		100	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/31		97	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/31		101	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/31		104	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/31		98	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/31		105	%	80 - 120
			Dissolved Potassium (K)	2021/12/31		100	%	80 - 120
			Dissolved Selenium (Se)	2021/12/31		101	%	80 - 120
			Dissolved Silver (Ag)	2021/12/31		99	%	80 - 120
			Dissolved Sodium (Na)	2021/12/31		NC	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/31		NC	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/31		99	%	80 - 120
			Dissolved Tin (Sn)	2021/12/31		101	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/31		102	%	80 - 120
			Dissolved Uranium (U)	2021/12/31		104	%	80 - 120
			Dissolved Vanadium (V)	2021/12/31		102	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/31		99	%	80 - 120
7761181	BAN	Spiked Blank	Dissolved Aluminum (Al)	2021/12/31		104	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/31		100	%	80 - 120
			Dissolved Arsenic (As)	2021/12/31		97	%	80 - 120
			Dissolved Barium (Ba)	2021/12/31		100	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/31		98	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/31		98	%	80 - 120
			Dissolved Boron (B)	2021/12/31		94	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/31		100	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/31		100	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/31		99	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/31		99	%	80 - 120
			Dissolved Copper (Cu)	2021/12/31		100	%	80 - 120
			Dissolved Iron (Fe)	2021/12/31		102	%	80 - 120
			Dissolved Lead (Pb)	2021/12/31		102	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/31		106	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/31		104	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/31		101	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/31		101	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/31		106	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Potassium (K)	2021/12/31		103	%	80 - 120
			Dissolved Selenium (Se)	2021/12/31		99	%	80 - 120
			Dissolved Silver (Ag)	2021/12/31		98	%	80 - 120
			Dissolved Sodium (Na)	2021/12/31		104	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/31		101	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/31		99	%	80 - 120
			Dissolved Tin (Sn)	2021/12/31		101	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/31		105	%	80 - 120
			Dissolved Uranium (U)	2021/12/31		103	%	80 - 120
			Dissolved Vanadium (V)	2021/12/31		103	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/31		100	%	80 - 120
7761181	BAN	Method Blank	Dissolved Aluminum (Al)	2021/12/31	<5.0		ug/L	
			Dissolved Antimony (Sb)	2021/12/31	<1.0		ug/L	
			Dissolved Arsenic (As)	2021/12/31	<1.0		ug/L	
			Dissolved Barium (Ba)	2021/12/31	<1.0		ug/L	
			Dissolved Beryllium (Be)	2021/12/31	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2021/12/31	<2.0		ug/L	
			Dissolved Boron (B)	2021/12/31	<50		ug/L	
			Dissolved Cadmium (Cd)	2021/12/31	<0.010		ug/L	
			Dissolved Calcium (Ca)	2021/12/31	<100		ug/L	
			Dissolved Chromium (Cr)	2021/12/31	<1.0		ug/L	
			Dissolved Cobalt (Co)	2021/12/31	<0.40		ug/L	
			Dissolved Copper (Cu)	2021/12/31	<0.50		ug/L	
			Dissolved Iron (Fe)	2021/12/31	<50		ug/L	
			Dissolved Lead (Pb)	2021/12/31	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2021/12/31	<100		ug/L	
			Dissolved Manganese (Mn)	2021/12/31	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2021/12/31	<2.0		ug/L	
			Dissolved Nickel (Ni)	2021/12/31	<2.0		ug/L	
			Dissolved Phosphorus (P)	2021/12/31	<100		ug/L	
			Dissolved Potassium (K)	2021/12/31	<100		ug/L	
			Dissolved Selenium (Se)	2021/12/31	<0.50		ug/L	
			Dissolved Silver (Ag)	2021/12/31	<0.10		ug/L	
			Dissolved Sodium (Na)	2021/12/31	<100		ug/L	
			Dissolved Strontium (Sr)	2021/12/31	<2.0		ug/L	
			Dissolved Thallium (Tl)	2021/12/31	<0.10		ug/L	
			Dissolved Tin (Sn)	2021/12/31	<2.0		ug/L	
			Dissolved Titanium (Ti)	2021/12/31	<2.0		ug/L	
			Dissolved Uranium (U)	2021/12/31	<0.10		ug/L	
			Dissolved Vanadium (V)	2021/12/31	<2.0		ug/L	
			Dissolved Zinc (Zn)	2021/12/31	<5.0		ug/L	
7761181	BAN	RPD	Dissolved Aluminum (Al)	2021/12/31	3.4		%	20
			Dissolved Antimony (Sb)	2021/12/31	NC		%	20
			Dissolved Arsenic (As)	2021/12/31	NC		%	20
			Dissolved Barium (Ba)	2021/12/31	0.75		%	20
			Dissolved Beryllium (Be)	2021/12/31	NC		%	20
			Dissolved Bismuth (Bi)	2021/12/31	NC		%	20
			Dissolved Boron (B)	2021/12/31	0.21		%	20
			Dissolved Cadmium (Cd)	2021/12/31	11		%	20
			Dissolved Calcium (Ca)	2021/12/31	0.11		%	20
			Dissolved Chromium (Cr)	2021/12/31	NC		%	20
			Dissolved Cobalt (Co)	2021/12/31	NC		%	20
			Dissolved Copper (Cu)	2021/12/31	NC		%	20

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Iron (Fe)	2021/12/31	NC		%	20
			Dissolved Lead (Pb)	2021/12/31	NC		%	20
			Dissolved Magnesium (Mg)	2021/12/31	0.44		%	20
			Dissolved Manganese (Mn)	2021/12/31	NC		%	20
			Dissolved Molybdenum (Mo)	2021/12/31	NC		%	20
			Dissolved Nickel (Ni)	2021/12/31	NC		%	20
			Dissolved Phosphorus (P)	2021/12/31	NC		%	20
			Dissolved Potassium (K)	2021/12/31	0.95		%	20
			Dissolved Selenium (Se)	2021/12/31	NC		%	20
			Dissolved Silver (Ag)	2021/12/31	NC		%	20
			Dissolved Sodium (Na)	2021/12/31	0.71		%	20
			Dissolved Strontium (Sr)	2021/12/31	0.39		%	20
			Dissolved Thallium (Tl)	2021/12/31	NC		%	20
			Dissolved Tin (Sn)	2021/12/31	NC		%	20
			Dissolved Titanium (Ti)	2021/12/31	NC		%	20
			Dissolved Uranium (U)	2021/12/31	1.4		%	20
			Dissolved Vanadium (V)	2021/12/31	NC		%	20
			Dissolved Zinc (Zn)	2021/12/31	NC		%	20
7761186	BAN	Matrix Spike [RMM782-02]	Dissolved Aluminum (Al)	2021/12/31		98	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/31		104	%	80 - 120
			Dissolved Arsenic (As)	2021/12/31		96	%	80 - 120
			Dissolved Barium (Ba)	2021/12/31		97	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/31		98	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/31		94	%	80 - 120
			Dissolved Boron (B)	2021/12/31		95	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/31		99	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/31		NC	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/31		95	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/31		95	%	80 - 120
			Dissolved Copper (Cu)	2021/12/31		94	%	80 - 120
			Dissolved Iron (Fe)	2021/12/31		97	%	80 - 120
			Dissolved Lead (Pb)	2021/12/31		96	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/31		NC	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/31		NC	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/31		102	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/31		95	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/31		103	%	80 - 120
			Dissolved Potassium (K)	2021/12/31		98	%	80 - 120
			Dissolved Selenium (Se)	2021/12/31		97	%	80 - 120
			Dissolved Silver (Ag)	2021/12/31		89	%	80 - 120
			Dissolved Sodium (Na)	2021/12/31		NC	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/31		NC	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/31		96	%	80 - 120
			Dissolved Tin (Sn)	2021/12/31		103	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/31		100	%	80 - 120
			Dissolved Uranium (U)	2021/12/31		101	%	80 - 120
			Dissolved Vanadium (V)	2021/12/31		100	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/31		95	%	80 - 120
7761186	BAN	Spiked Blank	Dissolved Aluminum (Al)	2021/12/31		100	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/31		100	%	80 - 120
			Dissolved Arsenic (As)	2021/12/31		94	%	80 - 120
			Dissolved Barium (Ba)	2021/12/31		99	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Beryllium (Be)	2021/12/31		97	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/31		99	%	80 - 120
			Dissolved Boron (B)	2021/12/31		94	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/31		98	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/31		100	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/31		97	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/31		98	%	80 - 120
			Dissolved Copper (Cu)	2021/12/31		98	%	80 - 120
			Dissolved Iron (Fe)	2021/12/31		99	%	80 - 120
			Dissolved Lead (Pb)	2021/12/31		101	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/31		102	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/31		100	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/31		99	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/31		99	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/31		102	%	80 - 120
			Dissolved Potassium (K)	2021/12/31		102	%	80 - 120
			Dissolved Selenium (Se)	2021/12/31		99	%	80 - 120
			Dissolved Silver (Ag)	2021/12/31		96	%	80 - 120
			Dissolved Sodium (Na)	2021/12/31		100	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/31		99	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/31		99	%	80 - 120
			Dissolved Tin (Sn)	2021/12/31		101	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/31		101	%	80 - 120
			Dissolved Uranium (U)	2021/12/31		103	%	80 - 120
			Dissolved Vanadium (V)	2021/12/31		100	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/31		99	%	80 - 120
7761186	BAN	Method Blank	Dissolved Aluminum (Al)	2021/12/31	<5.0		ug/L	
			Dissolved Antimony (Sb)	2021/12/31	<1.0		ug/L	
			Dissolved Arsenic (As)	2021/12/31	<1.0		ug/L	
			Dissolved Barium (Ba)	2021/12/31	<1.0		ug/L	
			Dissolved Beryllium (Be)	2021/12/31	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2021/12/31	<2.0		ug/L	
			Dissolved Boron (B)	2021/12/31	<50		ug/L	
			Dissolved Cadmium (Cd)	2021/12/31	<0.010		ug/L	
			Dissolved Calcium (Ca)	2021/12/31	<100		ug/L	
			Dissolved Chromium (Cr)	2021/12/31	<1.0		ug/L	
			Dissolved Cobalt (Co)	2021/12/31	<0.40		ug/L	
			Dissolved Copper (Cu)	2021/12/31	<0.50		ug/L	
			Dissolved Iron (Fe)	2021/12/31	<50		ug/L	
			Dissolved Lead (Pb)	2021/12/31	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2021/12/31	<100		ug/L	
			Dissolved Manganese (Mn)	2021/12/31	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2021/12/31	<2.0		ug/L	
			Dissolved Nickel (Ni)	2021/12/31	<2.0		ug/L	
			Dissolved Phosphorus (P)	2021/12/31	<100		ug/L	
			Dissolved Potassium (K)	2021/12/31	<100		ug/L	
			Dissolved Selenium (Se)	2021/12/31	<0.50		ug/L	
			Dissolved Silver (Ag)	2021/12/31	<0.10		ug/L	
			Dissolved Sodium (Na)	2021/12/31	<100		ug/L	
			Dissolved Strontium (Sr)	2021/12/31	<2.0		ug/L	
			Dissolved Thallium (Tl)	2021/12/31	<0.10		ug/L	
			Dissolved Tin (Sn)	2021/12/31	<2.0		ug/L	
			Dissolved Titanium (Ti)	2021/12/31	<2.0		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Uranium (U)	2021/12/31	<0.10		ug/L	
			Dissolved Vanadium (V)	2021/12/31	<2.0		ug/L	
			Dissolved Zinc (Zn)	2021/12/31	<5.0		ug/L	
7761186	BAN	RPD [RMM782-02]	Dissolved Aluminum (Al)	2021/12/31	NC		%	20
			Dissolved Antimony (Sb)	2021/12/31	NC		%	20
			Dissolved Arsenic (As)	2021/12/31	3.5		%	20
			Dissolved Barium (Ba)	2021/12/31	0.96		%	20
			Dissolved Beryllium (Be)	2021/12/31	NC		%	20
			Dissolved Bismuth (Bi)	2021/12/31	NC		%	20
			Dissolved Boron (B)	2021/12/31	3.3		%	20
			Dissolved Cadmium (Cd)	2021/12/31	NC		%	20
			Dissolved Calcium (Ca)	2021/12/31	1.6		%	20
			Dissolved Chromium (Cr)	2021/12/31	NC		%	20
			Dissolved Cobalt (Co)	2021/12/31	NC		%	20
			Dissolved Copper (Cu)	2021/12/31	NC		%	20
			Dissolved Iron (Fe)	2021/12/31	2.8		%	20
			Dissolved Lead (Pb)	2021/12/31	NC		%	20
			Dissolved Magnesium (Mg)	2021/12/31	0.22		%	20
			Dissolved Manganese (Mn)	2021/12/31	0.75		%	20
			Dissolved Molybdenum (Mo)	2021/12/31	NC		%	20
			Dissolved Nickel (Ni)	2021/12/31	NC		%	20
			Dissolved Phosphorus (P)	2021/12/31	NC		%	20
			Dissolved Potassium (K)	2021/12/31	0.36		%	20
			Dissolved Selenium (Se)	2021/12/31	NC		%	20
			Dissolved Silver (Ag)	2021/12/31	NC		%	20
			Dissolved Sodium (Na)	2021/12/31	1.3		%	20
			Dissolved Strontium (Sr)	2021/12/31	0.11		%	20
			Dissolved Thallium (Tl)	2021/12/31	NC		%	20
			Dissolved Tin (Sn)	2021/12/31	NC		%	20
			Dissolved Titanium (Ti)	2021/12/31	NC		%	20
			Dissolved Uranium (U)	2021/12/31	0.29		%	20
			Dissolved Vanadium (V)	2021/12/31	NC		%	20
			Dissolved Zinc (Zn)	2021/12/31	NC		%	20
7762167	MCN	Matrix Spike	Nitrogen (Ammonia Nitrogen)	2021/12/16		103	%	80 - 120
7762167	MCN	Spiked Blank	Nitrogen (Ammonia Nitrogen)	2021/12/16		102	%	80 - 120
7762167	MCN	Method Blank	Nitrogen (Ammonia Nitrogen)	2021/12/16	<0.050		mg/L	
7762167	MCN	RPD	Nitrogen (Ammonia Nitrogen)	2021/12/16	NC		%	20
7763835	FJO	Matrix Spike	Total Mercury (Hg)	2022/01/05		90	%	80 - 120
7763835	FJO	Spiked Blank	Total Mercury (Hg)	2022/01/05		89	%	80 - 120
7763835	FJO	Method Blank	Total Mercury (Hg)	2022/01/05	<0.013		ug/L	
7763835	FJO	RPD	Total Mercury (Hg)	2022/01/05	NC (3)		%	20
7766085	FJO	Matrix Spike	Total Mercury (Hg)	2022/01/06		99	%	80 - 120
7766085	FJO	Spiked Blank	Total Mercury (Hg)	2022/01/06		104	%	80 - 120
7766085	FJO	Method Blank	Total Mercury (Hg)	2022/01/06	<0.013		ug/L	
7766085	FJO	RPD	Total Mercury (Hg)	2022/01/06	NC (3)		%	20
7779091	EMT	Matrix Spike	Dissolved Chloride (Cl-)	2021/12/21		NC	%	80 - 120
7779091	EMT	Spiked Blank	Dissolved Chloride (Cl-)	2021/12/20		98	%	80 - 120
7779091	EMT	Method Blank	Dissolved Chloride (Cl-)	2021/12/20	<1.0		mg/L	
7779091	EMT	RPD	Dissolved Chloride (Cl-)	2021/12/21	2.3		%	20
7779092	EMT	Matrix Spike	Dissolved Sulphate (SO4)	2021/12/20		NC	%	80 - 120
7779092	EMT	Spiked Blank	Dissolved Sulphate (SO4)	2021/12/20		98	%	80 - 120
7779092	EMT	Method Blank	Dissolved Sulphate (SO4)	2021/12/20	<2.0		mg/L	
7779092	EMT	RPD	Dissolved Sulphate (SO4)	2021/12/20	0.16		%	20

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7779093	EMT	Matrix Spike	Reactive Silica (SiO2)	2021/12/20		82	%	80 - 120
7779093	EMT	Spiked Blank	Reactive Silica (SiO2)	2021/12/20		88	%	80 - 120
7779093	EMT	Method Blank	Reactive Silica (SiO2)	2021/12/20	<0.50		mg/L	
7779093	EMT	RPD	Reactive Silica (SiO2)	2021/12/20	5.7		%	20
7779094	EMT	Spiked Blank	Colour	2021/12/20		96	%	80 - 120
7779094	EMT	Method Blank	Colour	2021/12/20	<5.0		TCU	
7779094	EMT	RPD	Colour	2021/12/20	6.4		%	20
7779095	EMT	Matrix Spike	Orthophosphate (P)	2021/12/20		101	%	80 - 120
7779095	EMT	Spiked Blank	Orthophosphate (P)	2021/12/20		106	%	80 - 120
7779095	EMT	Method Blank	Orthophosphate (P)	2021/12/20	<0.010		mg/L	
7779095	EMT	RPD	Orthophosphate (P)	2021/12/20	NC		%	20
7779096	EMT	Matrix Spike	Nitrate + Nitrite (N)	2021/12/21		97	%	80 - 120
7779096	EMT	Spiked Blank	Nitrate + Nitrite (N)	2021/12/21		99	%	80 - 120
7779096	EMT	Method Blank	Nitrate + Nitrite (N)	2021/12/21	<0.050		mg/L	
7779096	EMT	RPD	Nitrate + Nitrite (N)	2021/12/21	12		%	20
7779098	EMT	Matrix Spike	Nitrite (N)	2021/12/20		106	%	80 - 120
7779098	EMT	Spiked Blank	Nitrite (N)	2021/12/20		102	%	80 - 120
7779098	EMT	Method Blank	Nitrite (N)	2021/12/20	<0.010		mg/L	
7779098	EMT	RPD	Nitrite (N)	2021/12/20	2.2		%	20
7796055	MCN	Matrix Spike	Total Alkalinity (Total as CaCO3)	2022/01/24		98	%	80 - 120
7796055	MCN	Spiked Blank	Total Alkalinity (Total as CaCO3)	2022/01/24		110	%	80 - 120
7796055	MCN	Method Blank	Total Alkalinity (Total as CaCO3)	2022/01/24	<5.0		mg/L	
7796055	MCN	RPD	Total Alkalinity (Total as CaCO3)	2022/01/24	1.2		%	20
7808059	MCN	Matrix Spike	Total Alkalinity (Total as CaCO3)	2022/01/31		NC	%	80 - 120
7808059	MCN	Spiked Blank	Total Alkalinity (Total as CaCO3)	2022/02/01		103	%	80 - 120
7808059	MCN	Method Blank	Total Alkalinity (Total as CaCO3)	2022/02/01	<5.0		mg/L	
7808059	MCN	RPD	Total Alkalinity (Total as CaCO3)	2022/01/31	6.6		%	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Elevated reporting limit due to sample matrix.

(2) Poor spike recovery due to sample matrix

(3) Mercury analyzed past recommended hold time.

Bureau Veritas Laboratories 465 George St., Unit G, Sydney, NS, B1P 1K5 Tel:902 567 1255 Toll Free: 888 535 7770 Fax: 902 539 6504 www.bvlabs.com

Bureau Veritas Job #: C1AF527
Report Date: 2022/02/01

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Colleen Acker, B.Sc, Scientific Service Specialist

Rosemarie MacDonald, Scientific Specialist (Organics)

Bureau Veritas Proprietary Software
Logiciel Propriétaire de Bureau Veritas

Automated Statchk

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.
For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas Laboratories 465 George St., Unit G, Sydney, NS, B1P 1K5 Tel:902 567 1255 Toll Free: 888 535 7770 Fax: 902 539 6504 www.bvlabs.com

Your Project #: 20-2863
Site Location: OH PARK/HARBOURSIDE EAST
Your C.O.C. #: 855544

Attention: Nadine Wambolt

Dillon Consulting Limited
275 Charlotte St
Sydney, NS
CANADA B1P 1C6

Report Date: 2022/01/17
Report #: R6965138
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1AF093
Received: 2021/12/02, 16:50

Sample Matrix: Water
Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Carbonate, Bicarbonate and Hydroxide (1)	9	N/A	2021/12/29	N/A	SM 23 4500-CO2 D
Alkalinity (1)	9	N/A	2021/12/10	ATL SOP 00013	EPA 310.2 R1974 m
Benzo(b/j)fluoranthene Sum (water) (1)	9	N/A	2021/12/30	N/A	Auto Calc.
Chloride (1)	9	N/A	2021/12/10	ATL SOP 00014	SM 23 4500-Cl- E m
Colour (1)	9	N/A	2021/12/10	ATL SOP 00020	SM 23 2120C m
Conductance - water (1)	9	N/A	2021/12/09	ATL SOP 00004	SM 23 2510B m
Hardness (calculated as CaCO3) (1)	9	N/A	2022/01/13	ATL SOP 00048	Auto Calc
Mercury - Total (CVAA,LL) (1)	6	2022/01/04	2022/01/04	ATL SOP 00026	EPA 245.1 R3 m
Mercury - Total (CVAA,LL) (1)	3	2021/12/14	2021/12/14	ATL SOP 00026	EPA 245.1 R3 m
Metals Water Diss. MS (as rec'd) (1)	7	N/A	2021/12/10	ATL SOP 00058	EPA 6020B R2 m
Metals Water Diss. MS (as rec'd) (1)	2	N/A	2021/12/16	ATL SOP 00058	EPA 6020B R2 m
Ion Balance (% Difference) (1)	9	N/A	2022/01/13	N/A	Auto Calc.
Anion and Cation Sum (1)	9	N/A	2022/01/13	N/A	Auto Calc.
Nitrogen Ammonia - water (1)	9	N/A	2021/12/09	ATL SOP 00015	EPA 350.1 R2 m
Nitrogen - Nitrate + Nitrite (1)	9	N/A	2021/12/10	ATL SOP 00016	USGS I-2547-11m
Nitrogen - Nitrite (1)	9	N/A	2021/12/10	ATL SOP 00017	SM 23 4500-NO2- B m
Nitrogen - Nitrate (as N) (1)	9	N/A	2022/01/11	ATL SOP 00018	ASTM D3867-16
PAH in Water by GC/MS (SIM) (1)	9	2021/12/08	2021/12/22	ATL SOP 00103	EPA 8270E R6 m
pH (1, 2)	9	N/A	2021/12/09	ATL SOP 00003	SM 23 4500-H+ B m
Phosphorus - ortho (1)	9	N/A	2021/12/10	ATL SOP 00021	SM 23 4500-P E m
Sat. pH and Langelier Index (@ 20C) (1)	9	N/A	2022/01/13	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 4C) (1)	9	N/A	2022/01/13	ATL SOP 00049	Auto Calc.
Reactive Silica (1)	9	N/A	2021/12/10	ATL SOP 00022	EPA 366.0 m
Sulphate (1)	9	N/A	2021/12/10	ATL SOP 00023	ASTM D516-16 m
Total Dissolved Solids (TDS calc) (1)	9	N/A	2022/01/13	N/A	Auto Calc.
Organic carbon - Total (TOC) (1, 3)	3	N/A	2021/12/10	ATL SOP 00203	SM 23 5310B m
Organic carbon - Total (TOC) (1, 3)	6	N/A	2021/12/13	ATL SOP 00203	SM 23 5310B m
Turbidity (1)	9	N/A	2021/12/09	ATL SOP 00011	EPA 180.1 R2 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

Your Project #: 20-2863
Site Location: OH PARK/HARBOURSIDE EAST
Your C.O.C. #: 855544

Attention: Nadine Wambolt

Dillon Consulting Limited
275 Charlotte St
Sydney, NS
CANADA B1P 1C6

Report Date: 2022/01/17
Report #: R6965138
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1AF093
Received: 2021/12/02, 16:50

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) The APHA Standard Method require pH to be analyzed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the APHA Standard Method holding time.
(3) TOC / DOC present in the sample should be considered as non-purgeable TOC / DOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Natalie MacAskill, Key Account Specialist
Email: Natalie.MacAskill@bureauveritas.com
Phone# (902)567-1255 Ext:17
==========
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Bureau Veritas Job #: C1AF093
Report Date: 2022/01/17

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK/HARBOURSIDE EAST

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RMJ881			RMJ882			RMJ883		
Sampling Date		2021/12/02			2021/12/02			2021/12/02		
COC Number		855544			855544			855544		
Sample #		DEC02-72			DEC02-73			DEC02-74		
	UNITS	CODT-205-MWA	RDL	QC Batch	CODT-206-MW	RDL	QC Batch	CODT-201-MWA	RDL	QC Batch
Calculated Parameters										
Anion Sum	me/L	5.35	N/A	7756652	3.39	N/A	7756652	5.91	N/A	7756652
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	200	1.0	7756650	82	1.0	7756650	210	1.0	7756650
Calculated TDS	mg/L	320	1.0	7756656	220	1.0	7756656	340	1.0	7756656
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	7756650	<1.0	1.0	7756650	1.1	1.0	7756650
Cation Sum	me/L	5.87	N/A	7756652	3.41	N/A	7756652	6.21	N/A	7756652
Hardness (CaCO3)	mg/L	230	1.0	7756651	160	1.0	7756651	290	1.0	7756651
Ion Balance (% Difference)	%	4.63	N/A	7756666	0.290	N/A	7756666	2.48	N/A	7756666
Langelier Index (@ 20C)	N/A	0.299		7756654	0.240		7756654	0.653		7756654
Langelier Index (@ 4C)	N/A	0.0500		7756655	-0.0100		7756655	0.405		7756655
Nitrate (N)	mg/L	<0.050	0.050	7756653	0.17	0.050	7756653	1.4	0.050	7756653
Saturation pH (@ 20C)	N/A	7.22		7756654	7.71		7756654	7.11		7756654
Saturation pH (@ 4C)	N/A	7.47		7756655	7.96		7756655	7.36		7756655
Inorganics										
Total Alkalinity (Total as CaCO3)	mg/L	200	25	7772892	83	5.0	7772892	210	25	7772892
Dissolved Chloride (Cl-)	mg/L	12	1.0	7772915	7.4	1.0	7772915	9.5	1.0	7772915
Colour	TCU	11	5.0	7772932	12	5.0	7772932	<5.0	5.0	7772932
Nitrate + Nitrite (N)	mg/L	<0.050	0.050	7772933	0.17	0.050	7772933	1.4	0.050	7772933
Nitrite (N)	mg/L	<0.010	0.010	7772934	<0.010	0.010	7772934	<0.010	0.010	7772934
Nitrogen (Ammonia Nitrogen)	mg/L	0.47	0.050	7762103	<0.050	0.050	7762103	<0.050	0.050	7762103
Total Organic Carbon (C)	mg/L	8.0	0.50	7757790	3.9	0.50	7757796	2.7	0.50	7758245
Orthophosphate (P)	mg/L	<0.010	0.010	7772930	0.022	0.010	7772930	0.020	0.010	7772930
pH	pH	7.52		7751099	7.95		7751099	7.76		7751099
Reactive Silica (SiO2)	mg/L	15	0.50	7772918	23	1.0	7772918	16	0.50	7772918
Dissolved Sulphate (SO4)	mg/L	48	2.0	7772917	73	2.0	7772917	64	2.0	7772917
Turbidity	NTU	110	1.0	7724902	25	0.10	7724902	12	0.10	7724902
Conductivity	uS/cm	520	1.0	7751100	340	1.0	7751100	570	1.0	7751100

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Bureau Veritas Job #: C1AF093
Report Date: 2022/01/17

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK/HARBOURSIDE EAST

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RMJ884			RMJ885			RMJ886		
Sampling Date		2021/12/02			2021/12/02			2021/12/02		
COC Number		855544			855544			855544		
Sample #		DEC02-75			DEC02-76			DEC02-77		
	UNITS	CODT-203-MW	RDL	QC Batch	CODT-008-MWB	RDL	QC Batch	SCU11-001-MWA	RDL	QC Batch
Calculated Parameters										
Anion Sum	me/L	5.19	N/A	7756652	4.81	N/A	7756652	13.2	N/A	7756652
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	110	1.0	7756650	11	1.0	7756650	170	1.0	7756650
Calculated TDS	mg/L	340	1.0	7756656	310	1.0	7756656	760	1.0	7756656
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	7756650	55	1.0	7756650	<1.0	1.0	7756650
Cation Sum	me/L	5.74	N/A	7756652	5.01	N/A	7756652	14.8	N/A	7756652
Hardness (CaCO3)	mg/L	220	1.0	7756651	170	1.0	7756651	550	1.0	7756651
Ion Balance (% Difference)	%	5.03	N/A	7756666	2.04	N/A	7756666	5.64	N/A	7756666
Langelier Index (@ 20C)	N/A	-0.0300		7756654	2.17		7756654	0.560		7756654
Langelier Index (@ 4C)	N/A	-0.279		7756655	1.92		7756655	0.313		7756655
Nitrate (N)	mg/L	0.42	0.050	7756653	0.11	0.050	7756653	0.066	0.050	7756653
Saturation pH (@ 20C)	N/A	7.46		7756654	8.54		7756654	7.02		7756654
Saturation pH (@ 4C)	N/A	7.71		7756655	8.79		7756655	7.27		7756655
Inorganics										
Total Alkalinity (Total as CaCO3)	mg/L	110	25	7772892	92	5.0	7772892	170	25	7772892
Dissolved Chloride (Cl-)	mg/L	17	1.0	7772915	48	1.0	7772915	350	5.0	7772915
Colour	TCU	5.1	5.0	7772932	21	5.0	7772932	7.9	5.0	7772932
Nitrate + Nitrite (N)	mg/L	0.42	0.050	7772933	0.27	0.050	7772933	0.078	0.050	7772933
Nitrite (N)	mg/L	<0.010	0.010	7772934	0.16	0.010	7772934	0.012	0.010	7772934
Nitrogen (Ammonia Nitrogen)	mg/L	0.092	0.050	7762103	0.29	0.050	7762104	3.8	0.25	7762104
Total Organic Carbon (C)	mg/L	3.5	0.50	7758245	4.2	0.50	7758245	4.9	0.50	7757790
Orthophosphate (P)	mg/L	0.010	0.010	7772930	<0.010	0.010	7772930	0.10	0.010	7772930
pH	pH	7.43		7751099	10.7 (1)		7751099	7.58		7751099
Reactive Silica (SiO2)	mg/L	24	1.0	7772918	25	1.0	7772918	12	0.50	7772918
Dissolved Sulphate (SO4)	mg/L	120	10	7772917	77	2.0	7772917	<2.0	2.0	7772917
Turbidity	NTU	3.0	0.10	7724906	2.1	0.10	7724906	15	0.10	7724906
Conductivity	uS/cm	560	1.0	7751100	530	1.0	7751100	1600	1.0	7751100

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) pH: linear range exceedance. Extended linearity confirmed.

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Bureau Veritas Job #: C1AF093
Report Date: 2022/01/17

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK/HARBOURSIDE EAST

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RMJ887			RMJ888			RMK216		
Sampling Date		2021/12/02			2021/12/02			2021/12/02		
COC Number		855544			855544			855544		
Sample #		DEC02-78			DEC02-79			DEC02-80		
	UNITS	SCU11-001-MWB	RDL	QC Batch	SCU7-001-MW	RDL	QC Batch	EB-03	RDL	QC Batch
Calculated Parameters										
Anion Sum	me/L	4.18	N/A	7756652	33.0	N/A	7756652	0.00	N/A	7756652
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	100	1.0	7756650	140	1.0	7756650	<1.0	1.0	7756650
Calculated TDS	mg/L	270	1.0	7756656	2200	1.0	7756656	<1.0	1.0	7756656
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	7756650	<1.0	1.0	7756650	<1.0	1.0	7756650
Cation Sum	me/L	4.48	N/A	7756652	35.0	N/A	7756652	0.0100	N/A	7756652
Hardness (CaCO3)	mg/L	120	1.0	7756651	1600	1.0	7756651	<1.0	1.0	7756651
Ion Balance (% Difference)	%	3.46	N/A	7756666	2.98	N/A	7756666	100	N/A	7756666
Langelier Index (@ 20C)	N/A	-0.524		7756654	0.669		7756654	NC		7756654
Langelier Index (@ 4C)	N/A	-0.773		7756655	0.426		7756655	NC		7756655
Nitrate (N)	mg/L	6.5	0.25	7756653	<0.050	0.050	7756653	<0.050	0.050	7756653
Saturation pH (@ 20C)	N/A	7.82		7756654	6.72		7756654	NC		7756654
Saturation pH (@ 4C)	N/A	8.07		7756655	6.96		7756655	NC		7756655
Inorganics										
Total Alkalinity (Total as CaCO3)	mg/L	100	10	7772892	140	25	7772892	<5.0	5.0	7772892
Dissolved Chloride (Cl-)	mg/L	47	1.0	7772915	230	5.0	7772915	<1.0	1.0	7772915
Colour	TCU	71	25	7772932	<5.0	5.0	7772932	<5.0	5.0	7772932
Nitrate + Nitrite (N)	mg/L	6.5	0.25	7772933	<0.050	0.050	7772933	<0.050	0.050	7772933
Nitrite (N)	mg/L	0.031	0.010	7772934	<0.010	0.010	7772934	<0.010	0.010	7772934
Nitrogen (Ammonia Nitrogen)	mg/L	1.6	0.050	7762103	0.15	0.050	7762102	<0.050	0.050	7762104
Total Organic Carbon (C)	mg/L	12	0.50	7758245	1.0	0.50	7758245	<0.50	0.50	7758245
Orthophosphate (P)	mg/L	1.7	0.050	7772930	<0.010	0.010	7772930	<0.010	0.010	7772930
pH	pH	7.30		7751102	7.39		7751102	6.54		7751102
Reactive Silica (SiO2)	mg/L	14	0.50	7772918	12	0.50	7772918	<0.50	0.50	7772918
Dissolved Sulphate (SO4)	mg/L	12	2.0	7772917	1100	60	7772917	<2.0	2.0	7772917
Turbidity	NTU	41	0.10	7724906	3.5	0.10	7724906	<0.10	0.10	7724906
Conductivity	uS/cm	460	1.0	7751104	2800	1.0	7751104	1.5	1.0	7751104

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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MERCURY BY COLD VAPOUR AA (WATER)

Bureau Veritas ID		RMJ881	RMJ882	RMJ883	RMJ884		
Sampling Date		2021/12/02	2021/12/02	2021/12/02	2021/12/02		
COC Number		855544	855544	855544	855544		
Sample #		DEC02-72	DEC02-73	DEC02-74	DEC02-75		
	UNITS	CODT-205-MWA	CODT-206-MW	CODT-201-MWA	CODT-203-MW	RDL	QC Batch
Metals							
Total Mercury (Hg)	ug/L	<0.013 (1)	<0.013 (1)	<0.013 (1)	<0.013 (1)	0.013	7761368

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Mercury analyzed past recommended hold time.

Bureau Veritas ID		RMJ885	RMJ886		RMJ887	RMJ888		
Sampling Date		2021/12/02	2021/12/02		2021/12/02	2021/12/02		
COC Number		855544	855544		855544	855544		
Sample #		DEC02-76	DEC02-77		DEC02-78	DEC02-79		
	UNITS	CODT-008-MWB	SCU11-001-MWA	QC Batch	SCU11-001-MWB	SCU7-001-MW	RDL	QC Batch
Metals								
Total Mercury (Hg)	ug/L	<0.013	<0.013	7724967	<0.013 (1)	<0.013 (1)	0.013	7761368

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Mercury analyzed past recommended hold time.

Bureau Veritas ID		RMK216		
Sampling Date		2021/12/02		
COC Number		855544		
Sample #		DEC02-80		
	UNITS	EB-03	RDL	QC Batch
Metals				
Total Mercury (Hg)	ug/L	<0.013	0.013	7724967

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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ELEMENTS BY ICP/MS (WATER)

Bureau Veritas ID		RMJ881	RMJ882	RMJ883	RMJ884	RMJ885		
Sampling Date		2021/12/02	2021/12/02	2021/12/02	2021/12/02	2021/12/02		
COC Number		855544	855544	855544	855544	855544		
Sample #		DEC02-72	DEC02-73	DEC02-74	DEC02-75	DEC02-76		
	UNITS	CODT-205-MWA	CODT-206-MW	CODT-201-MWA	CODT-203-MW	CODT-008-MWB	RDL	QC Batch
Metals								
Dissolved Aluminum (Al)	ug/L	13	13	11	9.2	360	5.0	7773179
Dissolved Antimony (Sb)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	7773179
Dissolved Arsenic (As)	ug/L	8.3	1.4	<1.0	<1.0	3.0	1.0	7773179
Dissolved Barium (Ba)	ug/L	210	41	20	53	37	1.0	7773179
Dissolved Beryllium (Be)	ug/L	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	7773179
Dissolved Bismuth (Bi)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	7773179
Dissolved Boron (B)	ug/L	54	<50	<50	<50	<50	50	7773179
Dissolved Cadmium (Cd)	ug/L	<0.010	0.020	0.030	0.041	<0.010	0.010	7773179
Dissolved Calcium (Ca)	ug/L	80000	59000	100000	83000	67000	100	7773179
Dissolved Chromium (Cr)	ug/L	<1.0	<1.0	<1.0	<1.0	1.5	1.0	7773179
Dissolved Cobalt (Co)	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	7773179
Dissolved Copper (Cu)	ug/L	<0.50	5.1	6.9	8.9	3.6	0.50	7773179
Dissolved Iron (Fe)	ug/L	7100	<50	<50	<50	<50	50	7773179
Dissolved Lead (Pb)	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	7773179
Dissolved Magnesium (Mg)	ug/L	8700	2600	9600	3600	520	100	7773179
Dissolved Manganese (Mn)	ug/L	1200	<2.0	<2.0	3.2	<2.0	2.0	7773179
Dissolved Molybdenum (Mo)	ug/L	3.0	<2.0	2.1	<2.0	6.9	2.0	7773179
Dissolved Nickel (Ni)	ug/L	2.4	<2.0	4.6	<2.0	<2.0	2.0	7773179
Dissolved Phosphorus (P)	ug/L	<100	<100	<100	<100	<100	100	7773179
Dissolved Potassium (K)	ug/L	3900	2500	2900	2000	3500	100	7773179
Dissolved Selenium (Se)	ug/L	<0.50	1.2	4.5	2.3	1.6	0.50	7773179
Dissolved Silver (Ag)	ug/L	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	7773179
Dissolved Sodium (Na)	ug/L	18000	4600	7100	29000	34000	100	7773179
Dissolved Strontium (Sr)	ug/L	2300	310	260	340	610	2.0	7773179
Dissolved Thallium (Tl)	ug/L	<0.10	<0.10	<0.10	0.21	<0.10	0.10	7773179
Dissolved Tin (Sn)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	7773179
Dissolved Titanium (Ti)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	7773179
Dissolved Uranium (U)	ug/L	0.37	1.6	0.66	0.95	0.67	0.10	7773179
Dissolved Vanadium (V)	ug/L	<2.0	2.5	<2.0	<2.0	10	2.0	7773179
Dissolved Zinc (Zn)	ug/L	89	13	30	65	<5.0	5.0	7773179

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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ELEMENTS BY ICP/MS (WATER)

Bureau Veritas ID		RMJ886		RMJ887		RMJ888		RMK216		
Sampling Date		2021/12/02		2021/12/02		2021/12/02		2021/12/02		
COC Number		855544		855544		855544		855544		
Sample #		DEC02-77		DEC02-78		DEC02-79		DEC02-80		
	UNITS	SCU11-001-MWA	QC Batch	SCU11-001-MWB	RDL	SCU7-001-MW	RDL	EB-03	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	ug/L	<5.0	7773179	9.6	5.0	<5.0	5.0	<5.0	5.0	7774690
Dissolved Antimony (Sb)	ug/L	<1.0	7773179	<1.0	1.0	<1.0	1.0	<1.0	1.0	7774690
Dissolved Arsenic (As)	ug/L	1.3	7773179	<1.0	1.0	2.5	1.0	<1.0	1.0	7774690
Dissolved Barium (Ba)	ug/L	690	7773179	31	1.0	17	1.0	<1.0	1.0	7774690
Dissolved Beryllium (Be)	ug/L	<0.10	7773179	<0.10	0.10	<0.10	0.10	<0.10	0.10	7774690
Dissolved Bismuth (Bi)	ug/L	<2.0	7773179	<2.0	2.0	<2.0	2.0	<2.0	2.0	7774690
Dissolved Boron (B)	ug/L	62	7773179	<50	50	<50	50	<50	50	7774690
Dissolved Cadmium (Cd)	ug/L	0.020	7773179	0.016	0.010	0.012	0.010	<0.010	0.010	7774690
Dissolved Calcium (Ca)	ug/L	180000	7773179	38000	100	620000	100	<100	100	7774690
Dissolved Chromium (Cr)	ug/L	<1.0	7773179	<1.0	1.0	<1.0	1.0	<1.0	1.0	7774690
Dissolved Cobalt (Co)	ug/L	<0.40	7773179	<0.40	0.40	0.80	0.40	<0.40	0.40	7774690
Dissolved Copper (Cu)	ug/L	<0.50	7773179	2.6	0.50	<0.50	0.50	<0.50	0.50	7774690
Dissolved Iron (Fe)	ug/L	2200	7773179	670	50	400	50	<50	50	7774690
Dissolved Lead (Pb)	ug/L	<0.50	7773179	<0.50	0.50	<0.50	0.50	<0.50	0.50	7774690
Dissolved Magnesium (Mg)	ug/L	22000	7773179	4900	100	12000	100	<100	100	7774690
Dissolved Manganese (Mn)	ug/L	1000	7773179	460	2.0	5500	2.0	<2.0	2.0	7774690
Dissolved Molybdenum (Mo)	ug/L	<2.0	7773179	<2.0	2.0	<2.0	2.0	<2.0	2.0	7774690
Dissolved Nickel (Ni)	ug/L	<2.0	7773179	<2.0	2.0	2.3	2.0	<2.0	2.0	7774690
Dissolved Phosphorus (P)	ug/L	1000	7773179	2100	100	<100	100	<100	100	7774690
Dissolved Potassium (K)	ug/L	7900	7773179	16000	100	2100	100	<100	100	7774690
Dissolved Selenium (Se)	ug/L	<0.50	7773179	<0.50	0.50	<0.50	0.50	<0.50	0.50	7774690
Dissolved Silver (Ag)	ug/L	<0.10	7773179	<0.10	0.10	<0.10	0.10	<0.10	0.10	7774690
Dissolved Sodium (Na)	ug/L	74000	7773179	37000	100	70000	100	110	100	7774690
Dissolved Strontium (Sr)	ug/L	4200	7773179	440	2.0	14000	20	<2.0	2.0	7774690
Dissolved Thallium (Tl)	ug/L	<0.10	7773179	<0.10	0.10	<0.10	0.10	<0.10	0.10	7774690
Dissolved Tin (Sn)	ug/L	<2.0	7773179	<2.0	2.0	<2.0	2.0	<2.0	2.0	7774690
Dissolved Titanium (Ti)	ug/L	<2.0	7773179	<2.0	2.0	<2.0	2.0	<2.0	2.0	7774690
Dissolved Uranium (U)	ug/L	0.14	7773179	<0.10	0.10	1.8	0.10	<0.10	0.10	7774690
Dissolved Vanadium (V)	ug/L	<2.0	7773179	<2.0	2.0	<2.0	2.0	<2.0	2.0	7774690
Dissolved Zinc (Zn)	ug/L	<5.0	7773179	45	5.0	<5.0	5.0	<5.0	5.0	7774690

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID		RMJ881	RMJ882	RMJ883	RMJ884		RMJ885		
Sampling Date		2021/12/02	2021/12/02	2021/12/02	2021/12/02		2021/12/02		
COC Number		855544	855544	855544	855544		855544		
Sample #		DEC02-72	DEC02-73	DEC02-74	DEC02-75		DEC02-76		
	UNITS	CODT-205-MWA	CODT-206-MW	CODT-201-MWA	CODT-203-MW	RDL	CODT-008-MWB	RDL	QC Batch
Polyaromatic Hydrocarbons									
1-Methylnaphthalene	ug/L	0.077	<0.050	0.13	0.17	0.050	0.55	0.050	7759250
2-Methylnaphthalene	ug/L	<0.050	<0.050	0.084	0.16	0.050	0.11	0.050	7759250
Acenaphthene	ug/L	0.22	0.051	0.71	1.5	0.010	0.29	0.010	7759250
Acenaphthylene	ug/L	0.090	0.011	0.043	0.020	0.010	0.036	0.010	7759250
Anthracene	ug/L	0.013	0.024	1.7	3.4	0.010	0.055	0.010	7759250
Benzo(a)anthracene	ug/L	<0.010	0.033	3.5	6.9	0.010	0.046	0.010	7759250
Benzo(a)pyrene	ug/L	<0.010	0.072	2.5	4.8	0.010	0.050	0.010	7759250
Benzo(b)fluoranthene	ug/L	<0.010	0.056	1.7	3.1	0.010	0.034	0.010	7759250
Benzo(b/j)fluoranthene	ug/L	<0.020	0.085	2.9	5.3	0.020	<0.040	0.040	7756200
Benzo(g,h,i)perylene	ug/L	<0.010	0.050	1.1	1.8	0.010	0.032	0.010	7759250
Benzo(j)fluoranthene	ug/L	<0.010	0.029	1.2	2.2	0.010	<0.030 (1)	0.030	7759250
Benzo(k)fluoranthene	ug/L	<0.010	0.027	1.1	2.1	0.010	0.019	0.010	7759250
Chrysene	ug/L	<0.010	0.051	3.3	6.0	0.010	0.063	0.010	7759250
Dibenzo(a,h)anthracene	ug/L	<0.010	0.013	0.36	0.66	0.010	<0.010	0.010	7759250
Fluoranthene	ug/L	0.019	0.083	7.3	14	0.010	0.14	0.010	7759250
Fluorene	ug/L	0.11	0.016	0.62	1.6	0.010	0.049	0.010	7759250
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	0.043	1.1	1.9	0.010	<0.030 (1)	0.030	7759250
Naphthalene	ug/L	<0.20	<0.20	0.21	<0.20	0.20	<0.20	0.20	7759250
Perylene	ug/L	<0.010	0.023	0.59	1.0	0.010	0.014	0.010	7759250
Phenanthrene	ug/L	0.029	0.056	6.2	13	0.010	0.039	0.010	7759250
Pyrene	ug/L	0.015	0.068	5.6	10	0.010	0.26	0.010	7759250
Surrogate Recovery (%)									
D10-Anthracene	%	96	107	102	90		110		7759250
D14-Terphenyl	%	101	102	100	84		105		7759250
D8-Acenaphthylene	%	92	106	102	93		114		7759250

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Elevated PAH RDL(s) due to matrix / co-extractive interference.

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SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID		RMJ886	RMJ887	RMJ888	RMK216		
Sampling Date		2021/12/02	2021/12/02	2021/12/02	2021/12/02		
COC Number		855544	855544	855544	855544		
Sample #		DEC02-77	DEC02-78	DEC02-79	DEC02-80		
	UNITS	SCU11-001-MWA	SCU11-001-MWB	SCU7-001-MW	EB-03	RDL	QC Batch
Polyaromatic Hydrocarbons							
1-Methylnaphthalene	ug/L	<0.050	<0.050	<0.050	<0.050	0.050	7759250
2-Methylnaphthalene	ug/L	<0.050	<0.050	<0.050	<0.050	0.050	7759250
Acenaphthene	ug/L	<0.010	0.012	<0.010	<0.010	0.010	7759250
Acenaphthylene	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Anthracene	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Benzo(a)anthracene	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Benzo(a)pyrene	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Benzo(b)fluoranthene	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Benzo(b/j)fluoranthene	ug/L	<0.020	<0.020	<0.020	<0.020	0.020	7756200
Benzo(g,h,i)perylene	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Benzo(j)fluoranthene	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Benzo(k)fluoranthene	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Chrysene	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Dibenzo(a,h)anthracene	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Fluoranthene	ug/L	0.012	0.012	<0.010	<0.010	0.010	7759250
Fluorene	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Naphthalene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	7759250
Perylene	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Phenanthrene	ug/L	0.031	0.022	<0.010	<0.010	0.010	7759250
Pyrene	ug/L	<0.010	0.010	<0.010	<0.010	0.010	7759250
Surrogate Recovery (%)							
D10-Anthracene	%	94	90	96	99		7759250
D14-Terphenyl	%	98	87	98	99		7759250
D8-Acenaphthylene	%	99	92	102	95		7759250

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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GENERAL COMMENTS

Sample RMJ882 [CODT-206-MW] : ortho-Phosphate > Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample RMJ883 [CODT-201-MWA] : ortho-Phosphate > Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample RMJ884 [CODT-203-MW] : ortho-Phosphate > Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.
Poor RCAp Ion Balance due to sample matrix.

Sample RMJ886 [SCU11-001-MWA] : Poor RCAp Ion Balance due to sample matrix.

Sample RMK216 [EB-03] : RCAp Ion Balance acceptable. Anion/cation agreement within 0.2 meq/L.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7724902	SHW	QC Standard	Turbidity	2021/12/09		101	%	80 - 120
7724902	SHW	Spiked Blank	Turbidity	2021/12/09		106	%	80 - 120
7724902	SHW	Method Blank	Turbidity	2021/12/09	<0.10		NTU	
7724902	SHW	RPD	Turbidity	2021/12/09	NC		%	20
7724906	SHW	QC Standard	Turbidity	2021/12/09		100	%	80 - 120
7724906	SHW	Spiked Blank	Turbidity	2021/12/09		104	%	80 - 120
7724906	SHW	Method Blank	Turbidity	2021/12/09	<0.10		NTU	
7724967	EPU	Matrix Spike	Total Mercury (Hg)	2021/12/14		98	%	80 - 120
7724967	EPU	Spiked Blank	Total Mercury (Hg)	2021/12/14		101	%	80 - 120
7724967	EPU	Method Blank	Total Mercury (Hg)	2021/12/14	<0.013		ug/L	
7724967	EPU	RPD	Total Mercury (Hg)	2021/12/14	NC		%	20
7751099	SHW	Spiked Blank	pH	2021/12/09		100	%	97 - 103
7751099	SHW	RPD	pH	2021/12/09	1.3		%	N/A
7751100	SHW	Spiked Blank	Conductivity	2021/12/09		104	%	80 - 120
7751100	SHW	Method Blank	Conductivity	2021/12/09	1.1, RDL=1.0		uS/cm	
7751100	SHW	RPD	Conductivity	2021/12/09	0.60		%	10
7751102	SHW	Spiked Blank	pH	2021/12/09		100	%	97 - 103
7751102	SHW	RPD	pH	2021/12/09	0.084		%	N/A
7751104	SHW	Spiked Blank	Conductivity	2021/12/09		101	%	80 - 120
7751104	SHW	Method Blank	Conductivity	2021/12/09	<1.0		uS/cm	
7751104	SHW	RPD	Conductivity	2021/12/09	2.9		%	10
7757790	NGI	Matrix Spike [RMJ881-04]	Total Organic Carbon (C)	2021/12/10		98	%	85 - 115
7757790	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/10		101	%	80 - 120
7757790	NGI	Method Blank	Total Organic Carbon (C)	2021/12/10	<0.50		mg/L	
7757790	NGI	RPD [RMJ881-04]	Total Organic Carbon (C)	2021/12/10	1.3		%	15
7757796	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/10		99	%	85 - 115
7757796	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/10		103	%	80 - 120
7757796	NGI	Method Blank	Total Organic Carbon (C)	2021/12/10	<0.50		mg/L	
7757796	NGI	RPD	Total Organic Carbon (C)	2021/12/10	NC (1)		%	15
7758245	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/13		96	%	85 - 115
7758245	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/13		100	%	80 - 120
7758245	NGI	Method Blank	Total Organic Carbon (C)	2021/12/13	<0.50		mg/L	
7758245	NGI	RPD	Total Organic Carbon (C)	2021/12/13	0.82		%	15
7759250	LGE	Matrix Spike	D10-Anthracene	2021/12/22		97	%	50 - 130
			D14-Terphenyl	2021/12/22		98	%	50 - 130
			D8-Acenaphthylene	2021/12/22		95	%	50 - 130
			1-Methylnaphthalene	2021/12/22		94	%	50 - 130
			2-Methylnaphthalene	2021/12/22		99	%	50 - 130
			Acenaphthene	2021/12/22		114	%	50 - 130
			Acenaphthylene	2021/12/22		96	%	50 - 130
			Anthracene	2021/12/22		106	%	50 - 130
			Benzo(a)anthracene	2021/12/22		101	%	50 - 130
			Benzo(a)pyrene	2021/12/22		97	%	50 - 130
			Benzo(b)fluoranthene	2021/12/22		99	%	50 - 130
			Benzo(g,h,i)perylene	2021/12/22		97	%	50 - 130
			Benzo(j)fluoranthene	2021/12/22		95	%	50 - 130
			Benzo(k)fluoranthene	2021/12/22		91	%	50 - 130
			Chrysene	2021/12/22		107	%	50 - 130
			Dibenzo(a,h)anthracene	2021/12/22		93	%	50 - 130
			Fluoranthene	2021/12/22		104	%	50 - 130
			Fluorene	2021/12/22		107	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2021/12/22		96	%	50 - 130
			Naphthalene	2021/12/22		114	%	50 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Perylene	2021/12/22		97	%	50 - 130
			Phenanthrene	2021/12/22		112	%	50 - 130
			Pyrene	2021/12/22		104	%	50 - 130
7759250	LGE	Spiked Blank	D10-Anthracene	2021/12/22		80	%	50 - 130
			D14-Terphenyl	2021/12/22		77	%	50 - 130
			D8-Acenaphthylene	2021/12/22		80	%	50 - 130
			1-Methylnaphthalene	2021/12/22		80	%	50 - 130
			2-Methylnaphthalene	2021/12/22		84	%	50 - 130
			Acenaphthene	2021/12/22		99	%	50 - 130
			Acenaphthylene	2021/12/22		79	%	50 - 130
			Anthracene	2021/12/22		87	%	50 - 130
			Benzo(a)anthracene	2021/12/22		79	%	50 - 130
			Benzo(a)pyrene	2021/12/22		80	%	50 - 130
			Benzo(b)fluoranthene	2021/12/22		82	%	50 - 130
			Benzo(g,h,i)perylene	2021/12/22		82	%	50 - 130
			Benzo(j)fluoranthene	2021/12/22		80	%	50 - 130
			Benzo(k)fluoranthene	2021/12/22		77	%	50 - 130
			Chrysene	2021/12/22		84	%	50 - 130
			Dibenzo(a,h)anthracene	2021/12/22		75	%	50 - 130
			Fluoranthene	2021/12/22		85	%	50 - 130
			Fluorene	2021/12/22		89	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2021/12/22		84	%	50 - 130
			Naphthalene	2021/12/22		94	%	50 - 130
			Perylene	2021/12/22		85	%	50 - 130
			Phenanthrene	2021/12/22		92	%	50 - 130
			Pyrene	2021/12/22		83	%	50 - 130
7759250	LGE	Method Blank	D10-Anthracene	2021/12/22		119	%	50 - 130
			D14-Terphenyl	2021/12/22		120	%	50 - 130
			D8-Acenaphthylene	2021/12/22		114	%	50 - 130
			1-Methylnaphthalene	2021/12/22	<0.050		ug/L	
			2-Methylnaphthalene	2021/12/22	<0.050		ug/L	
			Acenaphthene	2021/12/22	<0.010		ug/L	
			Acenaphthylene	2021/12/22	<0.010		ug/L	
			Anthracene	2021/12/22	<0.010		ug/L	
			Benzo(a)anthracene	2021/12/22	<0.010		ug/L	
			Benzo(a)pyrene	2021/12/22	<0.010		ug/L	
			Benzo(b)fluoranthene	2021/12/22	<0.010		ug/L	
			Benzo(g,h,i)perylene	2021/12/22	<0.010		ug/L	
			Benzo(j)fluoranthene	2021/12/22	<0.010		ug/L	
			Benzo(k)fluoranthene	2021/12/22	<0.010		ug/L	
			Chrysene	2021/12/22	<0.010		ug/L	
			Dibenzo(a,h)anthracene	2021/12/22	<0.010		ug/L	
			Fluoranthene	2021/12/22	<0.010		ug/L	
			Fluorene	2021/12/22	<0.010		ug/L	
			Indeno(1,2,3-cd)pyrene	2021/12/22	<0.010		ug/L	
			Naphthalene	2021/12/22	<0.20		ug/L	
			Perylene	2021/12/22	<0.010		ug/L	
			Phenanthrene	2021/12/22	<0.010		ug/L	
			Pyrene	2021/12/22	<0.010		ug/L	
7759250	LGE	RPD [RMK216-06]	1-Methylnaphthalene	2021/12/22	NC		%	40
			2-Methylnaphthalene	2021/12/22	NC		%	40
			Acenaphthene	2021/12/22	NC		%	40
			Acenaphthylene	2021/12/22	NC		%	40
			Anthracene	2021/12/22	NC		%	40

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Benzo(a)anthracene	2021/12/22	NC		%	40
			Benzo(a)pyrene	2021/12/22	NC		%	40
			Benzo(b)fluoranthene	2021/12/22	NC		%	40
			Benzo(g,h,i)perylene	2021/12/22	NC		%	40
			Benzo(j)fluoranthene	2021/12/22	NC		%	40
			Benzo(k)fluoranthene	2021/12/22	NC		%	40
			Chrysene	2021/12/22	NC		%	40
			Dibenzo(a,h)anthracene	2021/12/22	NC		%	40
			Fluoranthene	2021/12/22	NC		%	40
			Fluorene	2021/12/22	NC		%	40
			Indeno(1,2,3-cd)pyrene	2021/12/22	NC		%	40
			Naphthalene	2021/12/22	NC		%	40
			Perylene	2021/12/22	NC		%	40
			Phenanthrene	2021/12/22	NC		%	40
			Pyrene	2021/12/22	NC		%	40
7761368	FJO	Matrix Spike	Total Mercury (Hg)	2022/01/04		102	%	80 - 120
7761368	FJO	Spiked Blank	Total Mercury (Hg)	2022/01/04		99	%	80 - 120
7761368	FJO	Method Blank	Total Mercury (Hg)	2022/01/04	<0.013		ug/L	
7761368	FJO	RPD	Total Mercury (Hg)	2022/01/04	NC		%	20
7762102	MKY	Matrix Spike	Nitrogen (Ammonia Nitrogen)	2021/12/09		94	%	80 - 120
7762102	MKY	Spiked Blank	Nitrogen (Ammonia Nitrogen)	2021/12/09		103	%	80 - 120
7762102	MKY	Method Blank	Nitrogen (Ammonia Nitrogen)	2021/12/09	<0.050		mg/L	
7762102	MKY	RPD	Nitrogen (Ammonia Nitrogen)	2021/12/09	NC		%	20
7762103	MKY	Matrix Spike	Nitrogen (Ammonia Nitrogen)	2021/12/09		100	%	80 - 120
7762103	MKY	Spiked Blank	Nitrogen (Ammonia Nitrogen)	2021/12/09		101	%	80 - 120
7762103	MKY	Method Blank	Nitrogen (Ammonia Nitrogen)	2021/12/09	<0.050		mg/L	
7762103	MKY	RPD	Nitrogen (Ammonia Nitrogen)	2021/12/09	NC		%	20
7762104	MKY	Matrix Spike	Nitrogen (Ammonia Nitrogen)	2021/12/09		94	%	80 - 120
7762104	MKY	Spiked Blank	Nitrogen (Ammonia Nitrogen)	2021/12/09		95	%	80 - 120
7762104	MKY	Method Blank	Nitrogen (Ammonia Nitrogen)	2021/12/09	<0.050		mg/L	
7762104	MKY	RPD	Nitrogen (Ammonia Nitrogen)	2021/12/09	NC		%	20
7772892	EMT	Matrix Spike	Total Alkalinity (Total as CaCO3)	2021/12/10		NC	%	80 - 120
7772892	EMT	Spiked Blank	Total Alkalinity (Total as CaCO3)	2021/12/10		95	%	80 - 120
7772892	EMT	Method Blank	Total Alkalinity (Total as CaCO3)	2021/12/10	<5.0		mg/L	
7772892	EMT	RPD	Total Alkalinity (Total as CaCO3)	2021/12/10	0.87		%	20
7772915	EMT	Matrix Spike	Dissolved Chloride (Cl-)	2021/12/10		82	%	80 - 120
7772915	EMT	Spiked Blank	Dissolved Chloride (Cl-)	2021/12/10		95	%	80 - 120
7772915	EMT	Method Blank	Dissolved Chloride (Cl-)	2021/12/10	<1.0		mg/L	
7772915	EMT	RPD	Dissolved Chloride (Cl-)	2021/12/10	4.2		%	20
7772917	EMT	Matrix Spike	Dissolved Sulphate (SO4)	2021/12/10		NC	%	80 - 120
7772917	EMT	Spiked Blank	Dissolved Sulphate (SO4)	2021/12/10		97	%	80 - 120
7772917	EMT	Method Blank	Dissolved Sulphate (SO4)	2021/12/10	<2.0		mg/L	
7772917	EMT	RPD	Dissolved Sulphate (SO4)	2021/12/10	1.2		%	20
7772918	EMT	Matrix Spike	Reactive Silica (SiO2)	2021/12/10		NC	%	80 - 120
7772918	EMT	Spiked Blank	Reactive Silica (SiO2)	2021/12/10		94	%	80 - 120
7772918	EMT	Method Blank	Reactive Silica (SiO2)	2021/12/10	<0.50		mg/L	
7772918	EMT	RPD	Reactive Silica (SiO2)	2021/12/10	0.45		%	20
7772930	EMT	Matrix Spike	Orthophosphate (P)	2021/12/10		89	%	80 - 120
7772930	EMT	Spiked Blank	Orthophosphate (P)	2021/12/10		93	%	80 - 120
7772930	EMT	Method Blank	Orthophosphate (P)	2021/12/10	<0.010		mg/L	
7772930	EMT	RPD	Orthophosphate (P)	2021/12/10	5.8		%	20
7772932	EMT	Spiked Blank	Colour	2021/12/10		97	%	80 - 120
7772932	EMT	Method Blank	Colour	2021/12/10	<5.0		TCU	
7772932	EMT	RPD	Colour	2021/12/10	6.0		%	20

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7772933	EMT	Matrix Spike	Nitrate + Nitrite (N)	2021/12/10		97	%	80 - 120
7772933	EMT	Spiked Blank	Nitrate + Nitrite (N)	2021/12/10		97	%	80 - 120
7772933	EMT	Method Blank	Nitrate + Nitrite (N)	2021/12/10	<0.050		mg/L	
7772933	EMT	RPD	Nitrate + Nitrite (N)	2021/12/10	0.98		%	20
7772934	EMT	Matrix Spike	Nitrite (N)	2021/12/10		97	%	80 - 120
7772934	EMT	Spiked Blank	Nitrite (N)	2021/12/10		100	%	80 - 120
7772934	EMT	Method Blank	Nitrite (N)	2021/12/10	<0.010		mg/L	
7772934	EMT	RPD	Nitrite (N)	2021/12/10	3.7		%	20
7773179	BAN	Matrix Spike	Dissolved Aluminum (Al)	2021/12/16		100	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/16		105	%	80 - 120
			Dissolved Arsenic (As)	2021/12/16		101	%	80 - 120
			Dissolved Barium (Ba)	2021/12/16		95	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/16		102	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/16		93	%	80 - 120
			Dissolved Boron (B)	2021/12/16		100	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/16		94	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/16		NC	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/16		101	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/16		99	%	80 - 120
			Dissolved Copper (Cu)	2021/12/16		98	%	80 - 120
			Dissolved Iron (Fe)	2021/12/16		102	%	80 - 120
			Dissolved Lead (Pb)	2021/12/16		96	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/16		105	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/16		101	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/16		NC	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/16		99	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/16		104	%	80 - 120
			Dissolved Potassium (K)	2021/12/16		NC	%	80 - 120
			Dissolved Selenium (Se)	2021/12/16		101	%	80 - 120
			Dissolved Silver (Ag)	2021/12/16		87	%	80 - 120
			Dissolved Sodium (Na)	2021/12/16		NC	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/16		NC	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/16		97	%	80 - 120
			Dissolved Tin (Sn)	2021/12/16		103	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/16		106	%	80 - 120
			Dissolved Uranium (U)	2021/12/16		104	%	80 - 120
			Dissolved Vanadium (V)	2021/12/16		NC	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/16		99	%	80 - 120
7773179	BAN	Spiked Blank	Dissolved Aluminum (Al)	2021/12/10		102	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/10		100	%	80 - 120
			Dissolved Arsenic (As)	2021/12/10		97	%	80 - 120
			Dissolved Barium (Ba)	2021/12/10		97	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/10		99	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/10		99	%	80 - 120
			Dissolved Boron (B)	2021/12/10		98	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/10		99	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/10		104	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/10		100	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/10		99	%	80 - 120
			Dissolved Copper (Cu)	2021/12/10		102	%	80 - 120
			Dissolved Iron (Fe)	2021/12/10		102	%	80 - 120
			Dissolved Lead (Pb)	2021/12/10		101	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/10		104	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/10		102	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Molybdenum (Mo)	2021/12/10		104	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/10		102	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/10		105	%	80 - 120
			Dissolved Potassium (K)	2021/12/10		98	%	80 - 120
			Dissolved Selenium (Se)	2021/12/10		102	%	80 - 120
			Dissolved Silver (Ag)	2021/12/10		100	%	80 - 120
			Dissolved Sodium (Na)	2021/12/10		102	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/10		100	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/10		100	%	80 - 120
			Dissolved Tin (Sn)	2021/12/10		98	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/10		100	%	80 - 120
			Dissolved Uranium (U)	2021/12/10		104	%	80 - 120
			Dissolved Vanadium (V)	2021/12/10		104	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/10		103	%	80 - 120
7773179	BAN	Method Blank	Dissolved Aluminum (Al)	2021/12/10	<5.0		ug/L	
			Dissolved Antimony (Sb)	2021/12/10	<1.0		ug/L	
			Dissolved Arsenic (As)	2021/12/10	<1.0		ug/L	
			Dissolved Barium (Ba)	2021/12/10	<1.0		ug/L	
			Dissolved Beryllium (Be)	2021/12/10	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2021/12/10	<2.0		ug/L	
			Dissolved Boron (B)	2021/12/10	<50		ug/L	
			Dissolved Cadmium (Cd)	2021/12/10	<0.010		ug/L	
			Dissolved Calcium (Ca)	2021/12/10	<100		ug/L	
			Dissolved Chromium (Cr)	2021/12/10	<1.0		ug/L	
			Dissolved Cobalt (Co)	2021/12/10	<0.40		ug/L	
			Dissolved Copper (Cu)	2021/12/10	<0.50		ug/L	
			Dissolved Iron (Fe)	2021/12/10	<50		ug/L	
			Dissolved Lead (Pb)	2021/12/10	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2021/12/10	<100		ug/L	
			Dissolved Manganese (Mn)	2021/12/10	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2021/12/10	<2.0		ug/L	
			Dissolved Nickel (Ni)	2021/12/10	<2.0		ug/L	
			Dissolved Phosphorus (P)	2021/12/10	<100		ug/L	
			Dissolved Potassium (K)	2021/12/10	<100		ug/L	
			Dissolved Selenium (Se)	2021/12/10	<0.50		ug/L	
			Dissolved Silver (Ag)	2021/12/10	<0.10		ug/L	
			Dissolved Sodium (Na)	2021/12/10	<100		ug/L	
			Dissolved Strontium (Sr)	2021/12/10	<2.0		ug/L	
			Dissolved Thallium (Tl)	2021/12/10	<0.10		ug/L	
			Dissolved Tin (Sn)	2021/12/10	<2.0		ug/L	
			Dissolved Titanium (Ti)	2021/12/10	<2.0		ug/L	
			Dissolved Uranium (U)	2021/12/10	<0.10		ug/L	
			Dissolved Vanadium (V)	2021/12/10	<2.0		ug/L	
			Dissolved Zinc (Zn)	2021/12/10	<5.0		ug/L	
7773179	BAN	RPD	Dissolved Aluminum (Al)	2021/12/16	NC		%	20
			Dissolved Antimony (Sb)	2021/12/16	NC		%	20
			Dissolved Arsenic (As)	2021/12/16	3.4		%	20
			Dissolved Barium (Ba)	2021/12/16	1.9		%	20
			Dissolved Beryllium (Be)	2021/12/16	NC		%	20
			Dissolved Bismuth (Bi)	2021/12/16	NC		%	20
			Dissolved Boron (B)	2021/12/16	NC		%	20
			Dissolved Cadmium (Cd)	2021/12/16	NC (2)		%	20
			Dissolved Calcium (Ca)	2021/12/16	1.2		%	20
			Dissolved Chromium (Cr)	2021/12/16	3.1		%	20

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Cobalt (Co)	2021/12/16	9.4		%	20
			Dissolved Copper (Cu)	2021/12/16	0.82		%	20
			Dissolved Iron (Fe)	2021/12/16	NC		%	20
			Dissolved Lead (Pb)	2021/12/16	NC		%	20
			Dissolved Magnesium (Mg)	2021/12/16	2.1		%	20
			Dissolved Manganese (Mn)	2021/12/16	NC		%	20
			Dissolved Molybdenum (Mo)	2021/12/16	0.62		%	20
			Dissolved Nickel (Ni)	2021/12/16	1.7		%	20
			Dissolved Phosphorus (P)	2021/12/16	NC		%	20
			Dissolved Potassium (K)	2021/12/16	0.62		%	20
			Dissolved Selenium (Se)	2021/12/16	3.1		%	20
			Dissolved Silver (Ag)	2021/12/16	NC		%	20
			Dissolved Sodium (Na)	2021/12/16	0.57		%	20
			Dissolved Strontium (Sr)	2021/12/16	2.3		%	20
			Dissolved Thallium (Tl)	2021/12/16	NC		%	20
			Dissolved Tin (Sn)	2021/12/16	NC		%	20
			Dissolved Titanium (Ti)	2021/12/16	7.0		%	20
			Dissolved Uranium (U)	2021/12/16	0.73		%	20
			Dissolved Vanadium (V)	2021/12/16	0.19		%	20
			Dissolved Zinc (Zn)	2021/12/16	NC		%	20
7774690	BAN	Matrix Spike	Dissolved Aluminum (Al)	2021/12/16		97	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/16		101	%	80 - 120
			Dissolved Arsenic (As)	2021/12/16		95	%	80 - 120
			Dissolved Barium (Ba)	2021/12/16		92	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/16		103	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/16		91	%	80 - 120
			Dissolved Boron (B)	2021/12/16		100	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/16		90	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/16		NC	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/16		97	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/16		97	%	80 - 120
			Dissolved Copper (Cu)	2021/12/16		97	%	80 - 120
			Dissolved Iron (Fe)	2021/12/16		100	%	80 - 120
			Dissolved Lead (Pb)	2021/12/16		94	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/16		102	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/16		98	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/16		NC	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/16		97	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/16		101	%	80 - 120
			Dissolved Potassium (K)	2021/12/16		NC	%	80 - 120
			Dissolved Selenium (Se)	2021/12/16		100	%	80 - 120
			Dissolved Silver (Ag)	2021/12/16		97	%	80 - 120
			Dissolved Sodium (Na)	2021/12/16		NC	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/16		NC	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/16		94	%	80 - 120
			Dissolved Tin (Sn)	2021/12/16		100	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/16		102	%	80 - 120
			Dissolved Uranium (U)	2021/12/16		103	%	80 - 120
			Dissolved Vanadium (V)	2021/12/16		NC	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/16		99	%	80 - 120
7774690	BAN	Spiked Blank	Dissolved Aluminum (Al)	2021/12/10		99	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/10		99	%	80 - 120
			Dissolved Arsenic (As)	2021/12/10		97	%	80 - 120
			Dissolved Barium (Ba)	2021/12/10		95	%	80 - 120

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Beryllium (Be)	2021/12/10		96	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/10		97	%	80 - 120
			Dissolved Boron (B)	2021/12/10		95	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/10		100	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/10		101	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/10		99	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/10		99	%	80 - 120
			Dissolved Copper (Cu)	2021/12/10		101	%	80 - 120
			Dissolved Iron (Fe)	2021/12/10		102	%	80 - 120
			Dissolved Lead (Pb)	2021/12/10		99	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/10		103	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/10		100	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/10		100	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/10		101	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/10		103	%	80 - 120
			Dissolved Potassium (K)	2021/12/10		97	%	80 - 120
			Dissolved Selenium (Se)	2021/12/10		101	%	80 - 120
			Dissolved Silver (Ag)	2021/12/10		97	%	80 - 120
			Dissolved Sodium (Na)	2021/12/10		101	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/10		97	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/10		98	%	80 - 120
			Dissolved Tin (Sn)	2021/12/10		96	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/10		98	%	80 - 120
			Dissolved Uranium (U)	2021/12/10		103	%	80 - 120
			Dissolved Vanadium (V)	2021/12/10		102	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/10		102	%	80 - 120
7774690	BAN	Method Blank	Dissolved Aluminum (Al)	2021/12/10	<5.0		ug/L	
			Dissolved Antimony (Sb)	2021/12/10	<1.0		ug/L	
			Dissolved Arsenic (As)	2021/12/10	<1.0		ug/L	
			Dissolved Barium (Ba)	2021/12/10	<1.0		ug/L	
			Dissolved Beryllium (Be)	2021/12/10	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2021/12/10	<2.0		ug/L	
			Dissolved Boron (B)	2021/12/10	<50		ug/L	
			Dissolved Cadmium (Cd)	2021/12/10	<0.010		ug/L	
			Dissolved Calcium (Ca)	2021/12/10	<100		ug/L	
			Dissolved Chromium (Cr)	2021/12/10	<1.0		ug/L	
			Dissolved Cobalt (Co)	2021/12/10	<0.40		ug/L	
			Dissolved Copper (Cu)	2021/12/10	<0.50		ug/L	
			Dissolved Iron (Fe)	2021/12/10	<50		ug/L	
			Dissolved Lead (Pb)	2021/12/10	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2021/12/10	<100		ug/L	
			Dissolved Manganese (Mn)	2021/12/10	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2021/12/10	<2.0		ug/L	
			Dissolved Nickel (Ni)	2021/12/10	<2.0		ug/L	
			Dissolved Phosphorus (P)	2021/12/10	<100		ug/L	
			Dissolved Potassium (K)	2021/12/10	<100		ug/L	
			Dissolved Selenium (Se)	2021/12/10	<0.50		ug/L	
			Dissolved Silver (Ag)	2021/12/10	<0.10		ug/L	
			Dissolved Sodium (Na)	2021/12/10	<100		ug/L	
			Dissolved Strontium (Sr)	2021/12/10	<2.0		ug/L	
			Dissolved Thallium (Tl)	2021/12/10	<0.10		ug/L	
			Dissolved Tin (Sn)	2021/12/10	<2.0		ug/L	
			Dissolved Titanium (Ti)	2021/12/10	<2.0		ug/L	
			Dissolved Uranium (U)	2021/12/10	<0.10		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Vanadium (V)	2021/12/10	<2.0		ug/L	
			Dissolved Zinc (Zn)	2021/12/10	<5.0		ug/L	
7774690	BAN	RPD	Dissolved Aluminum (Al)	2021/12/16	3.8		%	20
			Dissolved Antimony (Sb)	2021/12/16	NC		%	20
			Dissolved Arsenic (As)	2021/12/16	NC		%	20
			Dissolved Barium (Ba)	2021/12/16	0.93		%	20
			Dissolved Beryllium (Be)	2021/12/16	NC		%	20
			Dissolved Bismuth (Bi)	2021/12/16	NC		%	20
			Dissolved Boron (B)	2021/12/16	NC		%	20
			Dissolved Cadmium (Cd)	2021/12/16	NC (2)		%	20
			Dissolved Calcium (Ca)	2021/12/16	1.4		%	20
			Dissolved Chromium (Cr)	2021/12/16	2.5		%	20
			Dissolved Cobalt (Co)	2021/12/16	NC		%	20
			Dissolved Copper (Cu)	2021/12/16	0.93		%	20
			Dissolved Iron (Fe)	2021/12/16	NC		%	20
			Dissolved Lead (Pb)	2021/12/16	NC		%	20
			Dissolved Magnesium (Mg)	2021/12/16	3.0		%	20
			Dissolved Manganese (Mn)	2021/12/16	NC		%	20
			Dissolved Molybdenum (Mo)	2021/12/16	0.094		%	20
			Dissolved Nickel (Ni)	2021/12/16	1.9		%	20
			Dissolved Phosphorus (P)	2021/12/16	NC		%	20
			Dissolved Potassium (K)	2021/12/16	0.068		%	20
			Dissolved Selenium (Se)	2021/12/16	0.42		%	20
			Dissolved Silver (Ag)	2021/12/16	NC		%	20
			Dissolved Sodium (Na)	2021/12/16	1.4		%	20
			Dissolved Strontium (Sr)	2021/12/16	1.1		%	20
			Dissolved Thallium (Tl)	2021/12/16	NC		%	20
			Dissolved Tin (Sn)	2021/12/16	NC		%	20
			Dissolved Titanium (Ti)	2021/12/16	NC		%	20
			Dissolved Uranium (U)	2021/12/16	NC		%	20
			Dissolved Vanadium (V)	2021/12/16	1.4		%	20
			Dissolved Zinc (Zn)	2021/12/16	NC		%	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Elevated reporting limit due to turbidity.

(2) Elevated reporting limit due to sample matrix.

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Colleen Acker, B.Sc, Scientific Service Specialist

Rosemarie MacDonald, Scientific Specialist (Organics)

Bureau Veritas Proprietary Software
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Your Project #: 20-2863
Site#: OH PARK / HARBOURSIDE EAST
Site Location: OH PARK / HARBOURSIDE EAST

Attention: Nadine Wambolt

Dillon Consulting Limited
275 Charlotte St
Sydney, NS
CANADA B1P 1C6

Report Date: 2022/01/27
Report #: R6979423
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1AF081
Received: 2021/12/03, 17:00

Sample Matrix: Water
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Carbonate, Bicarbonate and Hydroxide (1)	6	N/A	2021/12/29	N/A	SM 23 4500-CO2 D
Alkalinity (1)	1	N/A	2021/12/10	ATL SOP 00013	EPA 310.2 R1974 m
Alkalinity (1)	4	N/A	2021/12/13	ATL SOP 00013	EPA 310.2 R1974 m
Alkalinity (1)	1	N/A	2021/12/09	ATL SOP 00013	EPA 310.2 R1974 m
Benzo(b/j)fluoranthene Sum (water) (1)	6	N/A	2021/12/30	N/A	Auto Calc.
Chloride (1)	1	N/A	2021/12/10	ATL SOP 00014	SM 23 4500-Cl- E m
Chloride (1)	4	N/A	2021/12/13	ATL SOP 00014	SM 23 4500-Cl- E m
Chloride (1)	1	N/A	2021/12/09	ATL SOP 00014	SM 23 4500-Cl- E m
Colour (1)	1	N/A	2021/12/10	ATL SOP 00020	SM 23 2120C m
Colour (1)	4	N/A	2021/12/13	ATL SOP 00020	SM 23 2120C m
Colour (1)	1	N/A	2021/12/09	ATL SOP 00020	SM 23 2120C m
Conductance - water (1)	6	N/A	2021/12/09	ATL SOP 00004	SM 23 2510B m
Hardness (calculated as CaCO3) (1)	6	N/A	2022/01/13	ATL SOP 00048	Auto Calc
Mercury - Total (CVAA,LL) (1)	5	2022/01/04	2022/01/04	ATL SOP 00026	EPA 245.1 R3 m
Mercury - Total (CVAA,LL) (1)	1	2022/01/05	2022/01/05	ATL SOP 00026	EPA 245.1 R3 m
Metals Water Diss. MS (as rec'd) (1)	5	N/A	2021/12/10	ATL SOP 00058	EPA 6020B R2 m
Metals Water Diss. MS (as rec'd) (1)	1	N/A	2021/12/16	ATL SOP 00058	EPA 6020B R2 m
Ion Balance (% Difference) (1)	2	N/A	2022/01/13	N/A	Auto Calc.
Ion Balance (% Difference) (1)	4	N/A	2022/01/16	N/A	Auto Calc.
Anion and Cation Sum (1)	6	N/A	2022/01/13	N/A	Auto Calc.
Nitrogen Ammonia - water (1)	6	N/A	2021/12/09	ATL SOP 00015	EPA 350.1 R2 m
Nitrogen - Nitrate + Nitrite (1)	1	N/A	2021/12/10	ATL SOP 00016	USGS I-2547-11m
Nitrogen - Nitrate + Nitrite (1)	4	N/A	2021/12/13	ATL SOP 00016	USGS I-2547-11m
Nitrogen - Nitrate + Nitrite (1)	1	N/A	2021/12/09	ATL SOP 00016	USGS I-2547-11m
Nitrogen - Nitrite (1)	1	N/A	2021/12/10	ATL SOP 00017	SM 23 4500-NO2- B m
Nitrogen - Nitrite (1)	4	N/A	2021/12/13	ATL SOP 00017	SM 23 4500-NO2- B m
Nitrogen - Nitrite (1)	1	N/A	2021/12/09	ATL SOP 00017	SM 23 4500-NO2- B m
Nitrogen - Nitrate (as N) (1)	1	N/A	2022/01/11	ATL SOP 00018	ASTM D3867-16
Nitrogen - Nitrate (as N) (1)	4	N/A	2022/01/16	ATL SOP 00018	ASTM D3867-16
Nitrogen - Nitrate (as N) (1)	1	N/A	2022/01/09	ATL SOP 00018	ASTM D3867-16
PAH in Water by GC/MS (SIM) (1)	6	2021/12/08	2021/12/22	ATL SOP 00103	EPA 8270E R6 m
pH (1, 2)	6	N/A	2021/12/09	ATL SOP 00003	SM 23 4500-H+ B m

Your Project #: 20-2863
Site#: OH PARK / HARBOURSIDE EAST
Site Location: OH PARK / HARBOURSIDE EAST

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275 Charlotte St
Sydney, NS
CANADA B1P 1C6

Report Date: 2022/01/27
Report #: R6979423
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1AF081
Received: 2021/12/03, 17:00

Sample Matrix: Water
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Phosphorus - ortho (1)	1	N/A	2021/12/10	ATL SOP 00021	SM 23 4500-P E m
Phosphorus - ortho (1)	4	N/A	2021/12/13	ATL SOP 00021	SM 23 4500-P E m
Phosphorus - ortho (1)	1	N/A	2021/12/09	ATL SOP 00021	SM 23 4500-P E m
Sat. pH and Langelier Index (@ 20C) (1)	2	N/A	2022/01/13	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 20C) (1)	4	N/A	2022/01/16	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 4C) (1)	2	N/A	2022/01/13	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 4C) (1)	4	N/A	2022/01/16	ATL SOP 00049	Auto Calc.
Reactive Silica (1)	1	N/A	2021/12/10	ATL SOP 00022	EPA 366.0 m
Reactive Silica (1)	4	N/A	2021/12/13	ATL SOP 00022	EPA 366.0 m
Reactive Silica (1)	1	N/A	2021/12/09	ATL SOP 00022	EPA 366.0 m
Sulphate (1)	1	N/A	2022/01/24	ATL SOP 00023	ASTM D516-16 m
Sulphate (1)	1	N/A	2021/12/10	ATL SOP 00023	ASTM D516-16 m
Sulphate (1)	4	N/A	2021/12/13	ATL SOP 00023	ASTM D516-16 m
Total Dissolved Solids (TDS calc) (1)	2	N/A	2022/01/13	N/A	Auto Calc.
Total Dissolved Solids (TDS calc) (1)	4	N/A	2022/01/16	N/A	Auto Calc.
Organic carbon - Total (TOC) (1, 3)	6	N/A	2021/12/13	ATL SOP 00203	SM 23 5310B m
Turbidity (1)	6	N/A	2021/12/09	ATL SOP 00011	EPA 180.1 R2 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Your Project #: 20-2863
Site#: OH PARK / HARBOURSIDE EAST
Site Location: OH PARK / HARBOURSIDE EAST

Attention: Nadine Wambolt

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CANADA B1P 1C6

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CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1AF081
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Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) The APHA Standard Method require pH to be analyzed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the APHA Standard Method holding time.
(3) TOC / DOC present in the sample should be considered as non-purgeable TOC / DOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Natalie MacAskill, Key Account Specialist
Email: Natalie.MacAskill@bureauveritas.com
Phone# (902)567-1255 Ext:17
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Bureau Veritas Job #: C1AF081
Report Date: 2022/01/27

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RMJ814			RMJ815			RMJ816		
Sampling Date		2021/12/03			2021/12/03			2021/12/03		
Sample #		DEC03-58			DEC03-59			DEC03-60		
	UNITS	CONCW-101-MWB	RDL	QC Batch	CODT-105-MW	RDL	QC Batch	COBC-001-MWA	RDL	QC Batch
Calculated Parameters										
Anion Sum	me/L	5.01	N/A	7756701	11.5	N/A	7756652	17.7	N/A	7756652
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	86	1.0	7756699	380	1.0	7756650	140	1.0	7756650
Calculated TDS	mg/L	330	1.0	7756705	650	1.0	7756656	1000	1.0	7756656
Carb. Alkalinity (calc. as CaCO3)	mg/L	3.2	1.0	7756699	2.4	1.0	7756650	<1.0	1.0	7756650
Cation Sum	me/L	5.57	N/A	7756701	11.4	N/A	7756652	11.5	N/A	7756652
Hardness (CaCO3)	mg/L	200	1.0	7756700	530	1.0	7756700	460	1.0	7756700
Ion Balance (% Difference)	%	5.29	N/A	7756666	0.570	N/A	7756666	21.3	N/A	7756666
Langelier Index (@ 20C)	N/A	0.926		7756703	1.14		7756654	0.132		7756654
Langelier Index (@ 4C)	N/A	0.677		7756704	0.892		7756655	-0.114		7756655
Nitrate (N)	mg/L	0.73	0.050	7756702	2.8	0.25	7756702	<0.050	0.050	7756702
Saturation pH (@ 20C)	N/A	7.66		7756703	6.68		7756654	7.17		7756654
Saturation pH (@ 4C)	N/A	7.91		7756704	6.93		7756655	7.41		7756655
Inorganics										
Total Alkalinity (Total as CaCO3)	mg/L	89	5.0	7772892	380	25	7775208	140	5.0	7767624
Dissolved Chloride (Cl-)	mg/L	37	1.0	7772915	12	1.0	7775218	64	1.0	7767645
Colour	TCU	7.4	5.0	7772932	<5.0	5.0	7775221	<5.0	5.0	7767652
Nitrate + Nitrite (N)	mg/L	0.80	0.050	7772933	2.8	0.25	7775224	<0.050	0.050	7767655
Nitrite (N)	mg/L	0.077	0.010	7772934	<0.010	0.010	7775226	<0.010	0.010	7767656
Nitrogen (Ammonia Nitrogen)	mg/L	0.51	0.050	7762103	<0.050	0.050	7762104	0.51	0.050	7762103
Total Organic Carbon (C)	mg/L	3.1	0.50	7758245	2.9	0.50	7758245	2.9	0.50	7758245
Orthophosphate (P)	mg/L	0.016	0.010	7772930	0.026	0.010	7775223	<0.010	0.010	7767653
pH	pH	8.59		7751099	7.82		7751102	7.30		7751102
Reactive Silica (SiO2)	mg/L	24	1.0	7772918	20	0.50	7775220	8.5	0.50	7767648
Dissolved Sulphate (SO4)	mg/L	100	10	7772917	160	10	7775219	630	20	7796150
Turbidity	NTU	0.48	0.10	7724908	2.0	0.10	7724906	60	0.10	7724908
Conductivity	uS/cm	510	1.0	7751100	990	1.0	7751104	1500	1.0	7751104

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Bureau Veritas Job #: C1AF081
Report Date: 2022/01/27

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RMJ817			RMJ818			RMJ819		
Sampling Date		2021/12/03			2021/12/03			2021/12/03		
Sample #		DEC03-61			DEC03-62			DEC03-63		
	UNITS	SCU7-003-MW	RDL	QC Batch	COTS-001-MWB	RDL	QC Batch	FD-15	RDL	QC Batch
Calculated Parameters										
Anion Sum	me/L	10.4	N/A	7756652	9.06	N/A	7756652	4.93	N/A	7756652
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	150	1.0	7756650	290	1.0	7756650	79	1.0	7756650
Calculated TDS	mg/L	620	1.0	7756656	510	1.0	7756656	330	1.0	7756656
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	7756650	1.2	1.0	7756650	3.1	1.0	7756650
Cation Sum	me/L	11.0	N/A	7756652	8.91	N/A	7756652	5.61	N/A	7756652
Hardness (CaCO3)	mg/L	270	1.0	7756700	360	1.0	7756651	200	1.0	7756651
Ion Balance (% Difference)	%	2.86	N/A	7756666	0.830	N/A	7756666	6.45	N/A	7756666
Langelier Index (@ 20C)	N/A	-0.405		7756654	0.728		7756654	0.922		7756654
Langelier Index (@ 4C)	N/A	-0.652		7756655	0.480		7756655	0.673		7756655
Nitrate (N)	mg/L	0.41	0.050	7756702	0.16	0.050	7756702	0.69	0.050	7756653
Saturation pH (@ 20C)	N/A	7.37		7756654	6.93		7756654	7.70		7756654
Saturation pH (@ 4C)	N/A	7.61		7756655	7.18		7756655	7.95		7756655
Inorganics										
Total Alkalinity (Total as CaCO3)	mg/L	150	25	7775208	290	25	7775208	82	5.0	7775208
Dissolved Chloride (Cl-)	mg/L	180	5.0	7775218	40	1.0	7775218	36	1.0	7775218
Colour	TCU	<5.0	5.0	7775221	<5.0	5.0	7775221	7.5	5.0	7775221
Nitrate + Nitrite (N)	mg/L	0.42	0.050	7775224	0.32	0.050	7775224	0.78	0.050	7775224
Nitrite (N)	mg/L	0.014	0.010	7775226	0.16	0.010	7775226	0.089	0.010	7775226
Nitrogen (Ammonia Nitrogen)	mg/L	0.69	0.050	7762103	0.27	0.050	7762103	0.27	0.050	7762103
Total Organic Carbon (C)	mg/L	1.6	0.50	7758245	1.3	0.50	7758245	3.1	0.50	7758245
Orthophosphate (P)	mg/L	<0.010	0.010	7775223	0.011	0.010	7775223	0.011	0.010	7775223
pH	pH	6.96		7751102	7.66		7751102	8.62		7751102
Reactive Silica (SiO2)	mg/L	9.8	0.50	7775220	14	0.50	7775220	24	1.0	7775220
Dissolved Sulphate (SO4)	mg/L	110	10	7775219	100	4.0	7775219	110	10	7775219
Turbidity	NTU	6.9	0.10	7724908	0.96	0.10	7724908	14	0.10	7724908
Conductivity	uS/cm	1200	1.0	7751104	810	1.0	7751104	510	1.0	7751104

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Bureau Veritas Job #: C1AF081
Report Date: 2022/01/27

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

MERCURY BY COLD VAPOUR AA (WATER)

Bureau Veritas ID		RMJ814	RMJ815	RMJ816		RMJ817		
Sampling Date		2021/12/03	2021/12/03	2021/12/03		2021/12/03		
Sample #		DEC03-58	DEC03-59	DEC03-60		DEC03-61		
	UNITS	CONCW-101-MWB	CODT-105-MW	COBC-001-MWA	QC Batch	SCU7-003-MW	RDL	QC Batch
Metals								
Total Mercury (Hg)	ug/L	<0.013 (1)	<0.013 (1)	<0.013 (1)	7761368	<0.013 (1)	0.013	7763841

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Mercury analyzed past recommended hold time.

Bureau Veritas ID		RMJ818	RMJ819		
Sampling Date		2021/12/03	2021/12/03		
Sample #		DEC03-62	DEC03-63		
	UNITS	COTS-001-MWB	FD-15	RDL	QC Batch
Metals					
Total Mercury (Hg)	ug/L	<0.013 (1)	<0.013 (1)	0.013	7761368

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Mercury analyzed past recommended hold time.

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Bureau Veritas Job #: C1AF081
Report Date: 2022/01/27

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

ELEMENTS BY ICP/MS (WATER)

Bureau Veritas ID		RMJ814	RMJ815		RMJ816		RMJ817		
Sampling Date		2021/12/03	2021/12/03		2021/12/03		2021/12/03		
Sample #		DEC03-58	DEC03-59		DEC03-60		DEC03-61		
	UNITS	CONCW-101-MWB	CODT-105-MW	RDL	COBC-001-MWA	RDL	SCU7-003-MW	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	ug/L	72	18	5.0	6.5	5.0	26	5.0	7774690
Dissolved Antimony (Sb)	ug/L	<1.0	2.2	1.0	<1.0	1.0	<1.0	1.0	7774690
Dissolved Arsenic (As)	ug/L	10	2.5	1.0	1.7	1.0	1.6	1.0	7774690
Dissolved Barium (Ba)	ug/L	31	36	1.0	76	1.0	27	1.0	7774690
Dissolved Beryllium (Be)	ug/L	<0.10	<0.10	0.10	<0.10	0.10	<0.10	0.10	7774690
Dissolved Bismuth (Bi)	ug/L	<2.0	<2.0	2.0	<2.0	2.0	<2.0	2.0	7774690
Dissolved Boron (B)	ug/L	62	82	50	<50	50	77	50	7774690
Dissolved Cadmium (Cd)	ug/L	<0.010	0.024	0.010	0.044	0.010	0.20	0.010	7774690
Dissolved Calcium (Ca)	ug/L	68000	170000	100	170000	100	91000	100	7774690
Dissolved Chromium (Cr)	ug/L	1.1	<1.0	1.0	<1.0	1.0	<1.0	1.0	7774690
Dissolved Cobalt (Co)	ug/L	<0.40	<0.40	0.40	0.62	0.40	0.71	0.40	7774690
Dissolved Copper (Cu)	ug/L	0.98	3.6	0.50	<0.50	0.50	<0.50	0.50	7774690
Dissolved Iron (Fe)	ug/L	<50	<50	50	3100	50	270	50	7774690
Dissolved Lead (Pb)	ug/L	<0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	7774690
Dissolved Magnesium (Mg)	ug/L	6500	25000	100	10000	100	9300	100	7774690
Dissolved Manganese (Mn)	ug/L	12	<2.0	2.0	1900	2.0	1600	2.0	7774690
Dissolved Molybdenum (Mo)	ug/L	8.1	7.3	2.0	<2.0	2.0	<2.0	2.0	7774690
Dissolved Nickel (Ni)	ug/L	<2.0	<2.0	2.0	<2.0	2.0	<2.0	2.0	7774690
Dissolved Phosphorus (P)	ug/L	<100	<100	100	<100	100	<100	100	7774690
Dissolved Potassium (K)	ug/L	4900	5200	100	2600	100	5500	100	7774690
Dissolved Selenium (Se)	ug/L	2.6	29	0.50	<0.50	0.50	<0.50	0.50	7774690
Dissolved Silver (Ag)	ug/L	<0.10	<0.10	0.10	<0.10	0.10	<0.10	0.10	7774690
Dissolved Sodium (Na)	ug/L	35000	15000	100	46000	100	130000	100	7774690
Dissolved Strontium (Sr)	ug/L	390	420	2.0	5000	20	460	2.0	7774690
Dissolved Thallium (Tl)	ug/L	<0.10	<0.10	0.10	<0.10	0.10	<0.10	0.10	7774690
Dissolved Tin (Sn)	ug/L	<2.0	<2.0	2.0	<2.0	2.0	<2.0	2.0	7774690
Dissolved Titanium (Ti)	ug/L	<2.0	<2.0	2.0	<2.0	2.0	<2.0	2.0	7774690
Dissolved Uranium (U)	ug/L	1.7	3.2	0.10	<0.10	0.10	0.16	0.10	7774690
Dissolved Vanadium (V)	ug/L	7.3	4.4	2.0	<2.0	2.0	<2.0	2.0	7774690
Dissolved Zinc (Zn)	ug/L	<5.0	39	5.0	22	5.0	25	5.0	7774690

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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ELEMENTS BY ICP/MS (WATER)

Bureau Veritas ID		RMJ818	RMJ819		
Sampling Date		2021/12/03	2021/12/03		
Sample #		DEC03-62	DEC03-63		
	UNITS	COTS-001-MWB	FD-15	RDL	QC Batch
Metals					
Dissolved Aluminum (Al)	ug/L	<5.0	79	5.0	7774690
Dissolved Antimony (Sb)	ug/L	<1.0	<1.0	1.0	7774690
Dissolved Arsenic (As)	ug/L	<1.0	11	1.0	7774690
Dissolved Barium (Ba)	ug/L	36	31	1.0	7774690
Dissolved Beryllium (Be)	ug/L	<0.10	<0.10	0.10	7774690
Dissolved Bismuth (Bi)	ug/L	<2.0	<2.0	2.0	7774690
Dissolved Boron (B)	ug/L	<50	63	50	7774690
Dissolved Cadmium (Cd)	ug/L	0.023	<0.010	0.010	7774690
Dissolved Calcium (Ca)	ug/L	120000	68000	100	7774690
Dissolved Chromium (Cr)	ug/L	<1.0	1.1	1.0	7774690
Dissolved Cobalt (Co)	ug/L	<0.40	<0.40	0.40	7774690
Dissolved Copper (Cu)	ug/L	<0.50	1.0	0.50	7774690
Dissolved Iron (Fe)	ug/L	<50	<50	50	7774690
Dissolved Lead (Pb)	ug/L	<0.50	<0.50	0.50	7774690
Dissolved Magnesium (Mg)	ug/L	14000	6500	100	7774690
Dissolved Manganese (Mn)	ug/L	59	12	2.0	7774690
Dissolved Molybdenum (Mo)	ug/L	<2.0	7.8	2.0	7774690
Dissolved Nickel (Ni)	ug/L	<2.0	<2.0	2.0	7774690
Dissolved Phosphorus (P)	ug/L	<100	<100	100	7774690
Dissolved Potassium (K)	ug/L	2600	4900	100	7774690
Dissolved Selenium (Se)	ug/L	<0.50	2.5	0.50	7774690
Dissolved Silver (Ag)	ug/L	<0.10	<0.10	0.10	7774690
Dissolved Sodium (Na)	ug/L	39000	35000	100	7774690
Dissolved Strontium (Sr)	ug/L	1600	390	2.0	7774690
Dissolved Thallium (Tl)	ug/L	<0.10	<0.10	0.10	7774690
Dissolved Tin (Sn)	ug/L	<2.0	<2.0	2.0	7774690
Dissolved Titanium (Ti)	ug/L	<2.0	<2.0	2.0	7774690
Dissolved Uranium (U)	ug/L	1.1	1.8	0.10	7774690
Dissolved Vanadium (V)	ug/L	<2.0	7.3	2.0	7774690
Dissolved Zinc (Zn)	ug/L	<5.0	<5.0	5.0	7774690

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID		RMJ814		RMJ815	RMJ816	RMJ817	RMJ818		
Sampling Date		2021/12/03		2021/12/03	2021/12/03	2021/12/03	2021/12/03		
Sample #		DEC03-58		DEC03-59	DEC03-60	DEC03-61	DEC03-62		
	UNITS	CONCW-101-MWB	RDL	CODT-105-MW	COBC-001-MWA	SCU7-003-MW	COTS-001-MWB	RDL	QC Batch
Polyaromatic Hydrocarbons									
1-Methylnaphthalene	ug/L	<0.050	0.050	<0.050	<0.050	<0.050	<0.050	0.050	7759250
2-Methylnaphthalene	ug/L	<0.050	0.050	<0.050	<0.050	<0.050	<0.050	0.050	7759250
Acenaphthene	ug/L	0.048	0.010	0.036	1.2	<0.010	<0.010	0.010	7759250
Acenaphthylene	ug/L	<0.020 (1)	0.020	<0.010	0.23	<0.010	<0.010	0.010	7759250
Anthracene	ug/L	0.012	0.010	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Benzo(a)anthracene	ug/L	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Benzo(a)pyrene	ug/L	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Benzo(b)fluoranthene	ug/L	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Benzo(b/j)fluoranthene	ug/L	<0.020	0.020	<0.020	<0.020	<0.020	<0.020	0.020	7756200
Benzo(g,h,i)perylene	ug/L	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Benzo(j)fluoranthene	ug/L	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Benzo(k)fluoranthene	ug/L	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Chrysene	ug/L	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Dibenzo(a,h)anthracene	ug/L	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Fluoranthene	ug/L	0.017	0.010	<0.010	0.019	<0.010	0.019	0.010	7759250
Fluorene	ug/L	0.020	0.010	<0.010	0.033	<0.010	<0.010	0.010	7759250
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Naphthalene	ug/L	<0.20	0.20	<0.20	<0.20	<0.20	<0.20	0.20	7759250
Perylene	ug/L	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	0.010	7759250
Phenanthrene	ug/L	0.044	0.010	<0.010	0.022	<0.010	0.018	0.010	7759250
Pyrene	ug/L	0.015	0.010	0.010	0.059	<0.010	0.018	0.010	7759250
Surrogate Recovery (%)									
D10-Anthracene	%	97		96	93	98	95		7759250
D14-Terphenyl	%	96		97	95	94	98		7759250
D8-Acenaphthylene	%	99		97	94	96	95		7759250

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Elevated PAH RDL(s) due to matrix / co-extractive interference.

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SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID		RMJ819		
Sampling Date		2021/12/03		
Sample #		DEC03-63		
	UNITS	FD-15	RDL	QC Batch
Polyaromatic Hydrocarbons				
1-Methylnaphthalene	ug/L	<0.050	0.050	7759250
2-Methylnaphthalene	ug/L	<0.050	0.050	7759250
Acenaphthene	ug/L	0.048	0.010	7759250
Acenaphthylene	ug/L	<0.020 (1)	0.020	7759250
Anthracene	ug/L	0.012	0.010	7759250
Benzo(a)anthracene	ug/L	<0.010	0.010	7759250
Benzo(a)pyrene	ug/L	<0.010	0.010	7759250
Benzo(b)fluoranthene	ug/L	<0.010	0.010	7759250
Benzo(b/j)fluoranthene	ug/L	<0.020	0.020	7756200
Benzo(g,h,i)perylene	ug/L	<0.010	0.010	7759250
Benzo(j)fluoranthene	ug/L	<0.010	0.010	7759250
Benzo(k)fluoranthene	ug/L	<0.010	0.010	7759250
Chrysene	ug/L	<0.010	0.010	7759250
Dibenzo(a,h)anthracene	ug/L	<0.010	0.010	7759250
Fluoranthene	ug/L	0.016	0.010	7759250
Fluorene	ug/L	0.019	0.010	7759250
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	0.010	7759250
Naphthalene	ug/L	<0.20	0.20	7759250
Perylene	ug/L	<0.010	0.010	7759250
Phenanthrene	ug/L	0.045	0.010	7759250
Pyrene	ug/L	0.014	0.010	7759250
Surrogate Recovery (%)				
D10-Anthracene	%	98		7759250
D14-Terphenyl	%	97		7759250
D8-Acenaphthylene	%	101		7759250

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Elevated PAH RDL(s) due to matrix / co-extractive interference.

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GENERAL COMMENTS

Sample RMJ814 [CONCW-101-MWB] : ortho-Phosphate > Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.
Poor RCAp Ion Balance due to sample matrix.

Sample RMJ815 [CODT-105-MW] : ortho-Phosphate > Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample RMJ816 [COBC-001-MWA] : Poor RCAp Ion Balance due to sample matrix.

Sample RMJ818 [COTS-001-MWB] : ortho-Phosphate > Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample RMJ819 [FD-15] : ortho-Phosphate > Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.
Poor RCAp Ion Balance due to sample matrix. Possibly due to fine particulate matter. Anion sum does not include contribution from Total Organic Carbon.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7724906	SHW	QC Standard	Turbidity	2021/12/09		100	%	80 - 120
7724906	SHW	Spiked Blank	Turbidity	2021/12/09		104	%	80 - 120
7724906	SHW	Method Blank	Turbidity	2021/12/09	<0.10		NTU	
7724906	SHW	RPD	Turbidity	2021/12/09	NC		%	20
7724908	SHW	QC Standard	Turbidity	2021/12/09		101	%	80 - 120
7724908	SHW	Spiked Blank	Turbidity	2021/12/09		105	%	80 - 120
7724908	SHW	Method Blank	Turbidity	2021/12/09	<0.10		NTU	
7724908	SHW	RPD [RMJ814-01]	Turbidity	2021/12/09	12		%	20
7751099	SHW	Spiked Blank	pH	2021/12/09		100	%	97 - 103
7751099	SHW	RPD [RMJ814-01]	pH	2021/12/09	1.3		%	N/A
7751100	SHW	Spiked Blank	Conductivity	2021/12/09		104	%	80 - 120
7751100	SHW	Method Blank	Conductivity	2021/12/09	1.1, RDL=1.0		uS/cm	
7751100	SHW	RPD [RMJ814-01]	Conductivity	2021/12/09	0.60		%	10
7751102	SHW	Spiked Blank	pH	2021/12/09		100	%	97 - 103
7751102	SHW	RPD	pH	2021/12/09	0.084		%	N/A
7751104	SHW	Spiked Blank	Conductivity	2021/12/09		101	%	80 - 120
7751104	SHW	Method Blank	Conductivity	2021/12/09	<1.0		uS/cm	
7751104	SHW	RPD	Conductivity	2021/12/09	2.9		%	10
7758245	NGI	Matrix Spike [RMJ816-04]	Total Organic Carbon (C)	2021/12/13		96	%	85 - 115
7758245	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/13		100	%	80 - 120
7758245	NGI	Method Blank	Total Organic Carbon (C)	2021/12/13	<0.50		mg/L	
7758245	NGI	RPD [RMJ816-04]	Total Organic Carbon (C)	2021/12/13	0.82		%	15
7759250	LGE	Matrix Spike [RMJ817-06]	D10-Anthracene	2021/12/22		97	%	50 - 130
			D14-Terphenyl	2021/12/22		98	%	50 - 130
			D8-Acenaphthylene	2021/12/22		95	%	50 - 130
			1-Methylnaphthalene	2021/12/22		94	%	50 - 130
			2-Methylnaphthalene	2021/12/22		99	%	50 - 130
			Acenaphthene	2021/12/22		114	%	50 - 130
			Acenaphthylene	2021/12/22		96	%	50 - 130
			Anthracene	2021/12/22		106	%	50 - 130
			Benzo(a)anthracene	2021/12/22		101	%	50 - 130
			Benzo(a)pyrene	2021/12/22		97	%	50 - 130
			Benzo(b)fluoranthene	2021/12/22		99	%	50 - 130
			Benzo(g,h,i)perylene	2021/12/22		97	%	50 - 130
			Benzo(j)fluoranthene	2021/12/22		95	%	50 - 130
			Benzo(k)fluoranthene	2021/12/22		91	%	50 - 130
			Chrysene	2021/12/22		107	%	50 - 130
			Dibenzo(a,h)anthracene	2021/12/22		93	%	50 - 130
			Fluoranthene	2021/12/22		104	%	50 - 130
			Fluorene	2021/12/22		107	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2021/12/22		96	%	50 - 130
			Naphthalene	2021/12/22		114	%	50 - 130
			Perylene	2021/12/22		97	%	50 - 130
			Phenanthrene	2021/12/22		112	%	50 - 130
			Pyrene	2021/12/22		104	%	50 - 130
7759250	LGE	Spiked Blank	D10-Anthracene	2021/12/22		80	%	50 - 130
			D14-Terphenyl	2021/12/22		77	%	50 - 130
			D8-Acenaphthylene	2021/12/22		80	%	50 - 130
			1-Methylnaphthalene	2021/12/22		80	%	50 - 130
			2-Methylnaphthalene	2021/12/22		84	%	50 - 130
			Acenaphthene	2021/12/22		99	%	50 - 130
			Acenaphthylene	2021/12/22		79	%	50 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Anthracene	2021/12/22		87	%	50 - 130
			Benzo(a)anthracene	2021/12/22		79	%	50 - 130
			Benzo(a)pyrene	2021/12/22		80	%	50 - 130
			Benzo(b)fluoranthene	2021/12/22		82	%	50 - 130
			Benzo(g,h,i)perylene	2021/12/22		82	%	50 - 130
			Benzo(j)fluoranthene	2021/12/22		80	%	50 - 130
			Benzo(k)fluoranthene	2021/12/22		77	%	50 - 130
			Chrysene	2021/12/22		84	%	50 - 130
			Dibenzo(a,h)anthracene	2021/12/22		75	%	50 - 130
			Fluoranthene	2021/12/22		85	%	50 - 130
			Fluorene	2021/12/22		89	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2021/12/22		84	%	50 - 130
			Naphthalene	2021/12/22		94	%	50 - 130
			Perylene	2021/12/22		85	%	50 - 130
			Phenanthrene	2021/12/22		92	%	50 - 130
			Pyrene	2021/12/22		83	%	50 - 130
7759250	LGE	Method Blank	D10-Anthracene	2021/12/22		119	%	50 - 130
			D14-Terphenyl	2021/12/22		120	%	50 - 130
			D8-Acenaphthylene	2021/12/22		114	%	50 - 130
			1-Methylnaphthalene	2021/12/22	<0.050		ug/L	
			2-Methylnaphthalene	2021/12/22	<0.050		ug/L	
			Acenaphthene	2021/12/22	<0.010		ug/L	
			Acenaphthylene	2021/12/22	<0.010		ug/L	
			Anthracene	2021/12/22	<0.010		ug/L	
			Benzo(a)anthracene	2021/12/22	<0.010		ug/L	
			Benzo(a)pyrene	2021/12/22	<0.010		ug/L	
			Benzo(b)fluoranthene	2021/12/22	<0.010		ug/L	
			Benzo(g,h,i)perylene	2021/12/22	<0.010		ug/L	
			Benzo(j)fluoranthene	2021/12/22	<0.010		ug/L	
			Benzo(k)fluoranthene	2021/12/22	<0.010		ug/L	
			Chrysene	2021/12/22	<0.010		ug/L	
			Dibenzo(a,h)anthracene	2021/12/22	<0.010		ug/L	
			Fluoranthene	2021/12/22	<0.010		ug/L	
			Fluorene	2021/12/22	<0.010		ug/L	
			Indeno(1,2,3-cd)pyrene	2021/12/22	<0.010		ug/L	
			Naphthalene	2021/12/22	<0.20		ug/L	
			Perylene	2021/12/22	<0.010		ug/L	
			Phenanthrene	2021/12/22	<0.010		ug/L	
			Pyrene	2021/12/22	<0.010		ug/L	
7759250	LGE	RPD	1-Methylnaphthalene	2021/12/22	NC		%	40
			2-Methylnaphthalene	2021/12/22	NC		%	40
			Acenaphthene	2021/12/22	NC		%	40
			Acenaphthylene	2021/12/22	NC		%	40
			Anthracene	2021/12/22	NC		%	40
			Benzo(a)anthracene	2021/12/22	NC		%	40
			Benzo(a)pyrene	2021/12/22	NC		%	40
			Benzo(b)fluoranthene	2021/12/22	NC		%	40
			Benzo(g,h,i)perylene	2021/12/22	NC		%	40
			Benzo(j)fluoranthene	2021/12/22	NC		%	40
			Benzo(k)fluoranthene	2021/12/22	NC		%	40
			Chrysene	2021/12/22	NC		%	40
			Dibenzo(a,h)anthracene	2021/12/22	NC		%	40
			Fluoranthene	2021/12/22	NC		%	40

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Fluorene	2021/12/22	NC		%	40
			Indeno(1,2,3-cd)pyrene	2021/12/22	NC		%	40
			Naphthalene	2021/12/22	NC		%	40
			Perylene	2021/12/22	NC		%	40
			Phenanthrene	2021/12/22	NC		%	40
			Pyrene	2021/12/22	NC		%	40
7761368	FJO	Matrix Spike	Total Mercury (Hg)	2022/01/04		102	%	80 - 120
7761368	FJO	Spiked Blank	Total Mercury (Hg)	2022/01/04		99	%	80 - 120
7761368	FJO	Method Blank	Total Mercury (Hg)	2022/01/04	<0.013		ug/L	
7761368	FJO	RPD	Total Mercury (Hg)	2022/01/04	NC		%	20
7762103	MKY	Matrix Spike	Nitrogen (Ammonia Nitrogen)	2021/12/09		100	%	80 - 120
7762103	MKY	Spiked Blank	Nitrogen (Ammonia Nitrogen)	2021/12/09		101	%	80 - 120
7762103	MKY	Method Blank	Nitrogen (Ammonia Nitrogen)	2021/12/09	<0.050		mg/L	
7762103	MKY	RPD	Nitrogen (Ammonia Nitrogen)	2021/12/09	NC		%	20
7762104	MKY	Matrix Spike [RMJ815-03]	Nitrogen (Ammonia Nitrogen)	2021/12/09		94	%	80 - 120
7762104	MKY	Spiked Blank	Nitrogen (Ammonia Nitrogen)	2021/12/09		95	%	80 - 120
7762104	MKY	Method Blank	Nitrogen (Ammonia Nitrogen)	2021/12/09	<0.050		mg/L	
7762104	MKY	RPD [RMJ815-03]	Nitrogen (Ammonia Nitrogen)	2021/12/09	NC		%	20
7763841	FJO	Matrix Spike	Total Mercury (Hg)	2022/01/05		105	%	80 - 120
7763841	FJO	Spiked Blank	Total Mercury (Hg)	2022/01/05		92	%	80 - 120
7763841	FJO	Method Blank	Total Mercury (Hg)	2022/01/05	<0.013		ug/L	
7763841	FJO	RPD	Total Mercury (Hg)	2022/01/05	NC (1)		%	20
7767624	MCN	Matrix Spike [RMJ816-01]	Total Alkalinity (Total as CaCO3)	2021/12/09		NC	%	80 - 120
7767624	MCN	Spiked Blank	Total Alkalinity (Total as CaCO3)	2021/12/09		102	%	80 - 120
7767624	MCN	Method Blank	Total Alkalinity (Total as CaCO3)	2021/12/09	<5.0		mg/L	
7767624	MCN	RPD [RMJ816-01]	Total Alkalinity (Total as CaCO3)	2021/12/09	2.3		%	20
7767645	MCN	Matrix Spike [RMJ816-01]	Dissolved Chloride (Cl-)	2021/12/09		NC	%	80 - 120
7767645	MCN	Spiked Blank	Dissolved Chloride (Cl-)	2021/12/09		97	%	80 - 120
7767645	MCN	Method Blank	Dissolved Chloride (Cl-)	2021/12/09	<1.0		mg/L	
7767645	MCN	RPD [RMJ816-01]	Dissolved Chloride (Cl-)	2021/12/09	2.5		%	20
7767648	MCN	Matrix Spike [RMJ816-01]	Reactive Silica (SiO2)	2021/12/09		88	%	80 - 120
7767648	MCN	Spiked Blank	Reactive Silica (SiO2)	2021/12/09		96	%	80 - 120
7767648	MCN	Method Blank	Reactive Silica (SiO2)	2021/12/09	<0.50		mg/L	
7767648	MCN	RPD [RMJ816-01]	Reactive Silica (SiO2)	2021/12/09	0.48		%	20
7767652	MCN	Spiked Blank	Colour	2021/12/09		99	%	80 - 120
7767652	MCN	Method Blank	Colour	2021/12/09	<5.0		TCU	
7767652	MCN	RPD [RMJ816-01]	Colour	2021/12/09	NC		%	20
7767653	MCN	Matrix Spike [RMJ816-01]	Orthophosphate (P)	2021/12/09		96	%	80 - 120
7767653	MCN	Spiked Blank	Orthophosphate (P)	2021/12/09		100	%	80 - 120
7767653	MCN	Method Blank	Orthophosphate (P)	2021/12/09	<0.010		mg/L	
7767653	MCN	RPD [RMJ816-01]	Orthophosphate (P)	2021/12/09	NC		%	20
7767655	MCN	Matrix Spike [RMJ816-01]	Nitrate + Nitrite (N)	2021/12/09		96	%	80 - 120
7767655	MCN	Spiked Blank	Nitrate + Nitrite (N)	2021/12/09		96	%	80 - 120
7767655	MCN	Method Blank	Nitrate + Nitrite (N)	2021/12/09	<0.050		mg/L	
7767655	MCN	RPD [RMJ816-01]	Nitrate + Nitrite (N)	2021/12/09	NC		%	20
7767656	MCN	Matrix Spike [RMJ816-01]	Nitrite (N)	2021/12/09		101	%	80 - 120
7767656	MCN	Spiked Blank	Nitrite (N)	2021/12/09		105	%	80 - 120
7767656	MCN	Method Blank	Nitrite (N)	2021/12/09	<0.010		mg/L	
7767656	MCN	RPD [RMJ816-01]	Nitrite (N)	2021/12/09	NC		%	20
7772892	EMT	Matrix Spike [RMJ814-01]	Total Alkalinity (Total as CaCO3)	2021/12/10		NC	%	80 - 120
7772892	EMT	Spiked Blank	Total Alkalinity (Total as CaCO3)	2021/12/10		95	%	80 - 120
7772892	EMT	Method Blank	Total Alkalinity (Total as CaCO3)	2021/12/10	<5.0		mg/L	
7772892	EMT	RPD [RMJ814-01]	Total Alkalinity (Total as CaCO3)	2021/12/10	0.87		%	20

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7772915	EMT	Matrix Spike [RMJ814-01]	Dissolved Chloride (Cl-)	2021/12/10		82	%	80 - 120
7772915	EMT	Spiked Blank	Dissolved Chloride (Cl-)	2021/12/10		95	%	80 - 120
7772915	EMT	Method Blank	Dissolved Chloride (Cl-)	2021/12/10	<1.0		mg/L	
7772915	EMT	RPD [RMJ814-01]	Dissolved Chloride (Cl-)	2021/12/10	4.2		%	20
7772917	EMT	Matrix Spike [RMJ814-01]	Dissolved Sulphate (SO4)	2021/12/10		NC	%	80 - 120
7772917	EMT	Spiked Blank	Dissolved Sulphate (SO4)	2021/12/10		97	%	80 - 120
7772917	EMT	Method Blank	Dissolved Sulphate (SO4)	2021/12/10	<2.0		mg/L	
7772917	EMT	RPD [RMJ814-01]	Dissolved Sulphate (SO4)	2021/12/10	1.2		%	20
7772918	EMT	Matrix Spike [RMJ814-01]	Reactive Silica (SiO2)	2021/12/10		NC	%	80 - 120
7772918	EMT	Spiked Blank	Reactive Silica (SiO2)	2021/12/10		94	%	80 - 120
7772918	EMT	Method Blank	Reactive Silica (SiO2)	2021/12/10	<0.50		mg/L	
7772918	EMT	RPD [RMJ814-01]	Reactive Silica (SiO2)	2021/12/10	0.45		%	20
7772930	EMT	Matrix Spike [RMJ814-01]	Orthophosphate (P)	2021/12/10		89	%	80 - 120
7772930	EMT	Spiked Blank	Orthophosphate (P)	2021/12/10		93	%	80 - 120
7772930	EMT	Method Blank	Orthophosphate (P)	2021/12/10	<0.010		mg/L	
7772930	EMT	RPD [RMJ814-01]	Orthophosphate (P)	2021/12/10	5.8		%	20
7772932	EMT	Spiked Blank	Colour	2021/12/10		97	%	80 - 120
7772932	EMT	Method Blank	Colour	2021/12/10	<5.0		TCU	
7772932	EMT	RPD [RMJ814-01]	Colour	2021/12/10	6.0		%	20
7772933	EMT	Matrix Spike [RMJ814-01]	Nitrate + Nitrite (N)	2021/12/10		97	%	80 - 120
7772933	EMT	Spiked Blank	Nitrate + Nitrite (N)	2021/12/10		97	%	80 - 120
7772933	EMT	Method Blank	Nitrate + Nitrite (N)	2021/12/10	<0.050		mg/L	
7772933	EMT	RPD [RMJ814-01]	Nitrate + Nitrite (N)	2021/12/10	0.98		%	20
7772934	EMT	Matrix Spike [RMJ814-01]	Nitrite (N)	2021/12/10		97	%	80 - 120
7772934	EMT	Spiked Blank	Nitrite (N)	2021/12/10		100	%	80 - 120
7772934	EMT	Method Blank	Nitrite (N)	2021/12/10	<0.010		mg/L	
7772934	EMT	RPD [RMJ814-01]	Nitrite (N)	2021/12/10	3.7		%	20
7774690	BAN	Matrix Spike	Dissolved Aluminum (Al)	2021/12/16		97	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/16		101	%	80 - 120
			Dissolved Arsenic (As)	2021/12/16		95	%	80 - 120
			Dissolved Barium (Ba)	2021/12/16		92	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/16		103	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/16		91	%	80 - 120
			Dissolved Boron (B)	2021/12/16		100	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/16		90	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/16		NC	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/16		97	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/16		97	%	80 - 120
			Dissolved Copper (Cu)	2021/12/16		97	%	80 - 120
			Dissolved Iron (Fe)	2021/12/16		100	%	80 - 120
			Dissolved Lead (Pb)	2021/12/16		94	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/16		102	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/16		98	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/16		NC	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/16		97	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/16		101	%	80 - 120
			Dissolved Potassium (K)	2021/12/16		NC	%	80 - 120
			Dissolved Selenium (Se)	2021/12/16		100	%	80 - 120
			Dissolved Silver (Ag)	2021/12/16		97	%	80 - 120
			Dissolved Sodium (Na)	2021/12/16		NC	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/16		NC	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/16		94	%	80 - 120
			Dissolved Tin (Sn)	2021/12/16		100	%	80 - 120

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Titanium (Ti)	2021/12/16		102	%	80 - 120
			Dissolved Uranium (U)	2021/12/16		103	%	80 - 120
			Dissolved Vanadium (V)	2021/12/16		NC	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/16		99	%	80 - 120
7774690	BAN	Spiked Blank	Dissolved Aluminum (Al)	2021/12/10		99	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/10		99	%	80 - 120
			Dissolved Arsenic (As)	2021/12/10		97	%	80 - 120
			Dissolved Barium (Ba)	2021/12/10		95	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/10		96	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/10		97	%	80 - 120
			Dissolved Boron (B)	2021/12/10		95	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/10		100	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/10		101	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/10		99	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/10		99	%	80 - 120
			Dissolved Copper (Cu)	2021/12/10		101	%	80 - 120
			Dissolved Iron (Fe)	2021/12/10		102	%	80 - 120
			Dissolved Lead (Pb)	2021/12/10		99	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/10		103	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/10		100	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/10		100	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/10		101	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/10		103	%	80 - 120
			Dissolved Potassium (K)	2021/12/10		97	%	80 - 120
			Dissolved Selenium (Se)	2021/12/10		101	%	80 - 120
			Dissolved Silver (Ag)	2021/12/10		97	%	80 - 120
			Dissolved Sodium (Na)	2021/12/10		101	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/10		97	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/10		98	%	80 - 120
			Dissolved Tin (Sn)	2021/12/10		96	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/10		98	%	80 - 120
			Dissolved Uranium (U)	2021/12/10		103	%	80 - 120
			Dissolved Vanadium (V)	2021/12/10		102	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/10		102	%	80 - 120
7774690	BAN	Method Blank	Dissolved Aluminum (Al)	2021/12/10	<5.0		ug/L	
			Dissolved Antimony (Sb)	2021/12/10	<1.0		ug/L	
			Dissolved Arsenic (As)	2021/12/10	<1.0		ug/L	
			Dissolved Barium (Ba)	2021/12/10	<1.0		ug/L	
			Dissolved Beryllium (Be)	2021/12/10	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2021/12/10	<2.0		ug/L	
			Dissolved Boron (B)	2021/12/10	<50		ug/L	
			Dissolved Cadmium (Cd)	2021/12/10	<0.010		ug/L	
			Dissolved Calcium (Ca)	2021/12/10	<100		ug/L	
			Dissolved Chromium (Cr)	2021/12/10	<1.0		ug/L	
			Dissolved Cobalt (Co)	2021/12/10	<0.40		ug/L	
			Dissolved Copper (Cu)	2021/12/10	<0.50		ug/L	
			Dissolved Iron (Fe)	2021/12/10	<50		ug/L	
			Dissolved Lead (Pb)	2021/12/10	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2021/12/10	<100		ug/L	
			Dissolved Manganese (Mn)	2021/12/10	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2021/12/10	<2.0		ug/L	
			Dissolved Nickel (Ni)	2021/12/10	<2.0		ug/L	
			Dissolved Phosphorus (P)	2021/12/10	<100		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Potassium (K)	2021/12/10	<100		ug/L	
			Dissolved Selenium (Se)	2021/12/10	<0.50		ug/L	
			Dissolved Silver (Ag)	2021/12/10	<0.10		ug/L	
			Dissolved Sodium (Na)	2021/12/10	<100		ug/L	
			Dissolved Strontium (Sr)	2021/12/10	<2.0		ug/L	
			Dissolved Thallium (Tl)	2021/12/10	<0.10		ug/L	
			Dissolved Tin (Sn)	2021/12/10	<2.0		ug/L	
			Dissolved Titanium (Ti)	2021/12/10	<2.0		ug/L	
			Dissolved Uranium (U)	2021/12/10	<0.10		ug/L	
			Dissolved Vanadium (V)	2021/12/10	<2.0		ug/L	
			Dissolved Zinc (Zn)	2021/12/10	<5.0		ug/L	
7774690	BAN	RPD	Dissolved Aluminum (Al)	2021/12/16	3.8		%	20
			Dissolved Antimony (Sb)	2021/12/16	NC		%	20
			Dissolved Arsenic (As)	2021/12/16	NC		%	20
			Dissolved Barium (Ba)	2021/12/16	0.93		%	20
			Dissolved Beryllium (Be)	2021/12/16	NC		%	20
			Dissolved Bismuth (Bi)	2021/12/16	NC		%	20
			Dissolved Boron (B)	2021/12/16	NC		%	20
			Dissolved Cadmium (Cd)	2021/12/16	NC (2)		%	20
			Dissolved Calcium (Ca)	2021/12/16	1.4		%	20
			Dissolved Chromium (Cr)	2021/12/16	2.5		%	20
			Dissolved Cobalt (Co)	2021/12/16	NC		%	20
			Dissolved Copper (Cu)	2021/12/16	0.93		%	20
			Dissolved Iron (Fe)	2021/12/16	NC		%	20
			Dissolved Lead (Pb)	2021/12/16	NC		%	20
			Dissolved Magnesium (Mg)	2021/12/16	3.0		%	20
			Dissolved Manganese (Mn)	2021/12/16	NC		%	20
			Dissolved Molybdenum (Mo)	2021/12/16	0.094		%	20
			Dissolved Nickel (Ni)	2021/12/16	1.9		%	20
			Dissolved Phosphorus (P)	2021/12/16	NC		%	20
			Dissolved Potassium (K)	2021/12/16	0.068		%	20
			Dissolved Selenium (Se)	2021/12/16	0.42		%	20
			Dissolved Silver (Ag)	2021/12/16	NC		%	20
			Dissolved Sodium (Na)	2021/12/16	1.4		%	20
			Dissolved Strontium (Sr)	2021/12/16	1.1		%	20
			Dissolved Thallium (Tl)	2021/12/16	NC		%	20
			Dissolved Tin (Sn)	2021/12/16	NC		%	20
			Dissolved Titanium (Ti)	2021/12/16	NC		%	20
			Dissolved Uranium (U)	2021/12/16	NC		%	20
			Dissolved Vanadium (V)	2021/12/16	1.4		%	20
			Dissolved Zinc (Zn)	2021/12/16	NC		%	20
7775208	EMT	Matrix Spike	Total Alkalinity (Total as CaCO3)	2021/12/13		93	%	80 - 120
7775208	EMT	Spiked Blank	Total Alkalinity (Total as CaCO3)	2021/12/13		102	%	80 - 120
7775208	EMT	Method Blank	Total Alkalinity (Total as CaCO3)	2021/12/13	<5.0		mg/L	
7775208	EMT	RPD	Total Alkalinity (Total as CaCO3)	2021/12/13	NC		%	20
7775218	EMT	Matrix Spike	Dissolved Chloride (Cl-)	2021/12/13		97	%	80 - 120
7775218	EMT	Spiked Blank	Dissolved Chloride (Cl-)	2021/12/13		99	%	80 - 120
7775218	EMT	Method Blank	Dissolved Chloride (Cl-)	2021/12/13	<1.0		mg/L	
7775218	EMT	RPD	Dissolved Chloride (Cl-)	2021/12/13	5.1		%	20
7775219	EMT	Matrix Spike	Dissolved Sulphate (SO4)	2021/12/13		116	%	80 - 120
7775219	EMT	Spiked Blank	Dissolved Sulphate (SO4)	2021/12/13		107	%	80 - 120
7775219	EMT	Method Blank	Dissolved Sulphate (SO4)	2021/12/13	<2.0		mg/L	
7775219	EMT	RPD	Dissolved Sulphate (SO4)	2021/12/13	NC		%	20

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7775220	EMT	Matrix Spike	Reactive Silica (SiO2)	2021/12/13		91	%	80 - 120
7775220	EMT	Spiked Blank	Reactive Silica (SiO2)	2021/12/13		94	%	80 - 120
7775220	EMT	Method Blank	Reactive Silica (SiO2)	2021/12/13	<0.50		mg/L	
7775220	EMT	RPD	Reactive Silica (SiO2)	2021/12/13	3.2		%	20
7775221	EMT	Spiked Blank	Colour	2021/12/13		101	%	80 - 120
7775221	EMT	Method Blank	Colour	2021/12/13	<5.0		TCU	
7775221	EMT	RPD	Colour	2021/12/13	1.7		%	20
7775223	EMT	Matrix Spike	Orthophosphate (P)	2021/12/13		94	%	80 - 120
7775223	EMT	Spiked Blank	Orthophosphate (P)	2021/12/13		102	%	80 - 120
7775223	EMT	Method Blank	Orthophosphate (P)	2021/12/13	<0.010		mg/L	
7775223	EMT	RPD	Orthophosphate (P)	2021/12/13	NC		%	20
7775224	EMT	Matrix Spike	Nitrate + Nitrite (N)	2021/12/13		91	%	80 - 120
7775224	EMT	Spiked Blank	Nitrate + Nitrite (N)	2021/12/13		94	%	80 - 120
7775224	EMT	Method Blank	Nitrate + Nitrite (N)	2021/12/13	<0.050		mg/L	
7775224	EMT	RPD	Nitrate + Nitrite (N)	2021/12/13	15		%	20
7775226	EMT	Matrix Spike	Nitrite (N)	2021/12/13		86	%	80 - 120
7775226	EMT	Spiked Blank	Nitrite (N)	2021/12/13		107	%	80 - 120
7775226	EMT	Method Blank	Nitrite (N)	2021/12/13	<0.010		mg/L	
7775226	EMT	RPD	Nitrite (N)	2021/12/13	NC		%	20
7796150	MCN	Matrix Spike	Dissolved Sulphate (SO4)	2022/01/24		93	%	80 - 120
7796150	MCN	Spiked Blank	Dissolved Sulphate (SO4)	2022/01/24		98	%	80 - 120
7796150	MCN	Method Blank	Dissolved Sulphate (SO4)	2022/01/24	<2.0		mg/L	
7796150	MCN	RPD	Dissolved Sulphate (SO4)	2022/01/24	NC		%	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Mercury analyzed past recommended hold time.

(2) Elevated reporting limit due to sample matrix.

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Bureau Veritas Job #: C1AF081
Report Date: 2022/01/27

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Colleen Acker, B.Sc, Scientific Service Specialist

Rosemarie MacDonald, Scientific Specialist (Organics)

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Your Project #: 20-2863
Site#: OH PARK / HARBOURSIDE EAST
Site Location: OH PARK / HARBOURSIDE EAST

Attention: Nadine Wambolt

Dillon Consulting Limited
275 Charlotte St
Sydney, NS
CANADA B1P 1C6

Report Date: 2022/01/17
Report #: R6965130
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1AE795
Received: 2021/11/30, 16:45

Sample Matrix: Water
Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Carbonate, Bicarbonate and Hydroxide (1)	3	N/A	2022/01/02	N/A	SM 23 4500-CO2 D
Carbonate, Bicarbonate and Hydroxide (1)	3	N/A	2021/12/28	N/A	SM 23 4500-CO2 D
Carbonate, Bicarbonate and Hydroxide (1)	2	N/A	2021/12/29	N/A	SM 23 4500-CO2 D
Alkalinity (1)	3	N/A	2021/12/10	ATL SOP 00013	EPA 310.2 R1974 m
Alkalinity (1)	3	N/A	2021/12/08	ATL SOP 00013	EPA 310.2 R1974 m
Alkalinity (1)	2	N/A	2021/12/09	ATL SOP 00013	EPA 310.2 R1974 m
Benzo(b/j)fluoranthene Sum (water) (1)	8	N/A	2021/12/30	N/A	Auto Calc.
Chloride (1)	3	N/A	2021/12/08	ATL SOP 00014	SM 23 4500-Cl- E m
Chloride (1)	5	N/A	2021/12/09	ATL SOP 00014	SM 23 4500-Cl- E m
Colour (1)	3	N/A	2021/12/08	ATL SOP 00020	SM 23 2120C m
Colour (1)	5	N/A	2021/12/09	ATL SOP 00020	SM 23 2120C m
Conductance - water (1)	3	N/A	2021/12/07	ATL SOP 00004	SM 23 2510B m
Conductance - water (1)	5	N/A	2021/12/08	ATL SOP 00004	SM 23 2510B m
Hardness (calculated as CaCO3) (1)	8	N/A	2022/01/11	ATL SOP 00048	Auto Calc
Mercury - Total (CVAA,LL) (1)	8	2021/12/13	2021/12/13	ATL SOP 00026	EPA 245.1 R3 m
Metals Water Diss. MS (as rec'd) (1)	8	N/A	2021/12/07	ATL SOP 00058	EPA 6020B R2 m
Ion Balance (% Difference) (1)	8	N/A	2022/01/11	N/A	Auto Calc.
Anion and Cation Sum (1)	8	N/A	2022/01/11	N/A	Auto Calc.
Nitrogen Ammonia - water (1)	8	N/A	2021/12/07	ATL SOP 00015	EPA 350.1 R2 m
Nitrogen - Nitrate + Nitrite (1)	3	N/A	2021/12/08	ATL SOP 00016	USGS I-2547-11m
Nitrogen - Nitrate + Nitrite (1)	5	N/A	2021/12/09	ATL SOP 00016	USGS I-2547-11m
Nitrogen - Nitrite (1)	3	N/A	2021/12/08	ATL SOP 00017	SM 23 4500-NO2- B m
Nitrogen - Nitrite (1)	5	N/A	2021/12/09	ATL SOP 00017	SM 23 4500-NO2- B m
Nitrogen - Nitrate (as N) (1)	3	N/A	2022/01/10	ATL SOP 00018	ASTM D3867-16
Nitrogen - Nitrate (as N) (1)	5	N/A	2022/01/09	ATL SOP 00018	ASTM D3867-16
PAH in Water by GC/MS (SIM) (1)	8	2021/12/07	2021/12/21	ATL SOP 00103	EPA 8270E R6 m
pH (1, 2)	3	N/A	2021/12/07	ATL SOP 00003	SM 23 4500-H+ B m
pH (1, 2)	5	N/A	2021/12/08	ATL SOP 00003	SM 23 4500-H+ B m
Phosphorus - ortho (1)	3	N/A	2021/12/08	ATL SOP 00021	SM 23 4500-P E m
Phosphorus - ortho (1)	5	N/A	2021/12/09	ATL SOP 00021	SM 23 4500-P E m
Sat. pH and Langelier Index (@ 20C) (1)	8	N/A	2022/01/11	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 4C) (1)	8	N/A	2022/01/11	ATL SOP 00049	Auto Calc.

Your Project #: 20-2863
Site#: OH PARK / HARBOURSIDE EAST
Site Location: OH PARK / HARBOURSIDE EAST

Attention: Nadine Wambolt

Dillon Consulting Limited
275 Charlotte St
Sydney, NS
CANADA B1P 1C6

Report Date: 2022/01/17
Report #: R6965130
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1AE795
Received: 2021/11/30, 16:45

Sample Matrix: Water
Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Reactive Silica (1)	3	N/A	2021/12/08	ATL SOP 00022	EPA 366.0 m
Reactive Silica (1)	5	N/A	2021/12/09	ATL SOP 00022	EPA 366.0 m
Sulphate (1)	3	N/A	2021/12/08	ATL SOP 00023	ASTM D516-16 m
Sulphate (1)	5	N/A	2021/12/09	ATL SOP 00023	ASTM D516-16 m
Total Dissolved Solids (TDS calc) (1)	8	N/A	2022/01/11	N/A	Auto Calc.
Organic carbon - Total (TOC) (1, 3)	4	N/A	2021/12/10	ATL SOP 00203	SM 23 5310B m
Organic carbon - Total (TOC) (1, 3)	2	N/A	2021/12/08	ATL SOP 00203	SM 23 5310B m
Organic carbon - Total (TOC) (1, 3)	2	N/A	2021/12/09	ATL SOP 00203	SM 23 5310B m
Turbidity (1)	3	N/A	2021/12/07	ATL SOP 00011	EPA 180.1 R2 m
Turbidity (1)	5	N/A	2021/12/08	ATL SOP 00011	EPA 180.1 R2 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) The APHA Standard Method require pH to be analyzed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this

Your Project #: 20-2863
Site#: OH PARK / HARBOURSIDE EAST
Site Location: OH PARK / HARBOURSIDE EAST

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275 Charlotte St
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Report Date: 2022/01/17
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CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1AE795
Received: 2021/11/30, 16:45

report are reported past the APHA Standard Method holding time.
(3) TOC / DOC present in the sample should be considered as non-purgeable TOC / DOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Natalie MacAskill, Key Account Specialist
Email: Natalie.MacAskill@bureauveritas.com
Phone# (902)567-1255 Ext:17
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Bureau Veritas Job #: C1AE795
Report Date: 2022/01/17

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RMG854		RMG871			RMG872		
Sampling Date		2021/11/30		2021/11/30			2021/11/30		
Sample #		NOV30-137		NOV30-138			NOV30-139		
	UNITS	COSCW-002-MWA	RDL	COSCW-002-MWB	RDL	QC Batch	COBT-003-MWB	RDL	QC Batch
Calculated Parameters									
Anion Sum	me/L	8.80	N/A	6.55	N/A	7756158	10.8	N/A	7756158
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	300	1.0	210	1.0	7756152	220	1.0	7756152
Calculated TDS	mg/L	500	1.0	370	1.0	7756167	610	1.0	7756167
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	1.2	1.0	7756152	<1.0	1.0	7756152
Cation Sum	me/L	9.13	N/A	6.64	N/A	7756158	10.5	N/A	7756158
Hardness (CaCO3)	mg/L	440	1.0	280	1.0	7756154	320	1.0	7756154
Ion Balance (% Difference)	%	1.84	N/A	0.680	N/A	7756156	1.03	N/A	7756156
Langelier Index (@ 20C)	N/A	0.698		0.616		7756163	0.390		7756163
Langelier Index (@ 4C)	N/A	0.451		0.367		7756165	0.142		7756165
Nitrate (N)	mg/L	0.21	0.050	0.057	0.050	7756160	<0.050	0.050	7756160
Saturation pH (@ 20C)	N/A	6.81		7.14		7756163	7.12		7756163
Saturation pH (@ 4C)	N/A	7.06		7.39		7756165	7.37		7756165
Inorganics									
Total Alkalinity (Total as CaCO3)	mg/L	300	25	220	25	7767536	220	25	7765550
Dissolved Chloride (Cl-)	mg/L	5.1	1.0	6.9	1.0	7767551	170	5.0	7765566
Colour	TCU	<5.0	5.0	<5.0	5.0	7767556	<5.0	5.0	7765570
Nitrate + Nitrite (N)	mg/L	0.21	0.050	0.057	0.050	7767559	<0.050	0.050	7765572
Nitrite (N)	mg/L	<0.010	0.010	<0.010	0.010	7767560	<0.010	0.010	7765573
Nitrogen (Ammonia Nitrogen)	mg/L	0.059	0.050	<0.050	0.050	7761680	0.054	0.050	7761680
Total Organic Carbon (C)	mg/L	0.79	0.50	0.75	0.50	7757735	0.77	0.50	7757770
Orthophosphate (P)	mg/L	<0.010	0.010	<0.010	0.010	7767558	<0.010	0.010	7765571
pH	pH	7.51		7.76		7751034	7.51		7751016
Reactive Silica (SiO2)	mg/L	14	0.50	10	0.50	7767555	14	0.50	7765569
Dissolved Sulphate (SO4)	mg/L	120	10	98	2.0	7767552	73	2.0	7765568
Turbidity	NTU	14	0.10	2.2	0.10	7724879	0.55	0.10	7724874
Conductivity	uS/cm	800	1.0	610	1.0	7751037	1100	1.0	7751020

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Bureau Veritas Job #: C1AE795
Report Date: 2022/01/17

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RMG873			RMG874			RMG875		
Sampling Date		2021/11/30			2021/11/30			2021/11/30		
Sample #		NOV30-140			NOV30-141			NOV30-142		
	UNITS	COBC-002-MWA	RDL	QC Batch	COBC-004-MWA	RDL	QC Batch	MSES-012-MWA	RDL	QC Batch
Calculated Parameters										
Anion Sum	me/L	22.4	N/A	7756158	13.0	N/A	7756158	24.8	N/A	7756158
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	84	1.0	7756152	160	1.0	7756152	190	1.0	7756152
Calculated TDS	mg/L	1400	1.0	7756167	810	1.0	7756167	1600	1.0	7756167
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	7756152	1.3	1.0	7756152	<1.0	1.0	7756152
Cation Sum	me/L	24.8	N/A	7756158	13.2	N/A	7756158	25.7	N/A	7756158
Hardness (CaCO3)	mg/L	490	1.0	7756154	500	1.0	7756154	800	1.0	7756154
Ion Balance (% Difference)	%	5.07	N/A	7756156	0.770	N/A	7756156	1.80	N/A	7756156
Langelier Index (@ 20C)	N/A	-0.878		7756163	0.791		7756163	0.321		7756163
Langelier Index (@ 4C)	N/A	-1.12		7756165	0.544		7756165	0.0760		7756165
Nitrate (N)	mg/L	0.10	0.050	7756160	1.4	0.050	7756160	0.97	0.050	7756160
Saturation pH (@ 20C)	N/A	7.45		7756163	7.12		7756163	6.88		7756163
Saturation pH (@ 4C)	N/A	7.69		7756165	7.37		7756165	7.12		7756165
Inorganics										
Total Alkalinity (Total as CaCO3)	mg/L	84	5.0	7765550	170	25	7767536	190	25	7767587
Dissolved Chloride (Cl-)	mg/L	500	10	7765566	91	1.0	7767551	270	5.0	7767607
Colour	TCU	<5.0	5.0	7765570	<5.0	5.0	7767556	<5.0	5.0	7767612
Nitrate + Nitrite (N)	mg/L	0.10	0.050	7765572	1.4	0.050	7767559	0.97	0.050	7767615
Nitrite (N)	mg/L	<0.010	0.010	7765573	<0.010	0.010	7767560	<0.010	0.010	7767617
Nitrogen (Ammonia Nitrogen)	mg/L	<0.050	0.050	7761680	<0.050	0.050	7761680	0.055	0.050	7761670
Total Organic Carbon (C)	mg/L	2.7	0.50	7757721	1.5	0.50	7757766	1.5	0.50	7757770
Orthophosphate (P)	mg/L	<0.010	0.010	7765571	0.15	0.010	7767558	0.011	0.010	7767613
pH	pH	6.57		7751016	7.91		7751043	7.20		7751043
Reactive Silica (SiO2)	mg/L	3.9	0.50	7765569	23	1.0	7767555	41	2.5	7767610
Dissolved Sulphate (SO4)	mg/L	320	10	7765568	340	10	7767552	630	20	7767608
Turbidity	NTU	4.1	0.10	7724874	0.14	0.10	7724879	7.1	0.10	7724879
Conductivity	uS/cm	2700	1.0	7751020	1200	1.0	7751045	2400	1.0	7751045

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Bureau Veritas Job #: C1AE795
Report Date: 2022/01/17

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RMG876			RMG877		
Sampling Date		2021/11/30			2021/11/30		
Sample #		NOV30-143			NOV30-144		
	UNITS	MSES-008-MW	RDL	QC Batch	FD-13	RDL	QC Batch
Calculated Parameters							
Anion Sum	me/L	25.2	N/A	7756158	10.7	N/A	7756158
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	210	1.0	7756152	220	1.0	7756152
Calculated TDS	mg/L	1600	1.0	7756167	610	1.0	7756167
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	7756152	<1.0	1.0	7756152
Cation Sum	me/L	25.9	N/A	7756158	10.6	N/A	7756158
Hardness (CaCO3)	mg/L	990	1.0	7756154	320	1.0	7756154
Ion Balance (% Difference)	%	1.31	N/A	7756156	0.420	N/A	7756156
Langelier Index (@ 20C)	N/A	0.599		7756163	0.445		7756163
Langelier Index (@ 4C)	N/A	0.355		7756165	0.198		7756165
Nitrate (N)	mg/L	<0.050	0.050	7756160	<0.050	0.050	7756160
Saturation pH (@ 20C)	N/A	6.73		7756163	7.12		7756163
Saturation pH (@ 4C)	N/A	6.98		7756165	7.36		7756165
Inorganics							
Total Alkalinity (Total as CaCO3)	mg/L	220	25	7765550	220	25	7767587
Dissolved Chloride (Cl-)	mg/L	200	5.0	7765566	170	5.0	7767607
Colour	TCU	8.4	5.0	7765570	<5.0	5.0	7767612
Nitrate + Nitrite (N)	mg/L	<0.050	0.050	7765572	<0.050	0.050	7767615
Nitrite (N)	mg/L	<0.010	0.010	7765573	<0.010	0.010	7767617
Nitrogen (Ammonia Nitrogen)	mg/L	0.093	0.050	7761670	0.086	0.050	7761670
Total Organic Carbon (C)	mg/L	0.91	0.50	7757735	0.73	0.50	7757766
Orthophosphate (P)	mg/L	<0.010	0.010	7765571	<0.010	0.010	7767613
pH	pH	7.33		7751016	7.56		7751043
Reactive Silica (SiO2)	mg/L	25	1.0	7765569	14	0.50	7767610
Dissolved Sulphate (SO4)	mg/L	730	20	7765568	75	2.0	7767608
Turbidity	NTU	110	1.0	7724874	0.66	0.10	7724879
Conductivity	uS/cm	2300	1.0	7751020	1100	1.0	7751045

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Bureau Veritas Job #: C1AE795
Report Date: 2022/01/17

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

MERCURY BY COLD VAPOUR AA (WATER)

Bureau Veritas ID		RMG854	RMG871	RMG872	RMG873	RMG874		
Sampling Date		2021/11/30	2021/11/30	2021/11/30	2021/11/30	2021/11/30		
Sample #		NOV30-137	NOV30-138	NOV30-139	NOV30-140	NOV30-141		
	UNITS	COSCW-002-MWA	COSCW-002-MWB	COBT-003-MWB	COBC-002-MWA	COBC-004-MWA	RDL	QC Batch
Metals								
Total Mercury (Hg)	ug/L	<0.013	<0.013	<0.013	<0.013	<0.013	0.013	7752060

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		RMG875	RMG876	RMG877		
Sampling Date		2021/11/30	2021/11/30	2021/11/30		
Sample #		NOV30-142	NOV30-143	NOV30-144		
	UNITS	MSES-012-MWA	MSES-008-MW	FD-13	RDL	QC Batch
Metals						
Total Mercury (Hg)	ug/L	<0.013	<0.013	<0.013	0.013	7752060

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Dillon Consulting Limited
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Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

ELEMENTS BY ICP/MS (WATER)

Bureau Veritas ID		RMG854	RMG871	RMG872	RMG873	RMG874		
Sampling Date		2021/11/30	2021/11/30	2021/11/30	2021/11/30	2021/11/30		
Sample #		NOV30-137	NOV30-138	NOV30-139	NOV30-140	NOV30-141		
	UNITS	COSCW-002-MWA	COSCW-002-MWB	COBT-003-MWB	COBC-002-MWA	COBC-004-MWA	RDL	QC Batch
Metals								
Dissolved Aluminum (Al)	ug/L	15	8.2	6.9	35	9.5	5.0	7772883
Dissolved Antimony (Sb)	ug/L	<1.0	<1.0	<1.0	<1.0	2.7	1.0	7772883
Dissolved Arsenic (As)	ug/L	<1.0	<1.0	2.3	<1.0	5.3	1.0	7772883
Dissolved Barium (Ba)	ug/L	22	37	42	16	29	1.0	7772883
Dissolved Beryllium (Be)	ug/L	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	7772883
Dissolved Bismuth (Bi)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	7772883
Dissolved Boron (B)	ug/L	53	<50	61	69	88	50	7772883
Dissolved Cadmium (Cd)	ug/L	0.043	0.22	0.057	0.18	0.020	0.010	7772883
Dissolved Calcium (Ca)	ug/L	150000	92000	110000	170000	150000	100	7772883
Dissolved Chromium (Cr)	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	1.0	7772883
Dissolved Cobalt (Co)	ug/L	<0.40	<0.40	0.54	0.42	<0.40	0.40	7772883
Dissolved Copper (Cu)	ug/L	36	8.8	0.65	15	3.0	0.50	7772883
Dissolved Iron (Fe)	ug/L	<50	<50	150	67	<50	50	7772883
Dissolved Lead (Pb)	ug/L	1.6	0.88	<0.50	2.7	0.81	0.50	7772883
Dissolved Magnesium (Mg)	ug/L	15000	11000	12000	17000	28000	100	7772883
Dissolved Manganese (Mn)	ug/L	5.2	62	2400	79	18	2.0	7772883
Dissolved Molybdenum (Mo)	ug/L	<2.0	3.8	<2.0	<2.0	4.3	2.0	7772883
Dissolved Nickel (Ni)	ug/L	<2.0	<2.0	<2.0	5.4	<2.0	2.0	7772883
Dissolved Phosphorus (P)	ug/L	<100	<100	<100	<100	170	100	7772883
Dissolved Potassium (K)	ug/L	1300	1400	2600	3100	4700	100	7772883
Dissolved Selenium (Se)	ug/L	<0.50	<0.50	<0.50	4.9	9.9	0.50	7772883
Dissolved Silver (Ag)	ug/L	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	7772883
Dissolved Sodium (Na)	ug/L	9200	25000	94000	340000	70000	100	7772883
Dissolved Strontium (Sr)	ug/L	220	160	1200	800	380	2.0	7772883
Dissolved Thallium (Tl)	ug/L	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	7772883
Dissolved Tin (Sn)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	7772883
Dissolved Titanium (Ti)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	7772883
Dissolved Uranium (U)	ug/L	2.8	1.6	0.37	<0.10	0.81	0.10	7772883
Dissolved Vanadium (V)	ug/L	<2.0	<2.0	<2.0	<2.0	13	2.0	7772883
Dissolved Zinc (Zn)	ug/L	54	21	23	250	26	5.0	7772883

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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ELEMENTS BY ICP/MS (WATER)

Bureau Veritas ID		RMG875	RMG876	RMG877		
Sampling Date		2021/11/30	2021/11/30	2021/11/30		
Sample #		NOV30-142	NOV30-143	NOV30-144		
	UNITS	MSES-012-MWA	MSES-008-MW	FD-13	RDL	QC Batch
Metals						
Dissolved Aluminum (Al)	ug/L	47	17	<5.0	5.0	7772883
Dissolved Antimony (Sb)	ug/L	<1.0	<1.0	<1.0	1.0	7772883
Dissolved Arsenic (As)	ug/L	<1.0	12	2.3	1.0	7772883
Dissolved Barium (Ba)	ug/L	7.6	7.7	41	1.0	7772883
Dissolved Beryllium (Be)	ug/L	<0.10	<0.10	<0.10	0.10	7772883
Dissolved Bismuth (Bi)	ug/L	<2.0	<2.0	<2.0	2.0	7772883
Dissolved Boron (B)	ug/L	<50	63	61	50	7772883
Dissolved Cadmium (Cd)	ug/L	0.056	<0.010	0.015	0.010	7772883
Dissolved Calcium (Ca)	ug/L	280000	360000	110000	100	7772883
Dissolved Chromium (Cr)	ug/L	<1.0	<1.0	<1.0	1.0	7772883
Dissolved Cobalt (Co)	ug/L	<0.40	<0.40	0.57	0.40	7772883
Dissolved Copper (Cu)	ug/L	3.5	<0.50	0.61	0.50	7772883
Dissolved Iron (Fe)	ug/L	84	8100	140	50	7772883
Dissolved Lead (Pb)	ug/L	0.77	<0.50	<0.50	0.50	7772883
Dissolved Magnesium (Mg)	ug/L	24000	25000	12000	100	7772883
Dissolved Manganese (Mn)	ug/L	14	630	2400	2.0	7772883
Dissolved Molybdenum (Mo)	ug/L	<2.0	3.2	<2.0	2.0	7772883
Dissolved Nickel (Ni)	ug/L	35	<2.0	<2.0	2.0	7772883
Dissolved Phosphorus (P)	ug/L	<100	<100	<100	100	7772883
Dissolved Potassium (K)	ug/L	3600	5300	2600	100	7772883
Dissolved Selenium (Se)	ug/L	18	<0.50	<0.50	0.50	7772883
Dissolved Silver (Ag)	ug/L	<0.10	<0.10	<0.10	0.10	7772883
Dissolved Sodium (Na)	ug/L	220000	130000	96000	100	7772883
Dissolved Strontium (Sr)	ug/L	360	540	1100	2.0	7772883
Dissolved Thallium (Tl)	ug/L	<0.10	<0.10	<0.10	0.10	7772883
Dissolved Tin (Sn)	ug/L	<2.0	<2.0	<2.0	2.0	7772883
Dissolved Titanium (Ti)	ug/L	<2.0	<2.0	<2.0	2.0	7772883
Dissolved Uranium (U)	ug/L	0.38	0.52	0.35	0.10	7772883
Dissolved Vanadium (V)	ug/L	<2.0	<2.0	<2.0	2.0	7772883
Dissolved Zinc (Zn)	ug/L	48	34	24	5.0	7772883

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SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID		RMG854	RMG871	RMG872	RMG873	RMG874		
Sampling Date		2021/11/30	2021/11/30	2021/11/30	2021/11/30	2021/11/30		
Sample #		NOV30-137	NOV30-138	NOV30-139	NOV30-140	NOV30-141		
	UNITS	COSCW-002-MWA	COSCW-002-MWB	COBT-003-MWB	COBC-002-MWA	COBC-004-MWA	RDL	QC Batch
Polyaromatic Hydrocarbons								
1-Methylnaphthalene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	7760354
2-Methylnaphthalene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	7760354
Acenaphthene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7760354
Acenaphthylene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7760354
Anthracene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7760354
Benzo(a)anthracene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7760354
Benzo(a)pyrene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7760354
Benzo(b)fluoranthene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7760354
Benzo(b/j)fluoranthene	ug/L	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	7756243
Benzo(g,h,i)perylene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7760354
Benzo(j)fluoranthene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7760354
Benzo(k)fluoranthene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7760354
Chrysene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7760354
Dibenzo(a,h)anthracene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7760354
Fluoranthene	ug/L	<0.010	<0.010	0.013	<0.010	<0.010	0.010	7760354
Fluorene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7760354
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7760354
Naphthalene	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	7760354
Perylene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7760354
Phenanthrene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7760354
Pyrene	ug/L	<0.010	<0.010	0.011	<0.010	<0.010	0.010	7760354
Surrogate Recovery (%)								
D10-Anthracene	%	106	102	104	105	105		7760354
D14-Terphenyl	%	105	102	103	108	103		7760354
D8-Acenaphthylene	%	98	95	103	99	101		7760354

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SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID		RMG875	RMG876	RMG877		
Sampling Date		2021/11/30	2021/11/30	2021/11/30		
Sample #		NOV30-142	NOV30-143	NOV30-144		
	UNITS	MSES-012-MWA	MSES-008-MW	FD-13	RDL	QC Batch
Polyaromatic Hydrocarbons						
1-Methylnaphthalene	ug/L	<0.050	0.082	<0.050	0.050	7760354
2-Methylnaphthalene	ug/L	<0.050	<0.050	<0.050	0.050	7760354
Acenaphthene	ug/L	0.026	1.3	<0.010	0.010	7760354
Acenaphthylene	ug/L	0.034	1.4	<0.010	0.010	7760354
Anthracene	ug/L	0.18	0.088	<0.010	0.010	7760354
Benzo(a)anthracene	ug/L	0.27	0.043	<0.010	0.010	7760354
Benzo(a)pyrene	ug/L	0.21	<0.010	<0.010	0.010	7760354
Benzo(b)fluoranthene	ug/L	0.14	<0.010	<0.010	0.010	7760354
Benzo(b/j)fluoranthene	ug/L	0.24	<0.020	<0.020	0.020	7756243
Benzo(g,h,i)perylene	ug/L	0.077	<0.010	<0.010	0.010	7760354
Benzo(j)fluoranthene	ug/L	0.10	<0.010	<0.010	0.010	7760354
Benzo(k)fluoranthene	ug/L	0.091	<0.010	<0.010	0.010	7760354
Chrysene	ug/L	0.23	0.039	<0.010	0.010	7760354
Dibenzo(a,h)anthracene	ug/L	0.030	<0.010	<0.010	0.010	7760354
Fluoranthene	ug/L	0.63	0.87	<0.010	0.010	7760354
Fluorene	ug/L	0.090	2.3	<0.010	0.010	7760354
Indeno(1,2,3-cd)pyrene	ug/L	0.086	<0.010	<0.010	0.010	7760354
Naphthalene	ug/L	<0.20	<0.20	<0.20	0.20	7760354
Perylene	ug/L	0.050	<0.010	<0.010	0.010	7760354
Phenanthrene	ug/L	0.48	0.11	<0.010	0.010	7760354
Pyrene	ug/L	0.46	0.67	<0.010	0.010	7760354
Surrogate Recovery (%)						
D10-Anthracene	%	105	103	104		7760354
D14-Terphenyl	%	104	103	103		7760354
D8-Acenaphthylene	%	99	101	101		7760354

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QC Batch = Quality Control Batch

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GENERAL COMMENTS

Sample RMG873 [COBC-002-MWA] : Poor RCAp Ion Balance due to sample matrix.

Sample RMG875 [MSES-012-MWA] : ortho-Phosphate > Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7724874	SHW	QC Standard	Turbidity	2021/12/07		100	%	80 - 120
7724874	SHW	Spiked Blank	Turbidity	2021/12/07		106	%	80 - 120
7724874	SHW	Method Blank	Turbidity	2021/12/07	<0.10		NTU	
7724874	SHW	RPD	Turbidity	2021/12/07	11		%	20
7724879	SHW	QC Standard	Turbidity	2021/12/08		103	%	80 - 120
7724879	SHW	Spiked Blank	Turbidity	2021/12/08		105	%	80 - 120
7724879	SHW	Method Blank	Turbidity	2021/12/08	<0.10		NTU	
7724879	SHW	RPD	Turbidity	2021/12/08	NC		%	20
7751016	SHW	Spiked Blank	pH	2021/12/07		100	%	97 - 103
7751016	SHW	RPD	pH	2021/12/07	0.87		%	N/A
7751020	SHW	Spiked Blank	Conductivity	2021/12/07		101	%	80 - 120
7751020	SHW	Method Blank	Conductivity	2021/12/07	1.0, RDL=1.0		uS/cm	
7751020	SHW	RPD	Conductivity	2021/12/07	1.2		%	10
7751034	SHW	Spiked Blank	pH	2021/12/08		100	%	97 - 103
7751034	SHW	RPD	pH	2021/12/08	0.82		%	N/A
7751037	SHW	Spiked Blank	Conductivity	2021/12/08		102	%	80 - 120
7751037	SHW	Method Blank	Conductivity	2021/12/08	<1.0		uS/cm	
7751037	SHW	RPD	Conductivity	2021/12/08	0.86		%	10
7751043	SHW	Spiked Blank	pH	2021/12/08		100	%	97 - 103
7751043	SHW	RPD	pH	2021/12/08	1.7		%	N/A
7751045	SHW	Spiked Blank	Conductivity	2021/12/08		101	%	80 - 120
7751045	SHW	Method Blank	Conductivity	2021/12/08	<1.0		uS/cm	
7751045	SHW	RPD	Conductivity	2021/12/08	0.67		%	10
7752060	EPU	Spiked Blank	Total Mercury (Hg)	2021/12/13		97	%	80 - 120
7752060	EPU	Method Blank	Total Mercury (Hg)	2021/12/13	<0.013		ug/L	
7757721	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/08		99	%	85 - 115
7757721	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/08		103	%	80 - 120
7757721	NGI	Method Blank	Total Organic Carbon (C)	2021/12/08	<0.50		mg/L	
7757721	NGI	RPD	Total Organic Carbon (C)	2021/12/08	6.5		%	15
7757735	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/08		103	%	85 - 115
7757735	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/08		102	%	80 - 120
7757735	NGI	Method Blank	Total Organic Carbon (C)	2021/12/08	<0.50		mg/L	
7757735	NGI	RPD	Total Organic Carbon (C)	2021/12/08	0.83		%	15
7757766	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/10		103	%	85 - 115
7757766	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/10		104	%	80 - 120
7757766	NGI	Method Blank	Total Organic Carbon (C)	2021/12/10	<0.50		mg/L	
7757766	NGI	RPD	Total Organic Carbon (C)	2021/12/10	2.5 (1)		%	15
7757770	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/10		105	%	85 - 115
7757770	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/10		102	%	80 - 120
7757770	NGI	Method Blank	Total Organic Carbon (C)	2021/12/10	<0.50		mg/L	
7757770	NGI	RPD	Total Organic Carbon (C)	2021/12/10	1.1		%	15
7760354	LGE	Matrix Spike	D10-Anthracene	2021/12/21		93	%	50 - 130
			D14-Terphenyl	2021/12/21		93	%	50 - 130
			D8-Acenaphthylene	2021/12/21		90	%	50 - 130
			1-Methylnaphthalene	2021/12/21		83	%	50 - 130
			2-Methylnaphthalene	2021/12/21		86	%	50 - 130
			Acenaphthene	2021/12/21		100	%	50 - 130
			Acenaphthylene	2021/12/21		79	%	50 - 130
			Anthracene	2021/12/21		88	%	50 - 130
			Benzo(a)anthracene	2021/12/21		79	%	50 - 130
			Benzo(a)pyrene	2021/12/21		79	%	50 - 130
			Benzo(b)fluoranthene	2021/12/21		81	%	50 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Benzo(g,h,i)perylene	2021/12/21		77	%	50 - 130
			Benzo(j)fluoranthene	2021/12/21		79	%	50 - 130
			Benzo(k)fluoranthene	2021/12/21		78	%	50 - 130
			Chrysene	2021/12/21		86	%	50 - 130
			Dibenzo(a,h)anthracene	2021/12/21		75	%	50 - 130
			Fluoranthene	2021/12/21		85	%	50 - 130
			Fluorene	2021/12/21		92	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2021/12/21		77	%	50 - 130
			Naphthalene	2021/12/21		95	%	50 - 130
			Perylene	2021/12/21		83	%	50 - 130
			Phenanthrene	2021/12/21		93	%	50 - 130
			Pyrene	2021/12/21		84	%	50 - 130
7760354	LGE	Spiked Blank	D10-Anthracene	2021/12/20		100	%	50 - 130
			D14-Terphenyl	2021/12/20		99	%	50 - 130
			D8-Acenaphthylene	2021/12/20		97	%	50 - 130
			1-Methylnaphthalene	2021/12/20		92	%	50 - 130
			2-Methylnaphthalene	2021/12/20		95	%	50 - 130
			Acenaphthene	2021/12/20		113	%	50 - 130
			Acenaphthylene	2021/12/20		86	%	50 - 130
			Anthracene	2021/12/20		97	%	50 - 130
			Benzo(a)anthracene	2021/12/20		89	%	50 - 130
			Benzo(a)pyrene	2021/12/20		89	%	50 - 130
			Benzo(b)fluoranthene	2021/12/20		92	%	50 - 130
			Benzo(g,h,i)perylene	2021/12/20		89	%	50 - 130
			Benzo(j)fluoranthene	2021/12/20		90	%	50 - 130
			Benzo(k)fluoranthene	2021/12/20		90	%	50 - 130
			Chrysene	2021/12/20		95	%	50 - 130
			Dibenzo(a,h)anthracene	2021/12/20		72	%	50 - 130
			Fluoranthene	2021/12/20		96	%	50 - 130
			Fluorene	2021/12/20		103	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2021/12/20		87	%	50 - 130
			Naphthalene	2021/12/20		104	%	50 - 130
			Perylene	2021/12/20		93	%	50 - 130
			Phenanthrene	2021/12/20		106	%	50 - 130
			Pyrene	2021/12/20		94	%	50 - 130
7760354	LGE	Method Blank	D10-Anthracene	2021/12/20		96	%	50 - 130
			D14-Terphenyl	2021/12/20		98	%	50 - 130
			D8-Acenaphthylene	2021/12/20		92	%	50 - 130
			1-Methylnaphthalene	2021/12/20	<0.050		ug/L	
			2-Methylnaphthalene	2021/12/20	<0.050		ug/L	
			Acenaphthene	2021/12/20	<0.010		ug/L	
			Acenaphthylene	2021/12/20	<0.010		ug/L	
			Anthracene	2021/12/20	<0.010		ug/L	
			Benzo(a)anthracene	2021/12/20	<0.010		ug/L	
			Benzo(a)pyrene	2021/12/20	<0.010		ug/L	
			Benzo(b)fluoranthene	2021/12/20	<0.010		ug/L	
			Benzo(g,h,i)perylene	2021/12/20	<0.010		ug/L	
			Benzo(j)fluoranthene	2021/12/20	<0.010		ug/L	
			Benzo(k)fluoranthene	2021/12/20	<0.010		ug/L	
			Chrysene	2021/12/20	<0.010		ug/L	
			Dibenzo(a,h)anthracene	2021/12/20	<0.010		ug/L	
			Fluoranthene	2021/12/20	<0.010		ug/L	
			Fluorene	2021/12/20	<0.010		ug/L	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Indeno(1,2,3-cd)pyrene	2021/12/20	<0.010		ug/L	
			Naphthalene	2021/12/20	<0.20		ug/L	
			Perylene	2021/12/20	<0.010		ug/L	
			Phenanthrene	2021/12/20	<0.010		ug/L	
			Pyrene	2021/12/20	<0.010		ug/L	
7760354	LGE	RPD	1-Methylnaphthalene	2021/12/20	NC		%	40
			2-Methylnaphthalene	2021/12/20	NC		%	40
			Acenaphthene	2021/12/20	3.4		%	40
			Acenaphthylene	2021/12/20	NC		%	40
			Anthracene	2021/12/20	NC		%	40
			Benzo(a)anthracene	2021/12/20	NC		%	40
			Benzo(a)pyrene	2021/12/20	NC		%	40
			Benzo(b)fluoranthene	2021/12/20	NC		%	40
			Benzo(g,h,i)perylene	2021/12/20	NC		%	40
			Benzo(j)fluoranthene	2021/12/20	NC		%	40
			Benzo(k)fluoranthene	2021/12/20	NC		%	40
			Chrysene	2021/12/20	NC		%	40
			Dibenzo(a,h)anthracene	2021/12/20	NC		%	40
			Fluoranthene	2021/12/20	3.9		%	40
			Fluorene	2021/12/20	0.76		%	40
			Indeno(1,2,3-cd)pyrene	2021/12/20	NC		%	40
			Naphthalene	2021/12/20	NC		%	40
			Perylene	2021/12/20	NC		%	40
			Phenanthrene	2021/12/20	15		%	40
			Pyrene	2021/12/20	NC		%	40
7761670	MKY	Matrix Spike	Nitrogen (Ammonia Nitrogen)	2021/12/07		93	%	80 - 120
7761670	MKY	Spiked Blank	Nitrogen (Ammonia Nitrogen)	2021/12/07		96	%	80 - 120
7761670	MKY	Method Blank	Nitrogen (Ammonia Nitrogen)	2021/12/07	<0.050		mg/L	
7761670	MKY	RPD	Nitrogen (Ammonia Nitrogen)	2021/12/07	NC		%	20
7761680	MKY	Matrix Spike	Nitrogen (Ammonia Nitrogen)	2021/12/07		92	%	80 - 120
7761680	MKY	Spiked Blank	Nitrogen (Ammonia Nitrogen)	2021/12/07		96	%	80 - 120
7761680	MKY	Method Blank	Nitrogen (Ammonia Nitrogen)	2021/12/07	<0.050		mg/L	
7761680	MKY	RPD	Nitrogen (Ammonia Nitrogen)	2021/12/07	1.9		%	20
7765550	MCN	Matrix Spike	Total Alkalinity (Total as CaCO3)	2021/12/08		99	%	80 - 120
7765550	MCN	Spiked Blank	Total Alkalinity (Total as CaCO3)	2021/12/08		106	%	80 - 120
7765550	MCN	Method Blank	Total Alkalinity (Total as CaCO3)	2021/12/08	<5.0		mg/L	
7765550	MCN	RPD	Total Alkalinity (Total as CaCO3)	2021/12/08	3.5		%	20
7765566	MCN	Matrix Spike	Dissolved Chloride (Cl-)	2021/12/08		98	%	80 - 120
7765566	MCN	Spiked Blank	Dissolved Chloride (Cl-)	2021/12/08		99	%	80 - 120
7765566	MCN	Method Blank	Dissolved Chloride (Cl-)	2021/12/08	<1.0		mg/L	
7765566	MCN	RPD	Dissolved Chloride (Cl-)	2021/12/08	NC		%	20
7765568	MCN	Matrix Spike	Dissolved Sulphate (SO4)	2021/12/08		103	%	80 - 120
7765568	MCN	Spiked Blank	Dissolved Sulphate (SO4)	2021/12/08		101	%	80 - 120
7765568	MCN	Method Blank	Dissolved Sulphate (SO4)	2021/12/08	<2.0		mg/L	
7765568	MCN	RPD	Dissolved Sulphate (SO4)	2021/12/08	NC		%	20
7765569	MCN	Matrix Spike	Reactive Silica (SiO2)	2021/12/08		92	%	80 - 120
7765569	MCN	Spiked Blank	Reactive Silica (SiO2)	2021/12/08		95	%	80 - 120
7765569	MCN	Method Blank	Reactive Silica (SiO2)	2021/12/08	<0.50		mg/L	
7765569	MCN	RPD	Reactive Silica (SiO2)	2021/12/08	NC		%	20
7765570	MCN	Spiked Blank	Colour	2021/12/08		95	%	80 - 120
7765570	MCN	Method Blank	Colour	2021/12/08	<5.0		TCU	
7765570	MCN	RPD	Colour	2021/12/08	NC		%	20
7765571	MCN	Matrix Spike	Orthophosphate (P)	2021/12/08		101	%	80 - 120

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7765571	MCN	Spiked Blank	Orthophosphate (P)	2021/12/08		102	%	80 - 120
7765571	MCN	Method Blank	Orthophosphate (P)	2021/12/08	<0.010		mg/L	
7765571	MCN	RPD	Orthophosphate (P)	2021/12/08	NC		%	20
7765572	MCN	Matrix Spike	Nitrate + Nitrite (N)	2021/12/08		97	%	80 - 120
7765572	MCN	Spiked Blank	Nitrate + Nitrite (N)	2021/12/08		99	%	80 - 120
7765572	MCN	Method Blank	Nitrate + Nitrite (N)	2021/12/08	<0.050		mg/L	
7765572	MCN	RPD	Nitrate + Nitrite (N)	2021/12/08	NC		%	20
7765573	MCN	Matrix Spike	Nitrite (N)	2021/12/08		106	%	80 - 120
7765573	MCN	Spiked Blank	Nitrite (N)	2021/12/08		103	%	80 - 120
7765573	MCN	Method Blank	Nitrite (N)	2021/12/08	<0.010		mg/L	
7765573	MCN	RPD	Nitrite (N)	2021/12/08	NC		%	20
7767536	MCN	Matrix Spike	Total Alkalinity (Total as CaCO3)	2021/12/09		NC	%	80 - 120
7767536	MCN	Spiked Blank	Total Alkalinity (Total as CaCO3)	2021/12/09		104	%	80 - 120
7767536	MCN	Method Blank	Total Alkalinity (Total as CaCO3)	2021/12/09	<5.0		mg/L	
7767536	MCN	RPD	Total Alkalinity (Total as CaCO3)	2021/12/09	1.5		%	20
7767551	MCN	Matrix Spike	Dissolved Chloride (Cl-)	2021/12/09		99	%	80 - 120
7767551	MCN	Spiked Blank	Dissolved Chloride (Cl-)	2021/12/09		96	%	80 - 120
7767551	MCN	Method Blank	Dissolved Chloride (Cl-)	2021/12/09	<1.0		mg/L	
7767551	MCN	RPD	Dissolved Chloride (Cl-)	2021/12/09	0.84		%	20
7767552	MCN	Matrix Spike	Dissolved Sulphate (SO4)	2021/12/09		NC	%	80 - 120
7767552	MCN	Spiked Blank	Dissolved Sulphate (SO4)	2021/12/09		100	%	80 - 120
7767552	MCN	Method Blank	Dissolved Sulphate (SO4)	2021/12/10	<2.0		mg/L	
7767552	MCN	RPD	Dissolved Sulphate (SO4)	2021/12/09	0.71		%	20
7767555	MCN	Matrix Spike	Reactive Silica (SiO2)	2021/12/09		87	%	80 - 120
7767555	MCN	Spiked Blank	Reactive Silica (SiO2)	2021/12/09		94	%	80 - 120
7767555	MCN	Method Blank	Reactive Silica (SiO2)	2021/12/09	<0.50		mg/L	
7767555	MCN	RPD	Reactive Silica (SiO2)	2021/12/09	2.3		%	20
7767556	MCN	Spiked Blank	Colour	2021/12/09		97	%	80 - 120
7767556	MCN	Method Blank	Colour	2021/12/09	<5.0		TCU	
7767556	MCN	RPD	Colour	2021/12/09	NC		%	20
7767558	MCN	Matrix Spike	Orthophosphate (P)	2021/12/09		94	%	80 - 120
7767558	MCN	Spiked Blank	Orthophosphate (P)	2021/12/09		100	%	80 - 120
7767558	MCN	Method Blank	Orthophosphate (P)	2021/12/09	<0.010		mg/L	
7767558	MCN	RPD	Orthophosphate (P)	2021/12/09	NC		%	20
7767559	MCN	Matrix Spike	Nitrate + Nitrite (N)	2021/12/09		96	%	80 - 120
7767559	MCN	Spiked Blank	Nitrate + Nitrite (N)	2021/12/09		96	%	80 - 120
7767559	MCN	Method Blank	Nitrate + Nitrite (N)	2021/12/09	<0.050		mg/L	
7767559	MCN	RPD	Nitrate + Nitrite (N)	2021/12/09	NC		%	20
7767560	MCN	Matrix Spike	Nitrite (N)	2021/12/09		102	%	80 - 120
7767560	MCN	Spiked Blank	Nitrite (N)	2021/12/09		106	%	80 - 120
7767560	MCN	Method Blank	Nitrite (N)	2021/12/09	<0.010		mg/L	
7767560	MCN	RPD	Nitrite (N)	2021/12/09	NC		%	20
7767587	MCN	Matrix Spike	Total Alkalinity (Total as CaCO3)	2021/12/09		79 (2)	%	80 - 120
7767587	MCN	Spiked Blank	Total Alkalinity (Total as CaCO3)	2021/12/10		100	%	80 - 120
7767587	MCN	Method Blank	Total Alkalinity (Total as CaCO3)	2021/12/10	<5.0		mg/L	
7767587	MCN	RPD	Total Alkalinity (Total as CaCO3)	2021/12/09	3.3		%	20
7767607	MCN	Matrix Spike	Dissolved Chloride (Cl-)	2021/12/09		96	%	80 - 120
7767607	MCN	Spiked Blank	Dissolved Chloride (Cl-)	2021/12/09		96	%	80 - 120
7767607	MCN	Method Blank	Dissolved Chloride (Cl-)	2021/12/09	<1.0		mg/L	
7767607	MCN	RPD	Dissolved Chloride (Cl-)	2021/12/09	0.41		%	20
7767608	MCN	Matrix Spike	Dissolved Sulphate (SO4)	2021/12/09		95	%	80 - 120
7767608	MCN	Spiked Blank	Dissolved Sulphate (SO4)	2021/12/09		98	%	80 - 120
7767608	MCN	Method Blank	Dissolved Sulphate (SO4)	2021/12/10	<2.0		mg/L	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7767608	MCN	RPD	Dissolved Sulphate (SO4)	2021/12/09	NC		%	20
7767610	MCN	Matrix Spike	Reactive Silica (SiO2)	2021/12/09		91	%	80 - 120
7767610	MCN	Spiked Blank	Reactive Silica (SiO2)	2021/12/09		93	%	80 - 120
7767610	MCN	Method Blank	Reactive Silica (SiO2)	2021/12/09	<0.50		mg/L	
7767610	MCN	RPD	Reactive Silica (SiO2)	2021/12/09	0.65		%	20
7767612	MCN	Spiked Blank	Colour	2021/12/09		95	%	80 - 120
7767612	MCN	Method Blank	Colour	2021/12/09	<5.0		TCU	
7767612	MCN	RPD	Colour	2021/12/09	NC		%	20
7767613	MCN	Matrix Spike	Orthophosphate (P)	2021/12/09		NC	%	80 - 120
7767613	MCN	Spiked Blank	Orthophosphate (P)	2021/12/09		99	%	80 - 120
7767613	MCN	Method Blank	Orthophosphate (P)	2021/12/09	<0.010		mg/L	
7767613	MCN	RPD	Orthophosphate (P)	2021/12/09	5.0		%	20
7767615	MCN	Matrix Spike	Nitrate + Nitrite (N)	2021/12/09		96	%	80 - 120
7767615	MCN	Spiked Blank	Nitrate + Nitrite (N)	2021/12/09		97	%	80 - 120
7767615	MCN	Method Blank	Nitrate + Nitrite (N)	2021/12/09	<0.050		mg/L	
7767615	MCN	RPD	Nitrate + Nitrite (N)	2021/12/09	NC		%	20
7767617	MCN	Matrix Spike	Nitrite (N)	2021/12/09		4.5 (3)	%	80 - 120
7767617	MCN	Spiked Blank	Nitrite (N)	2021/12/09		108	%	80 - 120
7767617	MCN	Method Blank	Nitrite (N)	2021/12/09	<0.010		mg/L	
7767617	MCN	RPD	Nitrite (N)	2021/12/09	NC		%	20
7772883	BAN	Matrix Spike [RMG873-02]	Dissolved Aluminum (Al)	2021/12/07		99	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/07		105	%	80 - 120
			Dissolved Arsenic (As)	2021/12/07		96	%	80 - 120
			Dissolved Barium (Ba)	2021/12/07		94	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/07		99	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/07		93	%	80 - 120
			Dissolved Boron (B)	2021/12/07		98	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/07		99	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/07		NC	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/07		96	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/07		95	%	80 - 120
			Dissolved Copper (Cu)	2021/12/07		95	%	80 - 120
			Dissolved Iron (Fe)	2021/12/07		100	%	80 - 120
			Dissolved Lead (Pb)	2021/12/07		96	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/07		NC	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/07		96	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/07		106	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/07		95	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/07		104	%	80 - 120
			Dissolved Potassium (K)	2021/12/07		101	%	80 - 120
			Dissolved Selenium (Se)	2021/12/07		97	%	80 - 120
			Dissolved Silver (Ag)	2021/12/07		96	%	80 - 120
			Dissolved Sodium (Na)	2021/12/07		NC	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/07		NC	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/07		96	%	80 - 120
			Dissolved Tin (Sn)	2021/12/07		104	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/07		100	%	80 - 120
			Dissolved Uranium (U)	2021/12/07		104	%	80 - 120
			Dissolved Vanadium (V)	2021/12/07		103	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/07		93	%	80 - 120
7772883	BAN	Spiked Blank	Dissolved Aluminum (Al)	2021/12/07		102	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/07		100	%	80 - 120

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Arsenic (As)	2021/12/07		93	%	80 - 120
			Dissolved Barium (Ba)	2021/12/07		94	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/07		97	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/07		98	%	80 - 120
			Dissolved Boron (B)	2021/12/07		96	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/07		99	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/07		101	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/07		97	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/07		98	%	80 - 120
			Dissolved Copper (Cu)	2021/12/07		100	%	80 - 120
			Dissolved Iron (Fe)	2021/12/07		101	%	80 - 120
			Dissolved Lead (Pb)	2021/12/07		98	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/07		102	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/07		99	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/07		101	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/07		100	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/07		105	%	80 - 120
			Dissolved Potassium (K)	2021/12/07		98	%	80 - 120
			Dissolved Selenium (Se)	2021/12/07		96	%	80 - 120
			Dissolved Silver (Ag)	2021/12/07		97	%	80 - 120
			Dissolved Sodium (Na)	2021/12/07		97	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/07		99	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/07		99	%	80 - 120
			Dissolved Tin (Sn)	2021/12/07		99	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/07		101	%	80 - 120
			Dissolved Uranium (U)	2021/12/07		104	%	80 - 120
			Dissolved Vanadium (V)	2021/12/07		100	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/07		100	%	80 - 120
7772883	BAN	Method Blank	Dissolved Aluminum (Al)	2021/12/07	<5.0		ug/L	
			Dissolved Antimony (Sb)	2021/12/07	<1.0		ug/L	
			Dissolved Arsenic (As)	2021/12/07	<1.0		ug/L	
			Dissolved Barium (Ba)	2021/12/07	<1.0		ug/L	
			Dissolved Beryllium (Be)	2021/12/07	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2021/12/07	<2.0		ug/L	
			Dissolved Boron (B)	2021/12/07	<50		ug/L	
			Dissolved Cadmium (Cd)	2021/12/07	<0.010		ug/L	
			Dissolved Calcium (Ca)	2021/12/07	<100		ug/L	
			Dissolved Chromium (Cr)	2021/12/07	<1.0		ug/L	
			Dissolved Cobalt (Co)	2021/12/07	<0.40		ug/L	
			Dissolved Copper (Cu)	2021/12/07	<0.50		ug/L	
			Dissolved Iron (Fe)	2021/12/07	<50		ug/L	
			Dissolved Lead (Pb)	2021/12/07	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2021/12/07	<100		ug/L	
			Dissolved Manganese (Mn)	2021/12/07	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2021/12/07	<2.0		ug/L	
			Dissolved Nickel (Ni)	2021/12/07	<2.0		ug/L	
			Dissolved Phosphorus (P)	2021/12/07	<100		ug/L	
			Dissolved Potassium (K)	2021/12/07	<100		ug/L	
			Dissolved Selenium (Se)	2021/12/07	<0.50		ug/L	
			Dissolved Silver (Ag)	2021/12/07	<0.10		ug/L	
			Dissolved Sodium (Na)	2021/12/07	<100		ug/L	
			Dissolved Strontium (Sr)	2021/12/07	<2.0		ug/L	
			Dissolved Thallium (Tl)	2021/12/07	<0.10		ug/L	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Tin (Sn)	2021/12/07	<2.0		ug/L	
			Dissolved Titanium (Ti)	2021/12/07	<2.0		ug/L	
			Dissolved Uranium (U)	2021/12/07	<0.10		ug/L	
			Dissolved Vanadium (V)	2021/12/07	<2.0		ug/L	
			Dissolved Zinc (Zn)	2021/12/07	<5.0		ug/L	
7772883	BAN	RPD [RMG873-02]	Dissolved Aluminum (Al)	2021/12/07	NC		%	20
			Dissolved Antimony (Sb)	2021/12/07	NC		%	20
			Dissolved Arsenic (As)	2021/12/07	NC		%	20
			Dissolved Barium (Ba)	2021/12/07	0.23		%	20
			Dissolved Beryllium (Be)	2021/12/07	NC		%	20
			Dissolved Bismuth (Bi)	2021/12/07	NC		%	20
			Dissolved Boron (B)	2021/12/07	1.1		%	20
			Dissolved Cadmium (Cd)	2021/12/07	6.9		%	20
			Dissolved Calcium (Ca)	2021/12/07	0.50		%	20
			Dissolved Chromium (Cr)	2021/12/07	NC		%	20
			Dissolved Cobalt (Co)	2021/12/07	4.0		%	20
			Dissolved Copper (Cu)	2021/12/07	0.47		%	20
			Dissolved Iron (Fe)	2021/12/07	2.9		%	20
			Dissolved Lead (Pb)	2021/12/07	0.86		%	20
			Dissolved Magnesium (Mg)	2021/12/07	1.1		%	20
			Dissolved Manganese (Mn)	2021/12/07	0.34		%	20
			Dissolved Molybdenum (Mo)	2021/12/07	NC		%	20
			Dissolved Nickel (Ni)	2021/12/07	0.050		%	20
			Dissolved Phosphorus (P)	2021/12/07	NC		%	20
			Dissolved Potassium (K)	2021/12/07	0.84		%	20
			Dissolved Selenium (Se)	2021/12/07	1.3		%	20
			Dissolved Silver (Ag)	2021/12/07	NC		%	20
			Dissolved Sodium (Na)	2021/12/07	1.4		%	20
			Dissolved Strontium (Sr)	2021/12/07	0.52		%	20
			Dissolved Thallium (Tl)	2021/12/07	NC		%	20
			Dissolved Tin (Sn)	2021/12/07	NC		%	20
			Dissolved Titanium (Ti)	2021/12/07	NC		%	20
			Dissolved Uranium (U)	2021/12/07	NC		%	20
			Dissolved Vanadium (V)	2021/12/07	NC		%	20
			Dissolved Zinc (Zn)	2021/12/07	0.14		%	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Elevated reporting limit due to turbidity.

(2) Poor spike recovery due to probable matrix inteference.

(3) Poor spike recovery due to probable matrix interference.

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Bureau Veritas Job #: C1AE795
Report Date: 2022/01/17

Dillon Consulting Limited
Client Project #: 20-2863
Site Location: OH PARK / HARBOURSIDE EAST
Sampler Initials: MS

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Alan Stewart, Organics Manager, Bedford

Colleen Acker, B.Sc, Scientific Service Specialist

Bureau Veritas Proprietary Software
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BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.
For Service Group specific validation please refer to the Validation Signature Page.

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Your Project #: 20-2863
Site Location: OH PARK/HARBOURSIDE EAST

Attention: Nadine Wambolt

Dillon Consulting Limited
275 Charlotte St
Sydney, NS
CANADA B1P 1C6

Report Date: 2022/02/09
Report #: R6997205
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C1AE703
Received: 2021/12/01, 16:50

Sample Matrix: Water
Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Carbonate, Bicarbonate and Hydroxide (1)	8	N/A	2021/12/29	N/A	SM 23 4500-CO2 D
Alkalinity (1)	1	N/A	2021/12/08	ATL SOP 00013	EPA 310.2 R1974 m
Alkalinity (1)	7	N/A	2021/12/09	ATL SOP 00013	EPA 310.2 R1974 m
Benzo(b/j)fluoranthene Sum (water) (1)	8	N/A	2021/12/30	N/A	Auto Calc.
Chloride (1)	1	N/A	2021/12/08	ATL SOP 00014	SM 23 4500-Cl- E m
Chloride (1)	7	N/A	2021/12/09	ATL SOP 00014	SM 23 4500-Cl- E m
Colour (1)	1	N/A	2021/12/08	ATL SOP 00020	SM 23 2120C m
Colour (1)	7	N/A	2021/12/09	ATL SOP 00020	SM 23 2120C m
Conductance - water (1)	8	N/A	2021/12/09	ATL SOP 00004	SM 23 2510B m
Hardness (calculated as CaCO3) (1)	4	N/A	2022/01/11	ATL SOP 00048	Auto Calc
Hardness (calculated as CaCO3) (1)	1	N/A	2022/01/17	ATL SOP 00048	Auto Calc
Hardness (calculated as CaCO3) (1)	2	N/A	2022/01/18	ATL SOP 00048	Auto Calc
Hardness (calculated as CaCO3) (1)	1	N/A	2022/02/01	ATL SOP 00048	Auto Calc
Mercury - Total (CVAA,LL) (1)	5	2022/01/04	2022/01/04	ATL SOP 00026	EPA 245.1 R3 m
Mercury - Total (CVAA,LL) (1)	3	2021/12/14	2021/12/14	ATL SOP 00026	EPA 245.1 R3 m
Metals Water Diss. MS (as rec'd) (1)	2	N/A	2022/01/14	ATL SOP 00058	EPA 6020B R2 m
Metals Water Diss. MS (as rec'd) (1)	1	N/A	2022/01/17	ATL SOP 00058	EPA 6020B R2 m
Metals Water Diss. MS (as rec'd) (1)	4	N/A	2021/12/09	ATL SOP 00058	EPA 6020B R2 m
Metals Water Diss. MS (as rec'd) (1)	1	N/A	2022/02/01	ATL SOP 00058	EPA 6020B R2 m
Ion Balance (% Difference) (1)	3	N/A	2022/01/11	N/A	Auto Calc.
Ion Balance (% Difference) (1)	1	N/A	2022/01/17	N/A	Auto Calc.
Ion Balance (% Difference) (1)	2	N/A	2022/01/18	N/A	Auto Calc.
Ion Balance (% Difference) (1)	1	N/A	2022/01/24	N/A	Auto Calc.
Ion Balance (% Difference) (1)	1	N/A	2022/02/01	N/A	Auto Calc.
Anion and Cation Sum (1)	4	N/A	2022/01/11	N/A	Auto Calc.
Anion and Cation Sum (1)	1	N/A	2022/01/17	N/A	Auto Calc.
Anion and Cation Sum (1)	2	N/A	2022/01/18	N/A	Auto Calc.
Anion and Cation Sum (1)	1	N/A	2022/02/01	N/A	Auto Calc.
Nitrogen Ammonia - water (1)	8	N/A	2021/12/07	ATL SOP 00015	EPA 350.1 R2 m
Nitrogen - Nitrate + Nitrite (1)	1	N/A	2021/12/08	ATL SOP 00016	USGS I-2547-11m
Nitrogen - Nitrate + Nitrite (1)	7	N/A	2021/12/09	ATL SOP 00016	USGS I-2547-11m
Nitrogen - Nitrite (1)	1	N/A	2021/12/08	ATL SOP 00017	SM 23 4500-NO2- B m

Your Project #: 20-2863
Site Location: OH PARK/HARBOURSIDE EAST

Attention: Nadine Wambolt

Dillon Consulting Limited
275 Charlotte St
Sydney, NS
CANADA B1P 1C6

Report Date: 2022/02/09
Report #: R6997205
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C1AE703
Received: 2021/12/01, 16:50

Sample Matrix: Water
Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Nitrogen - Nitrite (1)	7	N/A	2021/12/09	ATL SOP 00017	SM 23 4500-NO2- B m
Nitrogen - Nitrate (as N) (1)	1	N/A	2022/01/10	ATL SOP 00018	ASTM D3867-16
Nitrogen - Nitrate (as N) (1)	7	N/A	2022/01/09	ATL SOP 00018	ASTM D3867-16
PAH in Water by GC/MS (SIM) (1)	2	2021/12/08	2021/12/21	ATL SOP 00103	EPA 8270E R6 m
PAH in Water by GC/MS (SIM) (1)	6	2021/12/08	2021/12/22	ATL SOP 00103	EPA 8270E R6 m
pH (1, 2)	8	N/A	2021/12/09	ATL SOP 00003	SM 23 4500-H+ B m
Phosphorus - ortho (1)	1	N/A	2021/12/08	ATL SOP 00021	SM 23 4500-P E m
Phosphorus - ortho (1)	7	N/A	2021/12/09	ATL SOP 00021	SM 23 4500-P E m
Sat. pH and Langelier Index (@ 20C) (1)	3	N/A	2022/01/11	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 20C) (1)	1	N/A	2022/01/17	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 20C) (1)	2	N/A	2022/01/18	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 20C) (1)	1	N/A	2022/01/24	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 20C) (1)	1	N/A	2022/02/01	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 4C) (1)	3	N/A	2022/01/11	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 4C) (1)	1	N/A	2022/01/17	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 4C) (1)	2	N/A	2022/01/18	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 4C) (1)	1	N/A	2022/01/24	ATL SOP 00049	Auto Calc.
Sat. pH and Langelier Index (@ 4C) (1)	1	N/A	2022/02/01	ATL SOP 00049	Auto Calc.
Reactive Silica (1)	1	N/A	2021/12/08	ATL SOP 00022	EPA 366.0 m
Reactive Silica (1)	7	N/A	2021/12/09	ATL SOP 00022	EPA 366.0 m
Sulphate (1)	1	N/A	2022/01/24	ATL SOP 00023	ASTM D516-16 m
Sulphate (1)	1	N/A	2021/12/08	ATL SOP 00023	ASTM D516-16 m
Sulphate (1)	6	N/A	2021/12/09	ATL SOP 00023	ASTM D516-16 m
Total Dissolved Solids (TDS calc) (1)	3	N/A	2022/01/11	N/A	Auto Calc.
Total Dissolved Solids (TDS calc) (1)	1	N/A	2022/01/17	N/A	Auto Calc.
Total Dissolved Solids (TDS calc) (1)	2	N/A	2022/01/18	N/A	Auto Calc.
Total Dissolved Solids (TDS calc) (1)	1	N/A	2022/01/24	N/A	Auto Calc.
Total Dissolved Solids (TDS calc) (1)	1	N/A	2022/02/01	N/A	Auto Calc.
Organic carbon - Total (TOC) (1, 3)	3	N/A	2021/12/10	ATL SOP 00203	SM 23 5310B m
Organic carbon - Total (TOC) (1, 3)	5	N/A	2021/12/08	ATL SOP 00203	SM 23 5310B m
Turbidity (1)	8	N/A	2021/12/08	ATL SOP 00011	EPA 180.1 R2 m

Your Project #: 20-2863
Site Location: OH PARK/HARBOURSIDE EAST

Attention: Nadine Wambolt

Dillon Consulting Limited
275 Charlotte St
Sydney, NS
CANADA B1P 1C6

Report Date: 2022/02/09
Report #: R6997205
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C1AE703
Received: 2021/12/01, 16:50

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9
(2) The APHA Standard Method require pH to be analyzed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the APHA Standard Method holding time.
(3) TOC / DOC present in the sample should be considered as non-purgeable TOC / DOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Natalie MacAskill, Key Account Specialist
Email: Natalie.MacAskill@bureauveritas.com
Phone# (902)567-1255 Ext:17

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RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RMG025			RMG042			RMG043		
Sampling Date		2021/12/01			2021/12/01			2021/12/01		
Sample #		DEC01-80			DEC01-81			DEC01-82		
	UNITS	COSB-002-MWA	RDL	QC Batch	COCP-110-MW	RDL	QC Batch	COBP-006-MWB	RDL	QC Batch
Calculated Parameters										
Anion Sum	me/L	37.7	N/A	7756379	9.45	N/A	7756379	8.25	N/A	7756379
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	70	1.0	7756376	190	1.0	7756376	280	1.0	7756376
Calculated TDS	mg/L	2600	1.0	7756384	600	1.0	7756384	460	1.0	7756384
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	7756376	1.1	1.0	7756376	<1.0	1.0	7756376
Cation Sum	me/L	38.4	N/A	7756379	9.60	N/A	7756379	8.21	N/A	7756379
Hardness (CaCO3)	mg/L	1900	1.0	7756377	400	1.0	7756377	330	1.0	7756377
Ion Balance (% Difference)	%	0.850	N/A	7756378	0.790	N/A	7756378	0.240	N/A	7756378
Langelier Index (@ 20C)	N/A	-0.898		7756381	0.707		7756381	0.293		7756381
Langelier Index (@ 4C)	N/A	-1.14		7756383	0.460		7756383	0.0450		7756383
Nitrate (N)	mg/L	0.59	0.050	7756380	0.11	0.050	7756380	<0.050	0.050	7756380
Saturation pH (@ 20C)	N/A	7.09		7756381	7.06		7756381	6.99		7756381
Saturation pH (@ 4C)	N/A	7.33		7756383	7.31		7756383	7.24		7756383
Inorganics										
Total Alkalinity (Total as CaCO3)	mg/L	70	5.0	7767587	190	25	7767587	280	25	7765457
Dissolved Chloride (Cl-)	mg/L	2.9	1.0	7767607	39	1.0	7767607	46	1.0	7765482
Colour	TCU	29	5.0	7767612	7.4	5.0	7767612	<5.0	5.0	7765488
Nitrate + Nitrite (N)	mg/L	0.59	0.050	7767615	0.11	0.050	7767615	<0.050	0.050	7765490
Nitrite (N)	mg/L	<0.010	0.010	7767617	<0.010	0.010	7767617	<0.010	0.010	7765492
Nitrogen (Ammonia Nitrogen)	mg/L	0.55	0.050	7761663	0.88	0.050	7761663	1.4	0.050	7761653
Total Organic Carbon (C)	mg/L	2.1	0.50	7757721	3.3	0.50	7757711	9.4	0.50	7757711
Orthophosphate (P)	mg/L	<0.010	0.010	7767613	<0.010	0.010	7767613	<0.010	0.010	7765489
pH	pH	6.19		7751090	7.77		7751090	7.28		7751090
Reactive Silica (SiO2)	mg/L	36	1.0	7767610	30	1.0	7767610	15	0.50	7765485
Dissolved Sulphate (SO4)	mg/L	1700	100	7796057	220	10	7767608	68	2.0	7765483
Turbidity	NTU	2.8	0.10	7724881	38	0.10	7724881	98	0.10	7724885
Conductivity	uS/cm	2700	1.0	7751096	890	1.0	7751096	740	1.0	7751096

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RMG044			RMG045			RMG046		
Sampling Date		2021/12/01			2021/12/01			2021/12/01		
Sample #		DEC01-83			DEC01-84			DEC01-85		
	UNITS	CONPL-202-MWA	RDL	QC Batch	COBB-004-MWA	RDL	QC Batch	MSES-104-MWA	RDL	QC Batch
Calculated Parameters										
Anion Sum	me/L	7.29	N/A	7756379	9.00	N/A	7756379	26.1	N/A	7756379
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	250	1.0	7756376	160	1.0	7756376	28	1.0	7756376
Calculated TDS	mg/L	400	1.0	7756384	570	1.0	7756384	1800	1.0	7756384
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.1	1.0	7756376	<1.0	1.0	7756376	<1.0	1.0	7756376
Cation Sum	me/L	7.18	N/A	7756379	8.85	N/A	7756379	28.4	N/A	7756379
Hardness (CaCO3)	mg/L	340	1.0	7756377	410	1.0	7756377	1300	1.0	7756377
Ion Balance (% Difference)	%	0.760	N/A	7756378	0.840	N/A	7756378	4.13	N/A	7756378
Langelier Index (@ 20C)	N/A	0.657		7756381	0.726		7756381	0.292		7756381
Langelier Index (@ 4C)	N/A	0.409		7756383	0.478		7756383	0.0480		7756383
Nitrate (N)	mg/L	0.053	0.050	7756380	<0.050	0.050	7756380	<0.050	0.050	7756380
Saturation pH (@ 20C)	N/A	7.01		7756381	7.08		7756381	7.50		7756381
Saturation pH (@ 4C)	N/A	7.26		7756383	7.33		7756383	7.74		7756383
Inorganics										
Total Alkalinity (Total as CaCO3)	mg/L	250	5.0	7767624	160	5.0	7767624	28	5.0	7767624
Dissolved Chloride (Cl-)	mg/L	9.2	1.0	7767645	27	1.0	7767645	45	1.0	7767645
Colour	TCU	<5.0	5.0	7767652	7.6	5.0	7767652	<5.0	5.0	7767652
Nitrate + Nitrite (N)	mg/L	0.053	0.050	7767655	<0.050	0.050	7767655	<0.050	0.050	7767655
Nitrite (N)	mg/L	<0.010	0.010	7767656	<0.010	0.010	7767656	<0.010	0.010	7767656
Nitrogen (Ammonia Nitrogen)	mg/L	<0.050	0.050	7761653	0.21	0.050	7761663	0.81	0.050	7761663
Total Organic Carbon (C)	mg/L	2.4	0.50	7757711	6.5	0.50	7757770	1.7	0.50	7757770
Orthophosphate (P)	mg/L	<0.010	0.010	7767653	0.018	0.010	7767653	<0.010	0.010	7767653
pH	pH	7.67		7751090	7.81		7751090	7.79		7751090
Reactive Silica (SiO2)	mg/L	9.5	0.50	7767648	23	1.0	7767648	2.3	0.50	7767648
Dissolved Sulphate (SO4)	mg/L	97	2.0	7767647	240	10	7767647	1200	100	7767647
Turbidity	NTU	23	0.10	7724881	0.72	0.10	7724881	3.7	0.10	7724885
Conductivity	uS/cm	640	1.0	7751096	830	1.0	7751096	2200	1.0	7751096

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 465 George St., Unit G, Sydney, NS, B1P 1K5 Tel:902 567 1255 Toll Free: 888 535 7770 Fax: 902 539 6504 www.bvlabs.com

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RMG047		RMG048		
Sampling Date		2021/12/01		2021/12/01		
Sample #		DEC01-86		DEC01-87		
	UNITS	MSES-104-MWB	QC Batch	FD-14	RDL	QC Batch
Calculated Parameters						
Anion Sum	me/L	43.9	7756158	43.2	N/A	7756158
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	360	7756152	360	1.0	7756152
Calculated TDS	mg/L	2800	7756167	2700	1.0	7756167
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	7756152	<1.0	1.0	7756152
Cation Sum	me/L	40.4	7756158	40.7	N/A	7756158
Hardness (CaCO3)	mg/L	1700	7756377	1700	1.0	7756154
Ion Balance (% Difference)	%	4.06	7756156	2.98	N/A	7756156
Langelier Index (@ 20C)	N/A	0.601	7756163	0.480		7756163
Langelier Index (@ 4C)	N/A	0.359	7756165	0.237		7756165
Nitrate (N)	mg/L	<0.050	7756380	<0.050	0.050	7756160
Saturation pH (@ 20C)	N/A	6.54	7756163	6.53		7756163
Saturation pH (@ 4C)	N/A	6.78	7756165	6.77		7756165
Inorganics						
Total Alkalinity (Total as CaCO3)	mg/L	360	7767624	360	5.0	7767624
Dissolved Chloride (Cl-)	mg/L	62	7767645	62	1.0	7767645
Colour	TCU	24	7767652	35	5.0	7767652
Nitrate + Nitrite (N)	mg/L	<0.050	7767655	<0.050	0.050	7767655
Nitrite (N)	mg/L	<0.010	7767656	<0.010	0.010	7767656
Nitrogen (Ammonia Nitrogen)	mg/L	0.54	7761663	0.53	0.050	7761663
Total Organic Carbon (C)	mg/L	3.7	7757770	3.7	0.50	7757735
Orthophosphate (P)	mg/L	<0.010	7767653	<0.010	0.010	7767653
pH	pH	7.14	7751090	7.01		7751090
Reactive Silica (SiO2)	mg/L	13	7767648	13	0.50	7767648
Dissolved Sulphate (SO4)	mg/L	1700	7767647	1600	100	7767647
Turbidity	NTU	58	7724885	59	0.10	7724885
Conductivity	uS/cm	3300	7751096	3200	1.0	7751096

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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MERCURY BY COLD VAPOUR AA (WATER)

Bureau Veritas ID		RMG025	RMG042		RMG043	RMG044		
Sampling Date		2021/12/01	2021/12/01		2021/12/01	2021/12/01		
Sample #		DEC01-80	DEC01-81		DEC01-82	DEC01-83		
	UNITS	COSB-002-MWA	COCP-110-MW	QC Batch	COBP-006-MWB	CONPL-202-MWA	RDL	QC Batch
Metals								
Total Mercury (Hg)	ug/L	<0.013	<0.013	7724967	<0.013 (1)	<0.013 (1)	0.013	7762793

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Mercury analyzed past recommended hold time.

Bureau Veritas ID		RMG045	RMG046	RMG047		RMG048		
Sampling Date		2021/12/01	2021/12/01	2021/12/01		2021/12/01		
Sample #		DEC01-84	DEC01-85	DEC01-86		DEC01-87		
	UNITS	COBB-004-MWA	MSES-104-MWA	MSES-104-MWB	QC Batch	FD-14	RDL	QC Batch
Metals								
Total Mercury (Hg)	ug/L	<0.013 (1)	<0.013 (1)	<0.013 (1)	7762793	<0.013	0.013	7724967

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Mercury analyzed past recommended hold time.

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ELEMENTS BY ICP/MS (WATER)

Bureau Veritas ID		RMG025			RMG042	RMG043	RMG044		
Sampling Date		2021/12/01			2021/12/01	2021/12/01	2021/12/01		
Sample #		DEC01-80			DEC01-81	DEC01-82	DEC01-83		
	UNITS	COSB-002-MWA	RDL	QC Batch	COCP-110-MW	COBP-006-MWB	CONPL-202-MWA	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	ug/L	3200	5.0	7772883	7.5	18	20	5.0	7772902
Dissolved Antimony (Sb)	ug/L	<1.0	1.0	7772883	3.0	<1.0	<1.0	1.0	7772902
Dissolved Arsenic (As)	ug/L	<1.0	1.0	7772883	21	<1.0	<1.0	1.0	7772902
Dissolved Barium (Ba)	ug/L	72	1.0	7772883	61	130	28	1.0	7772902
Dissolved Beryllium (Be)	ug/L	0.30	0.10	7772883	<0.10	<0.10	<0.10	0.10	7772902
Dissolved Bismuth (Bi)	ug/L	<2.0	2.0	7772883	<2.0	<2.0	<2.0	2.0	7772902
Dissolved Boron (B)	ug/L	120	50	7772883	83	60	<50	50	7772902
Dissolved Cadmium (Cd)	ug/L	2.1	0.010	7772883	0.33	0.037	0.074	0.010	7772902
Dissolved Calcium (Ca)	ug/L	560000	100	7772883	140000	110000	110000	100	7772902
Dissolved Chromium (Cr)	ug/L	1.0	1.0	7772883	<1.0	<1.0	<1.0	1.0	7772902
Dissolved Cobalt (Co)	ug/L	32	0.40	7772883	<0.40	<0.40	<0.40	0.40	7772902
Dissolved Copper (Cu)	ug/L	1.7	0.50	7772883	1.3	<0.50	<0.50	0.50	7772902
Dissolved Iron (Fe)	ug/L	1700	50	7772883	3100	11000	<50	50	7772902
Dissolved Lead (Pb)	ug/L	<0.50	0.50	7772883	<0.50	<0.50	<0.50	0.50	7772902
Dissolved Magnesium (Mg)	ug/L	120000	1000	7772883	12000	14000	16000	100	7772902
Dissolved Manganese (Mn)	ug/L	30000	2.0	7772883	230	4500	260	2.0	7772902
Dissolved Molybdenum (Mo)	ug/L	<2.0	2.0	7772883	7.1	<2.0	<2.0	2.0	7772902
Dissolved Nickel (Ni)	ug/L	620	2.0	7772883	<2.0	<2.0	<2.0	2.0	7772902
Dissolved Phosphorus (P)	ug/L	<100	100	7772883	220	100	<100	100	7772902
Dissolved Potassium (K)	ug/L	8600	100	7772883	11000	4200	1200	100	7772902
Dissolved Selenium (Se)	ug/L	<0.50	0.50	7772883	1.8	<0.50	<0.50	0.50	7772902
Dissolved Silver (Ag)	ug/L	<0.10	0.10	7772883	<0.10	<0.10	<0.10	0.10	7772902
Dissolved Sodium (Na)	ug/L	10000	100	7772883	28000	24000	9600	100	7772902
Dissolved Strontium (Sr)	ug/L	1600	2.0	7772883	530	470	350	2.0	7772902
Dissolved Thallium (Tl)	ug/L	0.10	0.10	7772883	<0.10	<0.10	<0.10	0.10	7772902
Dissolved Tin (Sn)	ug/L	<2.0	2.0	7772883	<2.0	<2.0	<2.0	2.0	7772902
Dissolved Titanium (Ti)	ug/L	<2.0	2.0	7772883	<2.0	<2.0	<2.0	2.0	7772902
Dissolved Uranium (U)	ug/L	0.22	0.10	7772883	2.3	<0.10	1.1	0.10	7772902
Dissolved Vanadium (V)	ug/L	<2.0	2.0	7772883	6.2	<2.0	<2.0	2.0	7772902
Dissolved Zinc (Zn)	ug/L	1700	5.0	7772883	<5.0	52	<5.0	5.0	7772902

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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ELEMENTS BY ICP/MS (WATER)

Bureau Veritas ID		RMG045		RMG046			RMG047		
Sampling Date		2021/12/01		2021/12/01			2021/12/01		
Sample #		DEC01-84		DEC01-85			DEC01-86		
	UNITS	COBB-004-MWA	QC Batch	MSES-104-MWA	RDL	QC Batch	MSES-104-MWB	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	ug/L	22	7781855	<5.0	5.0	7781855	280	5.0	7808539
Dissolved Antimony (Sb)	ug/L	<1.0	7781855	<1.0	1.0	7781855	<1.0	1.0	7808539
Dissolved Arsenic (As)	ug/L	2.9	7781855	1.2	1.0	7781855	3.0	1.0	7808539
Dissolved Barium (Ba)	ug/L	57	7781855	18	1.0	7781855	18	1.0	7808539
Dissolved Beryllium (Be)	ug/L	<0.10	7781855	<0.10	0.10	7781855	0.53	0.10	7808539
Dissolved Bismuth (Bi)	ug/L	<2.0	7781855	<2.0	2.0	7781855	<2.0	2.0	7808539
Dissolved Boron (B)	ug/L	83	7781855	<50	50	7781855	190	50	7808539
Dissolved Cadmium (Cd)	ug/L	0.044	7781855	0.096	0.010	7796229	0.081	0.010	7808539
Dissolved Calcium (Ca)	ug/L	150000	7781855	480000	100	7781855	400000	100	7808539
Dissolved Chromium (Cr)	ug/L	<1.0	7781855	<1.0	1.0	7781855	<1.0	1.0	7808539
Dissolved Cobalt (Co)	ug/L	0.49	7781855	<0.40	0.40	7781855	30	0.40	7808539
Dissolved Copper (Cu)	ug/L	0.82	7781855	<0.50	0.50	7781855	<0.50	0.50	7808539
Dissolved Iron (Fe)	ug/L	130	7781855	110	50	7781855	5300	50	7808539
Dissolved Lead (Pb)	ug/L	<0.50	7781855	<0.50	0.50	7781855	<0.50	0.50	7808539
Dissolved Magnesium (Mg)	ug/L	7200	7781855	32000	100	7781855	170000	1000	7808539
Dissolved Manganese (Mn)	ug/L	2000	7781855	100	2.0	7781855	72000	20	7808539
Dissolved Molybdenum (Mo)	ug/L	17	7781855	6.4	2.0	7781855	<2.0	2.0	7808539
Dissolved Nickel (Ni)	ug/L	2.1	7781855	<2.0	2.0	7781855	48	2.0	7808539
Dissolved Phosphorus (P)	ug/L	<100	7781855	<100	100	7781855	<100	100	7808539
Dissolved Potassium (K)	ug/L	3600	7781855	10000	100	7781855	13000	100	7808539
Dissolved Selenium (Se)	ug/L	<0.50	7781855	<0.50	0.50	7781855	<0.50	0.50	7808539
Dissolved Silver (Ag)	ug/L	<0.10	7781855	<0.10	0.10	7781855	<0.10	0.10	7808539
Dissolved Sodium (Na)	ug/L	12000	7781855	30000	100	7781855	140000	100	7808539
Dissolved Strontium (Sr)	ug/L	570	7781855	580	2.0	7781855	2000	2.0	7808539
Dissolved Thallium (Tl)	ug/L	<0.10	7781855	<0.10	0.10	7781855	<0.10	0.10	7808539
Dissolved Tin (Sn)	ug/L	<2.0	7781855	<2.0	2.0	7781855	<2.0	2.0	7808539
Dissolved Titanium (Ti)	ug/L	<2.0	7781855	<2.0	2.0	7781855	<2.0	2.0	7808539
Dissolved Uranium (U)	ug/L	5.5	7781855	<0.10	0.10	7781855	1.7	0.10	7808539
Dissolved Vanadium (V)	ug/L	<2.0	7781855	<2.0	2.0	7781855	<2.0	2.0	7808539
Dissolved Zinc (Zn)	ug/L	<5.0	7781855	<5.0	5.0	7781855	12	5.0	7808539

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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ELEMENTS BY ICP/MS (WATER)

Bureau Veritas ID		RMG048		
Sampling Date		2021/12/01		
Sample #		DEC01-87		
	UNITS	FD-14	RDL	QC Batch
Metals				
Dissolved Aluminum (Al)	ug/L	280	5.0	7781855
Dissolved Antimony (Sb)	ug/L	<1.0	1.0	7781855
Dissolved Arsenic (As)	ug/L	3.1	1.0	7781855
Dissolved Barium (Ba)	ug/L	18	1.0	7781855
Dissolved Beryllium (Be)	ug/L	0.54	0.10	7781855
Dissolved Bismuth (Bi)	ug/L	<2.0	2.0	7781855
Dissolved Boron (B)	ug/L	180	50	7781855
Dissolved Cadmium (Cd)	ug/L	0.077	0.010	7781855
Dissolved Calcium (Ca)	ug/L	400000	100	7781855
Dissolved Chromium (Cr)	ug/L	<1.0	1.0	7781855
Dissolved Cobalt (Co)	ug/L	30	0.40	7781855
Dissolved Copper (Cu)	ug/L	<0.50	0.50	7781855
Dissolved Iron (Fe)	ug/L	5200	50	7781855
Dissolved Lead (Pb)	ug/L	<0.50	0.50	7781855
Dissolved Magnesium (Mg)	ug/L	170000	1000	7781855
Dissolved Manganese (Mn)	ug/L	72000	20	7781855
Dissolved Molybdenum (Mo)	ug/L	<2.0	2.0	7781855
Dissolved Nickel (Ni)	ug/L	48	2.0	7781855
Dissolved Phosphorus (P)	ug/L	<100	100	7781855
Dissolved Potassium (K)	ug/L	13000	100	7781855
Dissolved Selenium (Se)	ug/L	<0.50	0.50	7781855
Dissolved Silver (Ag)	ug/L	<0.10	0.10	7781855
Dissolved Sodium (Na)	ug/L	140000	100	7781855
Dissolved Strontium (Sr)	ug/L	2000	2.0	7781855
Dissolved Thallium (Tl)	ug/L	<0.10	0.10	7781855
Dissolved Tin (Sn)	ug/L	<2.0	2.0	7781855
Dissolved Titanium (Ti)	ug/L	<2.0	2.0	7781855
Dissolved Uranium (U)	ug/L	1.7	0.10	7781855
Dissolved Vanadium (V)	ug/L	<2.0	2.0	7781855
Dissolved Zinc (Zn)	ug/L	12	5.0	7781855

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID		RMG025	RMG042		RMG043		RMG044		
Sampling Date		2021/12/01	2021/12/01		2021/12/01		2021/12/01		
Sample #		DEC01-80	DEC01-81		DEC01-82		DEC01-83		
	UNITS	COSB-002-MWA	COCP-110-MW	RDL	COBP-006-MWB	RDL	CONPL-202-MWA	RDL	QC Batch
Polyaromatic Hydrocarbons									
1-Methylnaphthalene	ug/L	<0.050	<0.050	0.050	20	0.050	<0.050	0.050	7749038
2-Methylnaphthalene	ug/L	<0.050	<0.050	0.050	<0.050	0.050	<0.050	0.050	7749038
Acenaphthene	ug/L	<0.010	0.024	0.010	35	0.010	<0.010	0.010	7749038
Acenaphthylene	ug/L	<0.010	<0.010	0.010	0.31	0.010	0.019	0.010	7749038
Anthracene	ug/L	<0.010	0.022	0.010	0.040	0.010	0.039	0.010	7749038
Benzo(a)anthracene	ug/L	<0.010	0.020	0.010	0.031	0.010	0.089	0.010	7749038
Benzo(a)pyrene	ug/L	<0.010	0.011	0.010	0.024	0.010	0.082	0.010	7749038
Benzo(b)fluoranthene	ug/L	<0.010	<0.010	0.010	0.017	0.010	0.054	0.010	7749038
Benzo(b/j)fluoranthene	ug/L	<0.020	<0.020	0.020	0.029	0.020	0.094	0.020	7756243
Benzo(g,h,i)perylene	ug/L	<0.010	<0.010	0.010	0.010	0.010	0.042	0.010	7749038
Benzo(j)fluoranthene	ug/L	<0.010	<0.010	0.010	0.012	0.010	0.040	0.010	7749038
Benzo(k)fluoranthene	ug/L	<0.010	<0.010	0.010	0.011	0.010	0.036	0.010	7749038
Chrysene	ug/L	<0.010	0.027	0.010	0.032	0.010	0.081	0.010	7749038
Dibenzo(a,h)anthracene	ug/L	<0.010	<0.010	0.010	<0.010	0.010	0.013	0.010	7749038
Fluoranthene	ug/L	<0.010	0.038	0.010	0.070	0.010	0.15	0.010	7749038
Fluorene	ug/L	<0.010	0.010	0.010	2.9	0.010	0.019	0.010	7749038
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	<0.010	0.010	0.011	0.010	0.039	0.010	7749038
Naphthalene	ug/L	<0.20	<0.20	0.20	53 (1)	2.0	<0.20	0.20	7749038
Perylene	ug/L	<0.010	<0.010	0.010	<0.010	0.010	0.023	0.010	7749038
Phenanthrene	ug/L	<0.010	0.027	0.010	0.33	0.010	0.099	0.010	7749038
Pyrene	ug/L	<0.010	0.11	0.010	0.067	0.010	0.13	0.010	7749038
Surrogate Recovery (%)									
D10-Anthracene	%	99	127		103		91		7749038
D14-Terphenyl	%	99	127		102		92		7749038
D8-Acenaphthylene	%	93	117		104		87		7749038

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Elevated PAH RDL(s) due to sample dilution.

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SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Bureau Veritas ID		RMG045		RMG046		RMG047		RMG048		
Sampling Date		2021/12/01		2021/12/01		2021/12/01		2021/12/01		
Sample #		DEC01-84		DEC01-85		DEC01-86		DEC01-87		
	UNITS	COBB-004-MWA	RDL	MSES-104-MWA	RDL	MSES-104-MWB	RDL	FD-14	RDL	QC Batch
Polyaromatic Hydrocarbons										
1-Methylnaphthalene	ug/L	<0.050	0.050	2.7	0.050	39 (1)	0.50	33	0.050	7749038
2-Methylnaphthalene	ug/L	<0.050	0.050	0.80	0.050	0.055	0.050	<0.050	0.050	7749038
Acenaphthene	ug/L	<0.010	0.010	9.5	0.010	16	0.010	12	0.010	7749038
Acenaphthylene	ug/L	<0.010	0.010	8.7	0.010	31	0.010	25	0.010	7749038
Anthracene	ug/L	<0.010	0.010	0.85	0.010	1.1	0.010	0.76	0.010	7749038
Benzo(a)anthracene	ug/L	<0.010	0.010	0.23	0.010	0.025	0.010	0.020	0.010	7749038
Benzo(a)pyrene	ug/L	<0.010	0.010	0.034	0.010	<0.010	0.010	<0.010	0.010	7749038
Benzo(b)fluoranthene	ug/L	<0.010	0.010	0.025	0.010	<0.010	0.010	<0.010	0.010	7749038
Benzo(b/j)fluoranthene	ug/L	<0.020	0.020	<0.040	0.040	<0.020	0.020	<0.020	0.020	7756243
Benzo(g,h,i)perylene	ug/L	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	7749038
Benzo(j)fluoranthene	ug/L	<0.010	0.010	<0.030 (2)	0.030	<0.010	0.010	<0.010	0.010	7749038
Benzo(k)fluoranthene	ug/L	<0.010	0.010	0.017	0.010	<0.010	0.010	<0.010	0.010	7749038
Chrysene	ug/L	<0.010	0.010	0.20	0.010	0.017	0.010	0.014	0.010	7749038
Dibenzo(a,h)anthracene	ug/L	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	7749038
Fluoranthene	ug/L	<0.010	0.010	4.0	0.010	0.55	0.010	0.45	0.010	7749038
Fluorene	ug/L	<0.010	0.010	3.9	0.010	11	0.010	8.5	0.010	7749038
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	7749038
Naphthalene	ug/L	<0.20	0.20	15	0.20	4.5	0.20	3.6	0.20	7749038
Perylene	ug/L	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	7749038
Phenanthrene	ug/L	<0.010	0.010	1.3	0.010	8.1	0.010	6.5	0.010	7749038
Pyrene	ug/L	<0.010	0.010	2.4	0.010	0.31	0.010	0.25	0.010	7749038
Surrogate Recovery (%)										
D10-Anthracene	%	101		138 (3)		114		90		7749038
D14-Terphenyl	%	104		137 (3)		113		87		7749038
D8-Acenaphthylene	%	93		136 (3)		116		91		7749038

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Elevated PAH RDL(s) due to sample dilution.
(2) Elevated PAH RDL(s) due to matrix / co-extractive interference.
(3) PAH surrogate(s) not within acceptance limits. Insufficient sample to repeat.

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GENERAL COMMENTS

REISSUED REPORT to modify sample id from CONPL-006-MWA to the correct ID of CONPL-202-MWA. 02/09/2022 NBU

Sample RMG045 [COBB-004-MWA] : ortho-Phosphate > Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample RMG046, Metals Water Diss. MS (as rec'd): Test repeated.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7724881	SHW	QC Standard	Turbidity	2021/12/08		101	%	80 - 120
7724881	SHW	Spiked Blank	Turbidity	2021/12/08		105	%	80 - 120
7724881	SHW	Method Blank	Turbidity	2021/12/08	<0.10		NTU	
7724881	SHW	RPD	Turbidity	2021/12/08	1.2		%	20
7724885	SHW	QC Standard	Turbidity	2021/12/08		102	%	80 - 120
7724885	SHW	Spiked Blank	Turbidity	2021/12/08		105	%	80 - 120
7724885	SHW	Method Blank	Turbidity	2021/12/08	<0.10		NTU	
7724885	SHW	RPD [RMG043-01]	Turbidity	2021/12/08	2.2		%	20
7724967	EPU	Matrix Spike [RMG025-05]	Total Mercury (Hg)	2021/12/14		98	%	80 - 120
7724967	EPU	Spiked Blank	Total Mercury (Hg)	2021/12/14		101	%	80 - 120
7724967	EPU	Method Blank	Total Mercury (Hg)	2021/12/14	<0.013		ug/L	
7724967	EPU	RPD	Total Mercury (Hg)	2021/12/14	NC		%	20
7749038	LGE	Matrix Spike	D10-Anthracene	2021/12/21		105	%	50 - 130
			D14-Terphenyl	2021/12/21		109	%	50 - 130
			D8-Acenaphthylene	2021/12/21		93	%	50 - 130
			1-Methylnaphthalene	2021/12/21		99	%	50 - 130
			2-Methylnaphthalene	2021/12/21		103	%	50 - 130
			Acenaphthene	2021/12/21		120	%	50 - 130
			Acenaphthylene	2021/12/21		97	%	50 - 130
			Anthracene	2021/12/21		107	%	50 - 130
			Benzo(a)anthracene	2021/12/21		98	%	50 - 130
			Benzo(a)pyrene	2021/12/21		100	%	50 - 130
			Benzo(b)fluoranthene	2021/12/21		102	%	50 - 130
			Benzo(g,h,i)perylene	2021/12/21		105	%	50 - 130
			Benzo(j)fluoranthene	2021/12/21		101	%	50 - 130
			Benzo(k)fluoranthene	2021/12/21		101	%	50 - 130
			Chrysene	2021/12/21		104	%	50 - 130
			Dibenzo(a,h)anthracene	2021/12/21		100	%	50 - 130
			Fluoranthene	2021/12/21		105	%	50 - 130
			Fluorene	2021/12/21		111	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2021/12/21		104	%	50 - 130
			Naphthalene	2021/12/21		118	%	50 - 130
			Perylene	2021/12/21		106	%	50 - 130
			Phenanthrene	2021/12/21		115	%	50 - 130
			Pyrene	2021/12/21		103	%	50 - 130
7749038	LGE	Spiked Blank	D10-Anthracene	2021/12/21		84	%	50 - 130
			D14-Terphenyl	2021/12/21		82	%	50 - 130
			D8-Acenaphthylene	2021/12/21		77	%	50 - 130
			1-Methylnaphthalene	2021/12/21		80	%	50 - 130
			2-Methylnaphthalene	2021/12/21		84	%	50 - 130
			Acenaphthene	2021/12/21		97	%	50 - 130
			Acenaphthylene	2021/12/21		81	%	50 - 130
			Anthracene	2021/12/21		81	%	50 - 130
			Benzo(a)anthracene	2021/12/21		80	%	50 - 130
			Benzo(a)pyrene	2021/12/21		83	%	50 - 130
			Benzo(b)fluoranthene	2021/12/21		83	%	50 - 130
			Benzo(g,h,i)perylene	2021/12/21		85	%	50 - 130
			Benzo(j)fluoranthene	2021/12/21		83	%	50 - 130
			Benzo(k)fluoranthene	2021/12/21		82	%	50 - 130
			Chrysene	2021/12/21		85	%	50 - 130
			Dibenzo(a,h)anthracene	2021/12/21		72	%	50 - 130
			Fluoranthene	2021/12/21		85	%	50 - 130
			Fluorene	2021/12/21		91	%	50 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Indeno(1,2,3-cd)pyrene	2021/12/21		84	%	50 - 130
			Naphthalene	2021/12/21		94	%	50 - 130
			Perylene	2021/12/21		88	%	50 - 130
			Phenanthrene	2021/12/21		101	%	50 - 130
			Pyrene	2021/12/21		85	%	50 - 130
7749038	LGE	Method Blank	D10-Anthracene	2021/12/21		126	%	50 - 130
			D14-Terphenyl	2021/12/21		124	%	50 - 130
			D8-Acenaphthylene	2021/12/21		126	%	50 - 130
			1-Methylnaphthalene	2021/12/21	<0.050		ug/L	
			2-Methylnaphthalene	2021/12/21	<0.050		ug/L	
			Acenaphthene	2021/12/21	<0.010		ug/L	
			Acenaphthylene	2021/12/21	<0.010		ug/L	
			Anthracene	2021/12/21	<0.010		ug/L	
			Benzo(a)anthracene	2021/12/21	<0.010		ug/L	
			Benzo(a)pyrene	2021/12/21	<0.010		ug/L	
			Benzo(b)fluoranthene	2021/12/21	<0.010		ug/L	
			Benzo(g,h,i)perylene	2021/12/21	<0.010		ug/L	
			Benzo(j)fluoranthene	2021/12/21	<0.010		ug/L	
			Benzo(k)fluoranthene	2021/12/21	<0.010		ug/L	
			Chrysene	2021/12/21	<0.010		ug/L	
			Dibenzo(a,h)anthracene	2021/12/21	<0.010		ug/L	
			Fluoranthene	2021/12/21	<0.010		ug/L	
			Fluorene	2021/12/21	<0.010		ug/L	
			Indeno(1,2,3-cd)pyrene	2021/12/21	<0.010		ug/L	
			Naphthalene	2021/12/21	<0.20		ug/L	
			Perylene	2021/12/21	<0.010		ug/L	
			Phenanthrene	2021/12/21	<0.010		ug/L	
			Pyrene	2021/12/21	<0.010		ug/L	
7749038	LGE	RPD [RMG045-06]	1-Methylnaphthalene	2021/12/21	NC		%	40
			2-Methylnaphthalene	2021/12/21	NC		%	40
			Acenaphthene	2021/12/21	NC		%	40
			Acenaphthylene	2021/12/21	NC		%	40
			Anthracene	2021/12/21	NC		%	40
			Benzo(a)anthracene	2021/12/21	NC		%	40
			Benzo(a)pyrene	2021/12/21	NC		%	40
			Benzo(b)fluoranthene	2021/12/21	NC		%	40
			Benzo(g,h,i)perylene	2021/12/21	NC		%	40
			Benzo(j)fluoranthene	2021/12/21	NC		%	40
			Benzo(k)fluoranthene	2021/12/21	NC		%	40
			Chrysene	2021/12/21	NC		%	40
			Dibenzo(a,h)anthracene	2021/12/21	NC		%	40
			Fluoranthene	2021/12/21	NC		%	40
			Fluorene	2021/12/21	NC		%	40
			Indeno(1,2,3-cd)pyrene	2021/12/21	NC		%	40
			Naphthalene	2021/12/21	NC		%	40
			Perylene	2021/12/21	NC		%	40
			Phenanthrene	2021/12/21	NC		%	40
			Pyrene	2021/12/21	NC		%	40
7751090	SHW	Spiked Blank	pH	2021/12/09		100	%	97 - 103
7751090	SHW	RPD	pH	2021/12/09	0.50		%	N/A
7751096	SHW	Spiked Blank	Conductivity	2021/12/09		100	%	80 - 120
7751096	SHW	Method Blank	Conductivity	2021/12/09	<1.0		uS/cm	
7751096	SHW	RPD	Conductivity	2021/12/09	0.34		%	10
7757711	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/08		99	%	85 - 115

Bureau Veritas 465 George St., Unit G, Sydney, NS, B1P 1K5 Tel:902 567 1255 Toll Free: 888 535 7770 Fax: 902 539 6504 www.bvlabs.com

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7757711	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/08		102	%	80 - 120
7757711	NGI	Method Blank	Total Organic Carbon (C)	2021/12/08	<0.50		mg/L	
7757711	NGI	RPD	Total Organic Carbon (C)	2021/12/08	0.27		%	15
7757721	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/08		99	%	85 - 115
7757721	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/08		103	%	80 - 120
7757721	NGI	Method Blank	Total Organic Carbon (C)	2021/12/08	<0.50		mg/L	
7757721	NGI	RPD	Total Organic Carbon (C)	2021/12/08	6.5		%	15
7757735	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/08		103	%	85 - 115
7757735	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/08		102	%	80 - 120
7757735	NGI	Method Blank	Total Organic Carbon (C)	2021/12/08	<0.50		mg/L	
7757735	NGI	RPD	Total Organic Carbon (C)	2021/12/08	0.83		%	15
7757770	NGI	Matrix Spike	Total Organic Carbon (C)	2021/12/10		105	%	85 - 115
7757770	NGI	Spiked Blank	Total Organic Carbon (C)	2021/12/10		102	%	80 - 120
7757770	NGI	Method Blank	Total Organic Carbon (C)	2021/12/10	<0.50		mg/L	
7757770	NGI	RPD	Total Organic Carbon (C)	2021/12/10	1.1		%	15
7761653	MKY	Matrix Spike	Nitrogen (Ammonia Nitrogen)	2021/12/07		94	%	80 - 120
7761653	MKY	Spiked Blank	Nitrogen (Ammonia Nitrogen)	2021/12/07		95	%	80 - 120
7761653	MKY	Method Blank	Nitrogen (Ammonia Nitrogen)	2021/12/07	<0.050		mg/L	
7761653	MKY	RPD	Nitrogen (Ammonia Nitrogen)	2021/12/07	NC		%	20
7761663	MKY	Matrix Spike	Nitrogen (Ammonia Nitrogen)	2021/12/07		91	%	80 - 120
7761663	MKY	Spiked Blank	Nitrogen (Ammonia Nitrogen)	2021/12/07		94	%	80 - 120
7761663	MKY	Method Blank	Nitrogen (Ammonia Nitrogen)	2021/12/07	<0.050		mg/L	
7761663	MKY	RPD	Nitrogen (Ammonia Nitrogen)	2021/12/07	NC		%	20
7762793	FJO	Matrix Spike	Total Mercury (Hg)	2022/01/04		87	%	80 - 120
7762793	FJO	Spiked Blank	Total Mercury (Hg)	2022/01/04		105	%	80 - 120
7762793	FJO	Method Blank	Total Mercury (Hg)	2022/01/04	<0.013		ug/L	
7762793	FJO	RPD	Total Mercury (Hg)	2022/01/04	NC		%	20
7765457	MCN	Matrix Spike [RMG043-01]	Total Alkalinity (Total as CaCO3)	2021/12/08		NC	%	80 - 120
7765457	MCN	Spiked Blank	Total Alkalinity (Total as CaCO3)	2021/12/08		109	%	80 - 120
7765457	MCN	Method Blank	Total Alkalinity (Total as CaCO3)	2021/12/08	<5.0		mg/L	
7765457	MCN	RPD [RMG043-01]	Total Alkalinity (Total as CaCO3)	2021/12/08	2.3		%	20
7765482	MCN	Matrix Spike [RMG043-01]	Dissolved Chloride (Cl-)	2021/12/08		93	%	80 - 120
7765482	MCN	Spiked Blank	Dissolved Chloride (Cl-)	2021/12/08		101	%	80 - 120
7765482	MCN	Method Blank	Dissolved Chloride (Cl-)	2021/12/08	<1.0		mg/L	
7765482	MCN	RPD [RMG043-01]	Dissolved Chloride (Cl-)	2021/12/08	0.66		%	20
7765483	MCN	Matrix Spike [RMG043-01]	Dissolved Sulphate (SO4)	2021/12/08		NC	%	80 - 120
7765483	MCN	Spiked Blank	Dissolved Sulphate (SO4)	2021/12/08		104	%	80 - 120
7765483	MCN	Method Blank	Dissolved Sulphate (SO4)	2021/12/08	<2.0		mg/L	
7765483	MCN	RPD [RMG043-01]	Dissolved Sulphate (SO4)	2021/12/08	0.74		%	20
7765485	MCN	Matrix Spike [RMG043-01]	Reactive Silica (SiO2)	2021/12/08		NC	%	80 - 120
7765485	MCN	Spiked Blank	Reactive Silica (SiO2)	2021/12/08		97	%	80 - 120
7765485	MCN	Method Blank	Reactive Silica (SiO2)	2021/12/08	<0.50		mg/L	
7765485	MCN	RPD [RMG043-01]	Reactive Silica (SiO2)	2021/12/08	0.86		%	20
7765488	MCN	Spiked Blank	Colour	2021/12/08		91	%	80 - 120
7765488	MCN	Method Blank	Colour	2021/12/08	<5.0		TCU	
7765488	MCN	RPD [RMG043-01]	Colour	2021/12/08	4.1		%	20
7765489	MCN	Matrix Spike [RMG043-01]	Orthophosphate (P)	2021/12/08		93	%	80 - 120
7765489	MCN	Spiked Blank	Orthophosphate (P)	2021/12/08		98	%	80 - 120
7765489	MCN	Method Blank	Orthophosphate (P)	2021/12/08	<0.010		mg/L	

Bureau Veritas 465 George St., Unit G, Sydney, NS, B1P 1K5 Tel:902 567 1255 Toll Free: 888 535 7770 Fax: 902 539 6504 www.bvlabs.com

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7765489	MCN	RPD [RMG043-01]	Orthophosphate (P)	2021/12/08	NC		%	20
7765490	MCN	Matrix Spike [RMG043-01]	Nitrate + Nitrite (N)	2021/12/08		94	%	80 - 120
7765490	MCN	Spiked Blank	Nitrate + Nitrite (N)	2021/12/08		99	%	80 - 120
7765490	MCN	Method Blank	Nitrate + Nitrite (N)	2021/12/08	<0.050		mg/L	
7765490	MCN	RPD [RMG043-01]	Nitrate + Nitrite (N)	2021/12/08	NC		%	20
7765492	MCN	Matrix Spike [RMG043-01]	Nitrite (N)	2021/12/08		103	%	80 - 120
7765492	MCN	Spiked Blank	Nitrite (N)	2021/12/08		106	%	80 - 120
7765492	MCN	Method Blank	Nitrite (N)	2021/12/08	<0.010		mg/L	
7765492	MCN	RPD [RMG043-01]	Nitrite (N)	2021/12/08	NC		%	20
7767587	MCN	Matrix Spike	Total Alkalinity (Total as CaCO3)	2021/12/09		79 (1)	%	80 - 120
7767587	MCN	Spiked Blank	Total Alkalinity (Total as CaCO3)	2021/12/10		100	%	80 - 120
7767587	MCN	Method Blank	Total Alkalinity (Total as CaCO3)	2021/12/10	<5.0		mg/L	
7767587	MCN	RPD	Total Alkalinity (Total as CaCO3)	2021/12/09	3.3		%	20
7767607	MCN	Matrix Spike	Dissolved Chloride (Cl-)	2021/12/09		96	%	80 - 120
7767607	MCN	Spiked Blank	Dissolved Chloride (Cl-)	2021/12/09		96	%	80 - 120
7767607	MCN	Method Blank	Dissolved Chloride (Cl-)	2021/12/09	<1.0		mg/L	
7767607	MCN	RPD	Dissolved Chloride (Cl-)	2021/12/09	0.41		%	20
7767608	MCN	Matrix Spike	Dissolved Sulphate (SO4)	2021/12/09		95	%	80 - 120
7767608	MCN	Spiked Blank	Dissolved Sulphate (SO4)	2021/12/09		98	%	80 - 120
7767608	MCN	Method Blank	Dissolved Sulphate (SO4)	2021/12/10	<2.0		mg/L	
7767608	MCN	RPD	Dissolved Sulphate (SO4)	2021/12/09	NC		%	20
7767610	MCN	Matrix Spike	Reactive Silica (SiO2)	2021/12/09		91	%	80 - 120
7767610	MCN	Spiked Blank	Reactive Silica (SiO2)	2021/12/09		93	%	80 - 120
7767610	MCN	Method Blank	Reactive Silica (SiO2)	2021/12/09	<0.50		mg/L	
7767610	MCN	RPD	Reactive Silica (SiO2)	2021/12/09	0.65		%	20
7767612	MCN	Spiked Blank	Colour	2021/12/09		95	%	80 - 120
7767612	MCN	Method Blank	Colour	2021/12/09	<5.0		TCU	
7767612	MCN	RPD	Colour	2021/12/09	NC		%	20
7767613	MCN	Matrix Spike	Orthophosphate (P)	2021/12/09		NC	%	80 - 120
7767613	MCN	Spiked Blank	Orthophosphate (P)	2021/12/09		99	%	80 - 120
7767613	MCN	Method Blank	Orthophosphate (P)	2021/12/09	<0.010		mg/L	
7767613	MCN	RPD	Orthophosphate (P)	2021/12/09	5.0		%	20
7767615	MCN	Matrix Spike	Nitrate + Nitrite (N)	2021/12/09		96	%	80 - 120
7767615	MCN	Spiked Blank	Nitrate + Nitrite (N)	2021/12/09		97	%	80 - 120
7767615	MCN	Method Blank	Nitrate + Nitrite (N)	2021/12/09	<0.050		mg/L	
7767615	MCN	RPD	Nitrate + Nitrite (N)	2021/12/09	NC		%	20
7767617	MCN	Matrix Spike	Nitrite (N)	2021/12/09		4.5 (2)	%	80 - 120
7767617	MCN	Spiked Blank	Nitrite (N)	2021/12/09		108	%	80 - 120
7767617	MCN	Method Blank	Nitrite (N)	2021/12/09	<0.010		mg/L	
7767617	MCN	RPD	Nitrite (N)	2021/12/09	NC		%	20
7767624	MCN	Matrix Spike	Total Alkalinity (Total as CaCO3)	2021/12/09		NC	%	80 - 120
7767624	MCN	Spiked Blank	Total Alkalinity (Total as CaCO3)	2021/12/09		102	%	80 - 120
7767624	MCN	Method Blank	Total Alkalinity (Total as CaCO3)	2021/12/09	<5.0		mg/L	
7767624	MCN	RPD	Total Alkalinity (Total as CaCO3)	2021/12/09	2.3		%	20
7767645	MCN	Matrix Spike	Dissolved Chloride (Cl-)	2021/12/09		NC	%	80 - 120
7767645	MCN	Spiked Blank	Dissolved Chloride (Cl-)	2021/12/09		97	%	80 - 120
7767645	MCN	Method Blank	Dissolved Chloride (Cl-)	2021/12/09	<1.0		mg/L	
7767645	MCN	RPD	Dissolved Chloride (Cl-)	2021/12/09	2.5		%	20
7767647	MCN	Matrix Spike	Dissolved Sulphate (SO4)	2021/12/09		NC	%	80 - 120
7767647	MCN	Spiked Blank	Dissolved Sulphate (SO4)	2021/12/09		102	%	80 - 120
7767647	MCN	Method Blank	Dissolved Sulphate (SO4)	2021/12/10	<2.0		mg/L	
7767648	MCN	Matrix Spike	Reactive Silica (SiO2)	2021/12/09		88	%	80 - 120

Bureau Veritas 465 George St., Unit G, Sydney, NS, B1P 1K5 Tel:902 567 1255 Toll Free: 888 535 7770 Fax: 902 539 6504 www.bvlabs.com

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7767648	MCN	Spiked Blank	Reactive Silica (SiO2)	2021/12/09		96	%	80 - 120
7767648	MCN	Method Blank	Reactive Silica (SiO2)	2021/12/09	<0.50		mg/L	
7767648	MCN	RPD	Reactive Silica (SiO2)	2021/12/09	0.48		%	20
7767652	MCN	Spiked Blank	Colour	2021/12/09		99	%	80 - 120
7767652	MCN	Method Blank	Colour	2021/12/09	<5.0		TCU	
7767652	MCN	RPD	Colour	2021/12/09	NC		%	20
7767653	MCN	Matrix Spike	Orthophosphate (P)	2021/12/09		96	%	80 - 120
7767653	MCN	Spiked Blank	Orthophosphate (P)	2021/12/09		100	%	80 - 120
7767653	MCN	Method Blank	Orthophosphate (P)	2021/12/09	<0.010		mg/L	
7767653	MCN	RPD	Orthophosphate (P)	2021/12/09	NC		%	20
7767655	MCN	Matrix Spike	Nitrate + Nitrite (N)	2021/12/09		96	%	80 - 120
7767655	MCN	Spiked Blank	Nitrate + Nitrite (N)	2021/12/09		96	%	80 - 120
7767655	MCN	Method Blank	Nitrate + Nitrite (N)	2021/12/09	<0.050		mg/L	
7767655	MCN	RPD	Nitrate + Nitrite (N)	2021/12/09	NC		%	20
7767656	MCN	Matrix Spike	Nitrite (N)	2021/12/09		101	%	80 - 120
7767656	MCN	Spiked Blank	Nitrite (N)	2021/12/09		105	%	80 - 120
7767656	MCN	Method Blank	Nitrite (N)	2021/12/09	<0.010		mg/L	
7767656	MCN	RPD	Nitrite (N)	2021/12/09	NC		%	20
7772883	BAN	Matrix Spike	Dissolved Aluminum (Al)	2021/12/07		99	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/07		105	%	80 - 120
			Dissolved Arsenic (As)	2021/12/07		96	%	80 - 120
			Dissolved Barium (Ba)	2021/12/07		94	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/07		99	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/07		93	%	80 - 120
			Dissolved Boron (B)	2021/12/07		98	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/07		99	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/07		NC	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/07		96	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/07		95	%	80 - 120
			Dissolved Copper (Cu)	2021/12/07		95	%	80 - 120
			Dissolved Iron (Fe)	2021/12/07		100	%	80 - 120
			Dissolved Lead (Pb)	2021/12/07		96	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/07		NC	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/07		96	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/07		106	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/07		95	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/07		104	%	80 - 120
			Dissolved Potassium (K)	2021/12/07		101	%	80 - 120
			Dissolved Selenium (Se)	2021/12/07		97	%	80 - 120
			Dissolved Silver (Ag)	2021/12/07		96	%	80 - 120
			Dissolved Sodium (Na)	2021/12/07		NC	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/07		NC	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/07		96	%	80 - 120
			Dissolved Tin (Sn)	2021/12/07		104	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/07		100	%	80 - 120
			Dissolved Uranium (U)	2021/12/07		104	%	80 - 120
			Dissolved Vanadium (V)	2021/12/07		103	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/07		93	%	80 - 120
7772883	BAN	Spiked Blank	Dissolved Aluminum (Al)	2021/12/07		102	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/07		100	%	80 - 120
			Dissolved Arsenic (As)	2021/12/07		93	%	80 - 120
			Dissolved Barium (Ba)	2021/12/07		94	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/07		97	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/07		98	%	80 - 120

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Boron (B)	2021/12/07		96	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/07		99	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/07		101	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/07		97	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/07		98	%	80 - 120
			Dissolved Copper (Cu)	2021/12/07		100	%	80 - 120
			Dissolved Iron (Fe)	2021/12/07		101	%	80 - 120
			Dissolved Lead (Pb)	2021/12/07		98	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/07		102	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/07		99	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/07		101	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/07		100	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/07		105	%	80 - 120
			Dissolved Potassium (K)	2021/12/07		98	%	80 - 120
			Dissolved Selenium (Se)	2021/12/07		96	%	80 - 120
			Dissolved Silver (Ag)	2021/12/07		97	%	80 - 120
			Dissolved Sodium (Na)	2021/12/07		97	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/07		99	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/07		99	%	80 - 120
			Dissolved Tin (Sn)	2021/12/07		99	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/07		101	%	80 - 120
			Dissolved Uranium (U)	2021/12/07		104	%	80 - 120
			Dissolved Vanadium (V)	2021/12/07		100	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/07		100	%	80 - 120
7772883	BAN	Method Blank	Dissolved Aluminum (Al)	2021/12/07	<5.0		ug/L	
			Dissolved Antimony (Sb)	2021/12/07	<1.0		ug/L	
			Dissolved Arsenic (As)	2021/12/07	<1.0		ug/L	
			Dissolved Barium (Ba)	2021/12/07	<1.0		ug/L	
			Dissolved Beryllium (Be)	2021/12/07	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2021/12/07	<2.0		ug/L	
			Dissolved Boron (B)	2021/12/07	<50		ug/L	
			Dissolved Cadmium (Cd)	2021/12/07	<0.010		ug/L	
			Dissolved Calcium (Ca)	2021/12/07	<100		ug/L	
			Dissolved Chromium (Cr)	2021/12/07	<1.0		ug/L	
			Dissolved Cobalt (Co)	2021/12/07	<0.40		ug/L	
			Dissolved Copper (Cu)	2021/12/07	<0.50		ug/L	
			Dissolved Iron (Fe)	2021/12/07	<50		ug/L	
			Dissolved Lead (Pb)	2021/12/07	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2021/12/07	<100		ug/L	
			Dissolved Manganese (Mn)	2021/12/07	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2021/12/07	<2.0		ug/L	
			Dissolved Nickel (Ni)	2021/12/07	<2.0		ug/L	
			Dissolved Phosphorus (P)	2021/12/07	<100		ug/L	
			Dissolved Potassium (K)	2021/12/07	<100		ug/L	
			Dissolved Selenium (Se)	2021/12/07	<0.50		ug/L	
			Dissolved Silver (Ag)	2021/12/07	<0.10		ug/L	
			Dissolved Sodium (Na)	2021/12/07	<100		ug/L	
			Dissolved Strontium (Sr)	2021/12/07	<2.0		ug/L	
			Dissolved Thallium (Tl)	2021/12/07	<0.10		ug/L	
			Dissolved Tin (Sn)	2021/12/07	<2.0		ug/L	
			Dissolved Titanium (Ti)	2021/12/07	<2.0		ug/L	
			Dissolved Uranium (U)	2021/12/07	<0.10		ug/L	
			Dissolved Vanadium (V)	2021/12/07	<2.0		ug/L	
			Dissolved Zinc (Zn)	2021/12/07	<5.0		ug/L	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7772883	BAN	RPD	Dissolved Aluminum (Al)	2021/12/07	NC		%	20
			Dissolved Antimony (Sb)	2021/12/07	NC		%	20
			Dissolved Arsenic (As)	2021/12/07	NC		%	20
			Dissolved Barium (Ba)	2021/12/07	0.23		%	20
			Dissolved Beryllium (Be)	2021/12/07	NC		%	20
			Dissolved Bismuth (Bi)	2021/12/07	NC		%	20
			Dissolved Boron (B)	2021/12/07	1.1		%	20
			Dissolved Cadmium (Cd)	2021/12/07	6.9		%	20
			Dissolved Calcium (Ca)	2021/12/07	0.50		%	20
			Dissolved Chromium (Cr)	2021/12/07	NC		%	20
			Dissolved Cobalt (Co)	2021/12/07	4.0		%	20
			Dissolved Copper (Cu)	2021/12/07	0.47		%	20
			Dissolved Iron (Fe)	2021/12/07	2.9		%	20
			Dissolved Lead (Pb)	2021/12/07	0.86		%	20
			Dissolved Magnesium (Mg)	2021/12/07	1.1		%	20
			Dissolved Manganese (Mn)	2021/12/07	0.34		%	20
			Dissolved Molybdenum (Mo)	2021/12/07	NC		%	20
			Dissolved Nickel (Ni)	2021/12/07	0.050		%	20
			Dissolved Phosphorus (P)	2021/12/07	NC		%	20
			Dissolved Potassium (K)	2021/12/07	0.84		%	20
			Dissolved Selenium (Se)	2021/12/07	1.3		%	20
			Dissolved Silver (Ag)	2021/12/07	NC		%	20
			Dissolved Sodium (Na)	2021/12/07	1.4		%	20
			Dissolved Strontium (Sr)	2021/12/07	0.52		%	20
			Dissolved Thallium (Tl)	2021/12/07	NC		%	20
			Dissolved Tin (Sn)	2021/12/07	NC		%	20
			Dissolved Titanium (Ti)	2021/12/07	NC		%	20
			Dissolved Uranium (U)	2021/12/07	NC		%	20
			Dissolved Vanadium (V)	2021/12/07	NC		%	20
			Dissolved Zinc (Zn)	2021/12/07	0.14		%	20
7772902	BAN	Matrix Spike	Dissolved Aluminum (Al)	2021/12/09		100	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/09		102	%	80 - 120
			Dissolved Arsenic (As)	2021/12/09		93	%	80 - 120
			Dissolved Barium (Ba)	2021/12/09		NC	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/09		96	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/09		98	%	80 - 120
			Dissolved Boron (B)	2021/12/09		103	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/09		100	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/09		102	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/09		96	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/09		96	%	80 - 120
			Dissolved Copper (Cu)	2021/12/09		99	%	80 - 120
			Dissolved Iron (Fe)	2021/12/09		100	%	80 - 120
			Dissolved Lead (Pb)	2021/12/09		98	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/09		102	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/09		NC	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/09		96	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/09		97	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/09		107	%	80 - 120
			Dissolved Potassium (K)	2021/12/09		103	%	80 - 120
			Dissolved Selenium (Se)	2021/12/09		96	%	80 - 120
			Dissolved Silver (Ag)	2021/12/09		96	%	80 - 120
			Dissolved Sodium (Na)	2021/12/09		97	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/09		97	%	80 - 120

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Thallium (Tl)	2021/12/09		100	%	80 - 120
			Dissolved Tin (Sn)	2021/12/09		102	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/09		96	%	80 - 120
			Dissolved Uranium (U)	2021/12/09		104	%	80 - 120
			Dissolved Vanadium (V)	2021/12/09		99	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/09		99	%	80 - 120
7772902	BAN	Spiked Blank	Dissolved Aluminum (Al)	2021/12/07		101	%	80 - 120
			Dissolved Antimony (Sb)	2021/12/07		101	%	80 - 120
			Dissolved Arsenic (As)	2021/12/07		94	%	80 - 120
			Dissolved Barium (Ba)	2021/12/07		94	%	80 - 120
			Dissolved Beryllium (Be)	2021/12/07		95	%	80 - 120
			Dissolved Bismuth (Bi)	2021/12/07		100	%	80 - 120
			Dissolved Boron (B)	2021/12/07		94	%	80 - 120
			Dissolved Cadmium (Cd)	2021/12/07		100	%	80 - 120
			Dissolved Calcium (Ca)	2021/12/07		101	%	80 - 120
			Dissolved Chromium (Cr)	2021/12/07		98	%	80 - 120
			Dissolved Cobalt (Co)	2021/12/07		98	%	80 - 120
			Dissolved Copper (Cu)	2021/12/07		100	%	80 - 120
			Dissolved Iron (Fe)	2021/12/07		101	%	80 - 120
			Dissolved Lead (Pb)	2021/12/07		99	%	80 - 120
			Dissolved Magnesium (Mg)	2021/12/07		105	%	80 - 120
			Dissolved Manganese (Mn)	2021/12/07		99	%	80 - 120
			Dissolved Molybdenum (Mo)	2021/12/07		101	%	80 - 120
			Dissolved Nickel (Ni)	2021/12/07		99	%	80 - 120
			Dissolved Phosphorus (P)	2021/12/07		104	%	80 - 120
			Dissolved Potassium (K)	2021/12/07		98	%	80 - 120
			Dissolved Selenium (Se)	2021/12/07		96	%	80 - 120
			Dissolved Silver (Ag)	2021/12/07		96	%	80 - 120
			Dissolved Sodium (Na)	2021/12/07		100	%	80 - 120
			Dissolved Strontium (Sr)	2021/12/07		99	%	80 - 120
			Dissolved Thallium (Tl)	2021/12/07		100	%	80 - 120
			Dissolved Tin (Sn)	2021/12/07		99	%	80 - 120
			Dissolved Titanium (Ti)	2021/12/07		99	%	80 - 120
			Dissolved Uranium (U)	2021/12/07		105	%	80 - 120
			Dissolved Vanadium (V)	2021/12/07		102	%	80 - 120
			Dissolved Zinc (Zn)	2021/12/07		99	%	80 - 120
7772902	BAN	Method Blank	Dissolved Aluminum (Al)	2021/12/07	<5.0		ug/L	
			Dissolved Antimony (Sb)	2021/12/07	<1.0		ug/L	
			Dissolved Arsenic (As)	2021/12/07	<1.0		ug/L	
			Dissolved Barium (Ba)	2021/12/07	<1.0		ug/L	
			Dissolved Beryllium (Be)	2021/12/07	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2021/12/07	<2.0		ug/L	
			Dissolved Boron (B)	2021/12/07	<50		ug/L	
			Dissolved Cadmium (Cd)	2021/12/07	<0.010		ug/L	
			Dissolved Calcium (Ca)	2021/12/07	<100		ug/L	
			Dissolved Chromium (Cr)	2021/12/07	<1.0		ug/L	
			Dissolved Cobalt (Co)	2021/12/07	<0.40		ug/L	
			Dissolved Copper (Cu)	2021/12/07	<0.50		ug/L	
			Dissolved Iron (Fe)	2021/12/07	<50		ug/L	
			Dissolved Lead (Pb)	2021/12/07	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2021/12/07	<100		ug/L	
			Dissolved Manganese (Mn)	2021/12/07	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2021/12/07	<2.0		ug/L	
			Dissolved Nickel (Ni)	2021/12/07	<2.0		ug/L	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Phosphorus (P)	2021/12/07	<100		ug/L	
			Dissolved Potassium (K)	2021/12/07	<100		ug/L	
			Dissolved Selenium (Se)	2021/12/07	<0.50		ug/L	
			Dissolved Silver (Ag)	2021/12/07	<0.10		ug/L	
			Dissolved Sodium (Na)	2021/12/07	<100		ug/L	
			Dissolved Strontium (Sr)	2021/12/07	<2.0		ug/L	
			Dissolved Thallium (Tl)	2021/12/07	<0.10		ug/L	
			Dissolved Tin (Sn)	2021/12/07	<2.0		ug/L	
			Dissolved Titanium (Ti)	2021/12/07	<2.0		ug/L	
			Dissolved Uranium (U)	2021/12/07	<0.10		ug/L	
			Dissolved Vanadium (V)	2021/12/07	<2.0		ug/L	
			Dissolved Zinc (Zn)	2021/12/07	<5.0		ug/L	
7772902	BAN	RPD	Dissolved Aluminum (Al)	2021/12/07	8.8		%	20
			Dissolved Antimony (Sb)	2021/12/07	NC		%	20
			Dissolved Arsenic (As)	2021/12/07	4.8		%	20
			Dissolved Barium (Ba)	2021/12/07	0.42		%	20
			Dissolved Beryllium (Be)	2021/12/07	NC		%	20
			Dissolved Bismuth (Bi)	2021/12/07	NC		%	20
			Dissolved Boron (B)	2021/12/07	3.5		%	20
			Dissolved Cadmium (Cd)	2021/12/07	1.2		%	20
			Dissolved Calcium (Ca)	2021/12/07	0.92		%	20
			Dissolved Chromium (Cr)	2021/12/07	NC		%	20
			Dissolved Cobalt (Co)	2021/12/07	1.5		%	20
			Dissolved Copper (Cu)	2021/12/07	0.18		%	20
			Dissolved Iron (Fe)	2021/12/07	NC		%	20
			Dissolved Lead (Pb)	2021/12/07	NC		%	20
			Dissolved Magnesium (Mg)	2021/12/07	0.012		%	20
			Dissolved Manganese (Mn)	2021/12/07	0.86		%	20
			Dissolved Molybdenum (Mo)	2021/12/07	6.5		%	20
			Dissolved Nickel (Ni)	2021/12/07	2.3		%	20
			Dissolved Phosphorus (P)	2021/12/07	NC		%	20
			Dissolved Potassium (K)	2021/12/07	0.95		%	20
			Dissolved Selenium (Se)	2021/12/07	0.21		%	20
			Dissolved Silver (Ag)	2021/12/07	NC		%	20
			Dissolved Sodium (Na)	2021/12/07	0.44		%	20
			Dissolved Strontium (Sr)	2021/12/07	1.8		%	20
			Dissolved Thallium (Tl)	2021/12/07	NC		%	20
			Dissolved Tin (Sn)	2021/12/07	NC		%	20
			Dissolved Titanium (Ti)	2021/12/07	NC		%	20
			Dissolved Uranium (U)	2021/12/07	NC		%	20
			Dissolved Vanadium (V)	2021/12/07	0.29		%	20
			Dissolved Zinc (Zn)	2021/12/07	10		%	20
7781855	BAN	Matrix Spike [RMG046-02]	Dissolved Aluminum (Al)	2022/01/14		97	%	80 - 120
			Dissolved Antimony (Sb)	2022/01/14		100	%	80 - 120
			Dissolved Arsenic (As)	2022/01/14		97	%	80 - 120
			Dissolved Barium (Ba)	2022/01/14		97	%	80 - 120
			Dissolved Beryllium (Be)	2022/01/14		97	%	80 - 120
			Dissolved Bismuth (Bi)	2022/01/14		94	%	80 - 120
			Dissolved Boron (B)	2022/01/14		95	%	80 - 120
			Dissolved Cadmium (Cd)	2022/01/14		99	%	80 - 120
			Dissolved Calcium (Ca)	2022/01/14		NC	%	80 - 120
			Dissolved Chromium (Cr)	2022/01/14		97	%	80 - 120
			Dissolved Cobalt (Co)	2022/01/14		96	%	80 - 120

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Copper (Cu)	2022/01/14		98	%	80 - 120
			Dissolved Iron (Fe)	2022/01/14		98	%	80 - 120
			Dissolved Lead (Pb)	2022/01/14		97	%	80 - 120
			Dissolved Magnesium (Mg)	2022/01/14		NC	%	80 - 120
			Dissolved Manganese (Mn)	2022/01/14		NC	%	80 - 120
			Dissolved Molybdenum (Mo)	2022/01/14		101	%	80 - 120
			Dissolved Nickel (Ni)	2022/01/14		97	%	80 - 120
			Dissolved Phosphorus (P)	2022/01/14		103	%	80 - 120
			Dissolved Potassium (K)	2022/01/14		NC	%	80 - 120
			Dissolved Selenium (Se)	2022/01/14		101	%	80 - 120
			Dissolved Silver (Ag)	2022/01/14		94	%	80 - 120
			Dissolved Sodium (Na)	2022/01/14		NC	%	80 - 120
			Dissolved Strontium (Sr)	2022/01/14		NC	%	80 - 120
			Dissolved Thallium (Tl)	2022/01/14		97	%	80 - 120
			Dissolved Tin (Sn)	2022/01/14		101	%	80 - 120
			Dissolved Titanium (Ti)	2022/01/14		101	%	80 - 120
			Dissolved Uranium (U)	2022/01/14		102	%	80 - 120
			Dissolved Vanadium (V)	2022/01/14		101	%	80 - 120
			Dissolved Zinc (Zn)	2022/01/14		96	%	80 - 120
7781855	BAN	Spiked Blank	Dissolved Aluminum (Al)	2022/01/14		101	%	80 - 120
			Dissolved Antimony (Sb)	2022/01/14		98	%	80 - 120
			Dissolved Arsenic (As)	2022/01/14		96	%	80 - 120
			Dissolved Barium (Ba)	2022/01/14		98	%	80 - 120
			Dissolved Beryllium (Be)	2022/01/14		95	%	80 - 120
			Dissolved Bismuth (Bi)	2022/01/14		98	%	80 - 120
			Dissolved Boron (B)	2022/01/14		95	%	80 - 120
			Dissolved Cadmium (Cd)	2022/01/14		99	%	80 - 120
			Dissolved Calcium (Ca)	2022/01/14		99	%	80 - 120
			Dissolved Chromium (Cr)	2022/01/14		98	%	80 - 120
			Dissolved Cobalt (Co)	2022/01/14		97	%	80 - 120
			Dissolved Copper (Cu)	2022/01/14		100	%	80 - 120
			Dissolved Iron (Fe)	2022/01/14		100	%	80 - 120
			Dissolved Lead (Pb)	2022/01/14		99	%	80 - 120
			Dissolved Magnesium (Mg)	2022/01/14		103	%	80 - 120
			Dissolved Manganese (Mn)	2022/01/14		100	%	80 - 120
			Dissolved Molybdenum (Mo)	2022/01/14		99	%	80 - 120
			Dissolved Nickel (Ni)	2022/01/14		100	%	80 - 120
			Dissolved Phosphorus (P)	2022/01/14		105	%	80 - 120
			Dissolved Potassium (K)	2022/01/14		97	%	80 - 120
			Dissolved Selenium (Se)	2022/01/14		100	%	80 - 120
			Dissolved Silver (Ag)	2022/01/14		99	%	80 - 120
			Dissolved Sodium (Na)	2022/01/14		99	%	80 - 120
			Dissolved Strontium (Sr)	2022/01/14		97	%	80 - 120
			Dissolved Thallium (Tl)	2022/01/14		99	%	80 - 120
			Dissolved Tin (Sn)	2022/01/14		99	%	80 - 120
			Dissolved Titanium (Ti)	2022/01/14		101	%	80 - 120
			Dissolved Uranium (U)	2022/01/14		103	%	80 - 120
			Dissolved Vanadium (V)	2022/01/14		100	%	80 - 120
			Dissolved Zinc (Zn)	2022/01/14		100	%	80 - 120
7781855	BAN	Method Blank	Dissolved Aluminum (Al)	2022/01/14	<5.0		ug/L	
			Dissolved Antimony (Sb)	2022/01/14	<1.0		ug/L	
			Dissolved Arsenic (As)	2022/01/14	<1.0		ug/L	
			Dissolved Barium (Ba)	2022/01/14	<1.0		ug/L	
			Dissolved Beryllium (Be)	2022/01/14	<0.10		ug/L	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Bismuth (Bi)	2022/01/14	<2.0		ug/L	
			Dissolved Boron (B)	2022/01/14	<50		ug/L	
			Dissolved Cadmium (Cd)	2022/01/14	<0.010		ug/L	
			Dissolved Calcium (Ca)	2022/01/14	<100		ug/L	
			Dissolved Chromium (Cr)	2022/01/14	<1.0		ug/L	
			Dissolved Cobalt (Co)	2022/01/14	<0.40		ug/L	
			Dissolved Copper (Cu)	2022/01/14	<0.50		ug/L	
			Dissolved Iron (Fe)	2022/01/14	<50		ug/L	
			Dissolved Lead (Pb)	2022/01/14	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2022/01/14	<100		ug/L	
			Dissolved Manganese (Mn)	2022/01/14	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2022/01/14	<2.0		ug/L	
			Dissolved Nickel (Ni)	2022/01/14	<2.0		ug/L	
			Dissolved Phosphorus (P)	2022/01/14	<100		ug/L	
			Dissolved Potassium (K)	2022/01/14	<100		ug/L	
			Dissolved Selenium (Se)	2022/01/14	<0.50		ug/L	
			Dissolved Silver (Ag)	2022/01/14	<0.10		ug/L	
			Dissolved Sodium (Na)	2022/01/14	<100		ug/L	
			Dissolved Strontium (Sr)	2022/01/14	<2.0		ug/L	
			Dissolved Thallium (Tl)	2022/01/14	<0.10		ug/L	
			Dissolved Tin (Sn)	2022/01/14	<2.0		ug/L	
			Dissolved Titanium (Ti)	2022/01/14	<2.0		ug/L	
			Dissolved Uranium (U)	2022/01/14	<0.10		ug/L	
			Dissolved Vanadium (V)	2022/01/14	<2.0		ug/L	
			Dissolved Zinc (Zn)	2022/01/14	<5.0		ug/L	
7781855	BAN	RPD [RMG046-02]	Dissolved Aluminum (Al)	2022/01/14	NC		%	20
			Dissolved Antimony (Sb)	2022/01/14	NC		%	20
			Dissolved Arsenic (As)	2022/01/14	5.9		%	20
			Dissolved Barium (Ba)	2022/01/14	0.0086		%	20
			Dissolved Beryllium (Be)	2022/01/14	NC		%	20
			Dissolved Bismuth (Bi)	2022/01/14	NC		%	20
			Dissolved Boron (B)	2022/01/14	NC		%	20
			Dissolved Calcium (Ca)	2022/01/14	0.020		%	20
			Dissolved Chromium (Cr)	2022/01/14	NC		%	20
			Dissolved Cobalt (Co)	2022/01/14	NC		%	20
			Dissolved Copper (Cu)	2022/01/14	NC		%	20
			Dissolved Iron (Fe)	2022/01/14	1.4		%	20
			Dissolved Lead (Pb)	2022/01/14	NC		%	20
			Dissolved Magnesium (Mg)	2022/01/14	0.77		%	20
			Dissolved Manganese (Mn)	2022/01/14	1.1		%	20
			Dissolved Molybdenum (Mo)	2022/01/14	0.048		%	20
			Dissolved Nickel (Ni)	2022/01/14	NC		%	20
			Dissolved Phosphorus (P)	2022/01/14	NC		%	20
			Dissolved Potassium (K)	2022/01/14	0.018		%	20
			Dissolved Selenium (Se)	2022/01/14	NC		%	20
			Dissolved Silver (Ag)	2022/01/14	NC		%	20
			Dissolved Sodium (Na)	2022/01/14	0.26		%	20
			Dissolved Strontium (Sr)	2022/01/14	0.34		%	20
			Dissolved Thallium (Tl)	2022/01/14	NC		%	20
			Dissolved Tin (Sn)	2022/01/14	NC		%	20
			Dissolved Titanium (Ti)	2022/01/14	NC		%	20
			Dissolved Uranium (U)	2022/01/14	NC		%	20
			Dissolved Vanadium (V)	2022/01/14	NC		%	20
			Dissolved Zinc (Zn)	2022/01/14	NC		%	20

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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7796057	MCN	Matrix Spike	Dissolved Sulphate (SO4)	2022/01/24		93	%	80 - 120
7796057	MCN	Spiked Blank	Dissolved Sulphate (SO4)	2022/01/24		94	%	80 - 120
7796057	MCN	Method Blank	Dissolved Sulphate (SO4)	2022/01/24	<2.0		mg/L	
7796057	MCN	RPD	Dissolved Sulphate (SO4)	2022/01/24	0.96		%	20
7796229	BAN	Matrix Spike	Dissolved Cadmium (Cd)	2022/01/24		95	%	80 - 120
7796229	BAN	Spiked Blank	Dissolved Cadmium (Cd)	2022/01/24		95	%	80 - 120
7796229	BAN	Method Blank	Dissolved Cadmium (Cd)	2022/01/24	<0.010		ug/L	
7796229	BAN	RPD	Dissolved Cadmium (Cd)	2022/01/24	NC		%	20
7808539	BAN	Matrix Spike	Dissolved Aluminum (Al)	2022/02/01		100	%	80 - 120
			Dissolved Antimony (Sb)	2022/02/01		97	%	80 - 120
			Dissolved Arsenic (As)	2022/02/01		93	%	80 - 120
			Dissolved Barium (Ba)	2022/02/01		92	%	80 - 120
			Dissolved Beryllium (Be)	2022/02/01		98	%	80 - 120
			Dissolved Bismuth (Bi)	2022/02/01		90	%	80 - 120
			Dissolved Boron (B)	2022/02/01		101	%	80 - 120
			Dissolved Cadmium (Cd)	2022/02/01		89	%	80 - 120
			Dissolved Calcium (Ca)	2022/02/01		NC	%	80 - 120
			Dissolved Chromium (Cr)	2022/02/01		94	%	80 - 120
			Dissolved Cobalt (Co)	2022/02/01		95	%	80 - 120
			Dissolved Copper (Cu)	2022/02/01		93	%	80 - 120
			Dissolved Iron (Fe)	2022/02/01		98	%	80 - 120
			Dissolved Lead (Pb)	2022/02/01		92	%	80 - 120
			Dissolved Magnesium (Mg)	2022/02/01		97	%	80 - 120
			Dissolved Manganese (Mn)	2022/02/01		95	%	80 - 120
			Dissolved Molybdenum (Mo)	2022/02/01		NC	%	80 - 120
			Dissolved Nickel (Ni)	2022/02/01		95	%	80 - 120
			Dissolved Phosphorus (P)	2022/02/01		100	%	80 - 120
			Dissolved Potassium (K)	2022/02/01		NC	%	80 - 120
			Dissolved Selenium (Se)	2022/02/01		96	%	80 - 120
			Dissolved Silver (Ag)	2022/02/01		90	%	80 - 120
			Dissolved Sodium (Na)	2022/02/01		NC	%	80 - 120
			Dissolved Strontium (Sr)	2022/02/01		NC	%	80 - 120
			Dissolved Thallium (Tl)	2022/02/01		93	%	80 - 120
			Dissolved Tin (Sn)	2022/02/01		101	%	80 - 120
			Dissolved Titanium (Ti)	2022/02/01		98	%	80 - 120
			Dissolved Uranium (U)	2022/02/01		100	%	80 - 120
			Dissolved Vanadium (V)	2022/02/01		NC	%	80 - 120
			Dissolved Zinc (Zn)	2022/02/01		95	%	80 - 120
7808539	BAN	Spiked Blank	Dissolved Aluminum (Al)	2022/01/31		99	%	80 - 120
			Dissolved Antimony (Sb)	2022/01/31		94	%	80 - 120
			Dissolved Arsenic (As)	2022/01/31		93	%	80 - 120
			Dissolved Barium (Ba)	2022/01/31		94	%	80 - 120
			Dissolved Beryllium (Be)	2022/01/31		94	%	80 - 120
			Dissolved Bismuth (Bi)	2022/01/31		94	%	80 - 120
			Dissolved Boron (B)	2022/01/31		96	%	80 - 120
			Dissolved Cadmium (Cd)	2022/01/31		96	%	80 - 120
			Dissolved Calcium (Ca)	2022/01/31		92	%	80 - 120
			Dissolved Chromium (Cr)	2022/01/31		95	%	80 - 120
			Dissolved Cobalt (Co)	2022/01/31		97	%	80 - 120
			Dissolved Copper (Cu)	2022/01/31		97	%	80 - 120
			Dissolved Iron (Fe)	2022/01/31		97	%	80 - 120
			Dissolved Lead (Pb)	2022/01/31		94	%	80 - 120
			Dissolved Magnesium (Mg)	2022/01/31		98	%	80 - 120
			Dissolved Manganese (Mn)	2022/01/31		97	%	80 - 120

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Molybdenum (Mo)	2022/01/31		96	%	80 - 120
			Dissolved Nickel (Ni)	2022/01/31		98	%	80 - 120
			Dissolved Phosphorus (P)	2022/01/31		100	%	80 - 120
			Dissolved Potassium (K)	2022/01/31		98	%	80 - 120
			Dissolved Selenium (Se)	2022/01/31		97	%	80 - 120
			Dissolved Silver (Ag)	2022/01/31		96	%	80 - 120
			Dissolved Sodium (Na)	2022/01/31		97	%	80 - 120
			Dissolved Strontium (Sr)	2022/01/31		96	%	80 - 120
			Dissolved Thallium (Tl)	2022/01/31		95	%	80 - 120
			Dissolved Tin (Sn)	2022/01/31		96	%	80 - 120
			Dissolved Titanium (Ti)	2022/01/31		97	%	80 - 120
			Dissolved Uranium (U)	2022/01/31		99	%	80 - 120
			Dissolved Vanadium (V)	2022/01/31		97	%	80 - 120
			Dissolved Zinc (Zn)	2022/01/31		98	%	80 - 120
7808539	BAN	Method Blank	Dissolved Aluminum (Al)	2022/01/31	<5.0		ug/L	
			Dissolved Antimony (Sb)	2022/01/31	<1.0		ug/L	
			Dissolved Arsenic (As)	2022/01/31	<1.0		ug/L	
			Dissolved Barium (Ba)	2022/01/31	<1.0		ug/L	
			Dissolved Beryllium (Be)	2022/01/31	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2022/01/31	<2.0		ug/L	
			Dissolved Boron (B)	2022/01/31	<50		ug/L	
			Dissolved Cadmium (Cd)	2022/01/31	<0.010		ug/L	
			Dissolved Calcium (Ca)	2022/01/31	<100		ug/L	
			Dissolved Chromium (Cr)	2022/01/31	<1.0		ug/L	
			Dissolved Cobalt (Co)	2022/01/31	<0.40		ug/L	
			Dissolved Copper (Cu)	2022/01/31	<0.50		ug/L	
			Dissolved Iron (Fe)	2022/01/31	<50		ug/L	
			Dissolved Lead (Pb)	2022/01/31	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2022/01/31	<100		ug/L	
			Dissolved Manganese (Mn)	2022/01/31	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2022/01/31	<2.0		ug/L	
			Dissolved Nickel (Ni)	2022/01/31	<2.0		ug/L	
			Dissolved Phosphorus (P)	2022/01/31	<100		ug/L	
			Dissolved Potassium (K)	2022/01/31	<100		ug/L	
			Dissolved Selenium (Se)	2022/01/31	<0.50		ug/L	
			Dissolved Silver (Ag)	2022/01/31	<0.10		ug/L	
			Dissolved Sodium (Na)	2022/01/31	<100		ug/L	
			Dissolved Strontium (Sr)	2022/01/31	<2.0		ug/L	
			Dissolved Thallium (Tl)	2022/01/31	<0.10		ug/L	
			Dissolved Tin (Sn)	2022/01/31	<2.0		ug/L	
			Dissolved Titanium (Ti)	2022/01/31	<2.0		ug/L	
			Dissolved Uranium (U)	2022/01/31	<0.10		ug/L	
			Dissolved Vanadium (V)	2022/01/31	<2.0		ug/L	
			Dissolved Zinc (Zn)	2022/01/31	<5.0		ug/L	
7808539	BAN	RPD	Dissolved Aluminum (Al)	2022/02/01	NC		%	20
			Dissolved Antimony (Sb)	2022/02/01	NC		%	20
			Dissolved Arsenic (As)	2022/02/01	NC		%	20
			Dissolved Barium (Ba)	2022/02/01	1.4		%	20
			Dissolved Beryllium (Be)	2022/02/01	NC		%	20
			Dissolved Bismuth (Bi)	2022/02/01	NC		%	20
			Dissolved Boron (B)	2022/02/01	NC		%	20
			Dissolved Cadmium (Cd)	2022/02/01	NC (3)		%	20
			Dissolved Calcium (Ca)	2022/02/01	0.82		%	20
			Dissolved Chromium (Cr)	2022/02/01	3.2		%	20

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Cobalt (Co)	2022/02/01	NC		%	20
			Dissolved Copper (Cu)	2022/02/01	4.0		%	20
			Dissolved Iron (Fe)	2022/02/01	NC		%	20
			Dissolved Lead (Pb)	2022/02/01	NC		%	20
			Dissolved Magnesium (Mg)	2022/02/01	0.99		%	20
			Dissolved Manganese (Mn)	2022/02/01	NC		%	20
			Dissolved Molybdenum (Mo)	2022/02/01	1.4		%	20
			Dissolved Nickel (Ni)	2022/02/01	4.4		%	20
			Dissolved Phosphorus (P)	2022/02/01	NC		%	20
			Dissolved Potassium (K)	2022/02/01	0.47		%	20
			Dissolved Selenium (Se)	2022/02/01	2.4		%	20
			Dissolved Silver (Ag)	2022/02/01	NC		%	20
			Dissolved Sodium (Na)	2022/02/01	1.6		%	20
			Dissolved Strontium (Sr)	2022/02/01	1.9		%	20
			Dissolved Thallium (Tl)	2022/02/01	NC		%	20
			Dissolved Tin (Sn)	2022/02/01	NC		%	20
			Dissolved Titanium (Ti)	2022/02/01	NC		%	20
			Dissolved Uranium (U)	2022/02/01	NC		%	20
			Dissolved Vanadium (V)	2022/02/01	0.86		%	20
			Dissolved Zinc (Zn)	2022/02/01	NC		%	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Poor spike recovery due to probable matrix inteference.

(2) Poor spike recovery due to probable matrix interference.

(3) Elevated reporting limit due to sample matrix.

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Colleen Acker, B.Sc, Scientific Service Specialist

Rosemarie MacDonald, Scientific Specialist (Organics)

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Appendix D

QC Tables

TABLE D-1
2021 LTMM GROUNDWATER MONITORING EVENT OHP & HE
SUMMARY OF FIELD DUPLICATES AND TRIP BLANKS

Field Duplicate Sample - Laboratory Certificate Number	Date Sampled	Field Blank Sample - Laboratory Certificate Number	Date Sampled	Equipment Blank Sample - Laboratory Certificate Number	Date Sampled
FD-13 - C1AE795	2020-11-30	TB-01 - C1Z6147[1]	2020-12-13	EB-03 - C1AF093	2020-12-02
FD-14 - C1AE703	2020-12-01				
FD-15 - C1AF081	2020-12-03				
FD-16 - C1AF527	2020-12-07				

Notes:

1. Sample CODT-201-MWC is the only monitor well sampled for petroleum hydrocarbons as part of the OHP and HE LTMM program; this sample was stored and transported to the laboroatory with samples collected from HCP, and a trip blank assoicated with the HCP program.

2. FD - Field Duplicate

3. TB - Trip Blank

4. EB - Equipment Blank

TABLE D-2
2021 LTMM GROUNDWATER MONITORING EVENTOHP AND HE
RPD FOR FIELD DUPLICATES (GROUNDWATER) - PAHs

Sample Location	Sample	Type	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(j)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Perylene	Phenanthrene	Pyrene
				µg/L																			
COBT-003-MWB	FD-13	Field Duplicate	2020-11-30	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.05	<0.05	<0.20	<0.010	<0.010	<0.010
		Regular		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.013	<0.010	<0.010	<0.05	<0.05	<0.20	<0.010	<0.010	0.011
		RPD (%)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MSES-104-MWB	FD-14	Field Duplicate	2020-12-01	12	25.000	0.76	0.020	<0.010	<0.010	<0.010	<0.010	<0.010	0.014	<0.010	0.45	8.50	<0.010	33	<0.050	3.60	<0.010	6.5	0.25
		Regular		16	31	1.1	0.025	<0.010	<0.010	<0.010	<0.010	<0.010	0.017	<0.010	0.55	11	<0.010	39	0.055	4.5	<0.010	8.1	0.31
		RPD (%)		28.57%	21.43%	36.56%	NA	NA	NA	NA	NA	NA	N/A	NA	20.00%	25.64%	NA	16.67%	NA	22.22%	NA	21.92%	21.43%
CONCW-101-MWB	FD-15	Field Duplicate	2020-12-03	0.048	<0.020	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.016	0.019	<0.010	<0.050	<0.050	<0.20	<0.010	0.045	0.014
		Regular		0.048	<0.020	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.017	0.02	<0.010	<0.050	<0.050	<0.20	<0.010	0.044	0.015
		RPD (%)		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MCES-201-MWB	FD-16	Field Duplicate	2020-12-07	0.011	0.018	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.038	0.011	<0.010	<0.050	<0.050	<0.20	<0.010	0.016	0.077
		Regular		0.012	0.019	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.039	0.011	<0.010	<0.050	<0.050	<0.20	<0.010	0.017	0.078
		RPD (%)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.29%

Notes:

NA - Not applicable (Either 1) Parameter not analyzed or 2) One or both sample results exhibit concentrations less than 5 times the RDL)

Bold - Calculation is outside of the acceptable RPD range.

8 - Elevated PAH RDL(s) due to matrix / co-extractive interference.

TABLE D-3
2021 LTMM GROUNDWATER MONITORING EVENT OHP AND HE
RPD FOR FIELD DUPLICATES (GROUNDWATER) - INORGANIC CHEMISTRY

Sample Location	Sample	Type	Sample Date	Na	K	Ca	Mg	ALK	SO4	Cl	SiO2	OPO4	P	NO3	NO2	NO2-NO3	NH3	Colour	TOC	TURB	COND	pH	HARD	BICARB ALK	CARB ALK	TDS	Al	Sb
				µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	TCU	mg/L	NTU	µS/cm	pH	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L
COBT-003-MWB	FD-13	Field Duplicate	2020-11-30	94000	2600	110000	12000	220	73	170	14	<0.010	<100	<0.050	<0.010	<0.050	0.054	<5.0	0.77	0.55	1100	7.51	320	220	<1.0	610	6.9	<1.0
		Regular		96000	2600	110000	12000	220	75	170	14	<0.010	<100	<0.050	<0.010	<0.050	0.086	<5.0	0.73	0.66	1100	7.56	320	220	<1.0	610	<5.0	<1.0
		RPD (%)		2.11%	0.00%	0.00%	0.00%	0.00%	2.70%	0.00%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	18.18%	0.00%	0.66%	0.00%	0.00%	N/A	0.00%	N/A	N/A
MSES-104-MWB	FD-14	Field Duplicate	2020-12-01	140000	13000	400000	170000	360	1600	62	13	<0.010	<100	<0.050	<0.010	<0.050	0.53	35	3.7	59	3200	7.01	1700	360	<1.0	2700	280	<1.0
		Regular		140000	13000	400000	170000	360	1700	62	13	<0.010	<100	<0.050	<0.010	<0.050	0.54	24	3.7	58	3300	7.14	1700	360	<1.0	2800	280	<1.0
		RPD (%)		0.00%	0.00%	0.00%	0.00%	1.39%	6.06%	1.61%	3.85%	N/A	N/A	N/A	N/A	N/A	9.35%	N/A	13.51%	0.17%	0.03%	0.00%	0.00%	0.00%	N/A	3.64%	0.00%	N/A
CONCW-101-MWB	FD-15	Field Duplicate	2020-12-03	35000	4900	68000	6500	82	110	36	24	0.011	<100	0.69	0.089	0.78	0.27	7.5	3.1	14	510	8.62	200	79	3.1	330	79	<1.0
		Regular		35000	4900	68000	6500	89	100	37	24	0.016	<100	0.73	0.077	0.8	0.51	7.4	3.1	0.48	510	8.59	200	86	3.2	330	72	<1.0
		RPD (%)		0.00%	0.00%	0.00%	0.00%	5.85%	9.52%	2.74%	2.08%	N/A	N/A	5.63%	14.46%	2.53%	12.82%	N/A	16.13%	N/A	0.20%	11.62%	0.00%	8.48%	N/A	0.00%	9.27%	N/A
MCES-201-MWB	FD-16	Field Duplicate	2020-12-07	50000	14000	220000	<100	440	140	45	3.7	<0.010	<100	<0.050	0.24	0.16	1.1	<5.0	2.8	15	2300	12.1	540	<1.0	<1.0	730	45	<1.0
		Regular		48000	14000	220000	<100	400	130	55	3.4	<0.010	<100	<0.050	0.17	0.22	1.1	<5.0	2.6	17	2300	12.1	550	<1.0	<1.0	720	46	<1.0
		RPD (%)		4.08%	0.00%	0.00%	N/A	9.52%	7.41%	20.00%	8.45%	N/A	N/A	N/A	34.15%	N/A	0.00%	N/A	7.41%	12.50%	0.00%	0.00%	1.83%	N/A	N/A	1.38%	2.20%	N/A

Sample Location	Sample	Type	Sample Date	As	Ba	Be	Bi	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Hg	Mo	Ni	Se	Ag	Sr	Tl	Sn	Ti	U	V	Zn
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
COBT-003-MWB	FD-13	Field Duplicate	2020-11-30	2.3	41	<0.10	<2.0	61	0.015	<1.0	0.57	0.61	140	<0.50	2400	<0.013	<2.0	<2.0	<0.50	<0.10	1100	<0.10	<2.0	<2.0	0.35	<2.0	24
		Regular		2.3	42	<0.10	<2.0	61	0.057	<1.0	0.54	0.65	150	<0.50	2400	<0.013	<2.0	<2.0	<0.50	<0.10	1200	<0.10	<2.0	<2.0	0.37	<2.0	23
		RPD (%)		0.00%	2.41%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00%	N/A	N/A	N/A	N/A	N/A	8.70%	N/A	N/A	N/A	N/A	N/A	N/A
MSES-104-MWB	FD-14	Field Duplicate	2020-12-01	3.1	18	0.54	<2.0	180	0.077	<1.0	30	<0.50	5200	<0.50	72000	<0.013	<2.0	48	<0.50	<0.10	2000	<0.10	<2.0	<2.0	1.7	<2.0	12
		Regular		3	18	0.53	<2.0	190	0.081	<1.0	30	<0.50	5300	<0.50	72000	<0.013	<2.0	48	<0.50	<0.10	2000	<0.10	<2.0	<2.0	1.7	<2.0	12
		RPD (%)		N/A	0.00%	1.87%	N/A	N/A	5.06%	N/A	0.00%	N/A	1.90%	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	0.00%	N/A	N/A	N/A	0.00%	N/A	N/A
CONCW-101-MWB	FD-15	Field Duplicate	2020-12-03	11	31	<0.10	<2.0	63	<0.010	1.1	<0.40	1	<50	<0.50	12	<0.013	7.8	<2.0	2.5	<0.10	390	<0.10	<2.0	<2.0	1.8	7.3	<5.0
		Regular		10	31	<0.10	<2.0	62	<0.010	1.1	<0.40	0.98	<50	<0.50	12	<0.013	8.1	<2.0	2.6	<0.10	390	<0.10	<2.0	<2.0	1.7	7.3	<5.0
		RPD (%)		9.52%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00%	N/A	N/A	N/A	3.92%	N/A	0.00%	N/A	N/A	N/A	5.71%	N/A	N/A
MCES-201-MWB	FD-16	Field Duplicate	2020-12-07	<1.0	120	<0.10	<2.0	<50	<0.010	2.1	<0.40	3.5	<50	<0.50	<2.0	<0.013	9.1	<2.0	1.6	<0.10	1100	<0.10	<2.0	<2.0	<0.10	25	<5.0
		Regular		<1.0	120	<0.10	<2.0	<50	<0.010	2.3	<0.40	3.5	<50	<0.50	<2.0	<0.013	9.3	<2.0	1.6	<0.10	1100	<0.10	<2.0	<2.0	<0.10	25	<5.0
		RPD (%)		N/A	0.00%	N/A	N/A	N/A	N/A	9.09%	N/A	0.00%	N/A	N/A	N/A	N/A	2.17%	N/A	N/A	N/A	0.00%	N/A	N/A	N/A	N/A	0.00%	N/A

Notes:
NA - Not applicable (Either 1) Parameter not analyzed or 2) One or both sample results exhibit concentrations less than 5 times the RDL)
Bold - Calculation is outside of the acceptable RPD range.

References

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- Open Hearth Park and Harbourside East 2019 Long Term Maintenance and Monitoring Groundwater Event Final Report, Dillon Consulting Limited, March 2020.
- Open Hearth Park and Harbourside East 2020 Long Term Maintenance and Monitoring Groundwater Event Final Report, Dillon Consulting Limited, February 2021.
- Nova Scotia Environment Tier I Environmental Quality Standards for Groundwater (Coarse Grained Soil, Non-potable Groundwater Commercial/Industrial Site) 2013 (R. 2021).
- Ontario Ministry of Environment, Table 3 Full Depth Generic Site Condition Standards in a Non-potable Groundwater (Coarse Grained Soil) 2011.