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NOVA SCOTIA LANDS INC.

Long Term Maintenance and Monitoring 2015 Groundwater Monitoring Event Harbourside Commercial Park

Final Report

June 2016 – 14-1360

June 22, 2016

Nova Scotia Lands Inc.
45 Wabana Court
Harbourside Commercial Park
Sydney, Nova Scotia
B1P 6H2

ATTENTION: Mr. Frank Potter
Executive Director

Long Term Maintenance and Monitoring 2015 Groundwater Monitoring Event Harbourside Commercial Park (Final)

Dear Mr. Potter:

Dillon Consulting Limited is pleased to submit the above referenced report for your review. Should you have any questions or comments, please contact the undersigned at (902) 562-9880.

Yours sincerely,

DILLON CONSULTING LIMITED

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

NJW:kmf

Enclosure

Our file: 14-1360-2000

DILLON CONSULTING

275
Charlotte Street
Sydney
Nova Scotia
Canada
B1P 1C6
Telephone
902.562.9880
Fax
902.562.9890

Dillon Consulting
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Table of Contents

Figures

Tables

Appendices

References

Executive Summary

Nova Scotia Lands Inc. (NS Lands) is a Crown Corporation of the Province of Nova Scotia responsible for the Long Term Maintenance and Monitoring Program (LTMM) implemented at Harbourside Commercial Park (HCP). NS Lands retained Dillon Consulting Limited to conduct the LTMM program, which consists of an annual groundwater sampling program carried out in late fall to coincide with increased rainfall. The LTMM event was completed between November 25, 2015 and December 11, 2015 and, in accordance with the request for proposal (RFP) NSLAND57 Groundwater Monitoring Services, the groundwater monitoring event was scheduled to include 32 water level measurements, checking eight monitor/recovery wells for product, and the collection of 25 groundwater samples for select analysis (i.e., petroleum hydrocarbons (PHCs), polycyclic aromatic hydrocarbons (PAHs) and metals).

Analytical data were assessed in comparison to the July 2013 Nova Scotia Contaminated Sites Regulations (NS CSR) Tier I Environmental Quality Standards (EQS) for groundwater. Where Tier I EQS are not available (e.g., for most PAHs and for metals in groundwater at non-potable sites), the Ontario Ministry of the Environment (MOE) Groundwater Standards for use under Ontario's Environmental Protection Act were used.

Analytical results indicate one exceedance of the Tier I EQS for Modified TPH (i.e., SCU10-004-MW).

Five monitor wells contained PAH concentrations above the MOE standards (i.e., SCU10-004-MW, SCU20-013-MW, SCU20-014-MW, SCU20-016-MW and SCU20-017-MW). Groundwater quality trend analysis was performed for select monitor wells within the HCP area via Mann-Kendall analysis, which included select PAH indicator parameters (i.e., acenaphthylene and anthracene). Two monitor wells (i.e., SCU10-004-MW and SCU20-013-MW) contained concentration(s) of indicator parameters exhibiting an increasing or potentially increasing concentration trend during the 2015 monitoring event (i.e., acenaphthylene exhibited increasing concentration trends in both SCU10-004-MW and SCU20-013-MW; and anthracene exhibited a potentially increasing concentration trend in SCU20-013-MW).

Two monitor wells contained metals concentrations above MOE standards (i.e., SCU27-002-MW and SCU32-003-MW). Groundwater quality trend analysis was performed for select monitor wells via Mann-Kendall analysis, which included select inorganic parameters (i.e., sodium, barium and selenium). One monitor well (i.e., SCU27-002-MW) exhibited a potentially increasing trend during the 2015 event (i.e., barium).

The 2015 monitoring event identified the presence of DNAPL at three monitor well locations, including SCU10-002-MW, SCU10-004-MW and SCU32-001-MWA.

This report was prepared by Dillon Consulting Limited for the sole benefit of our client, Nova Scotia Lands Inc. 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.

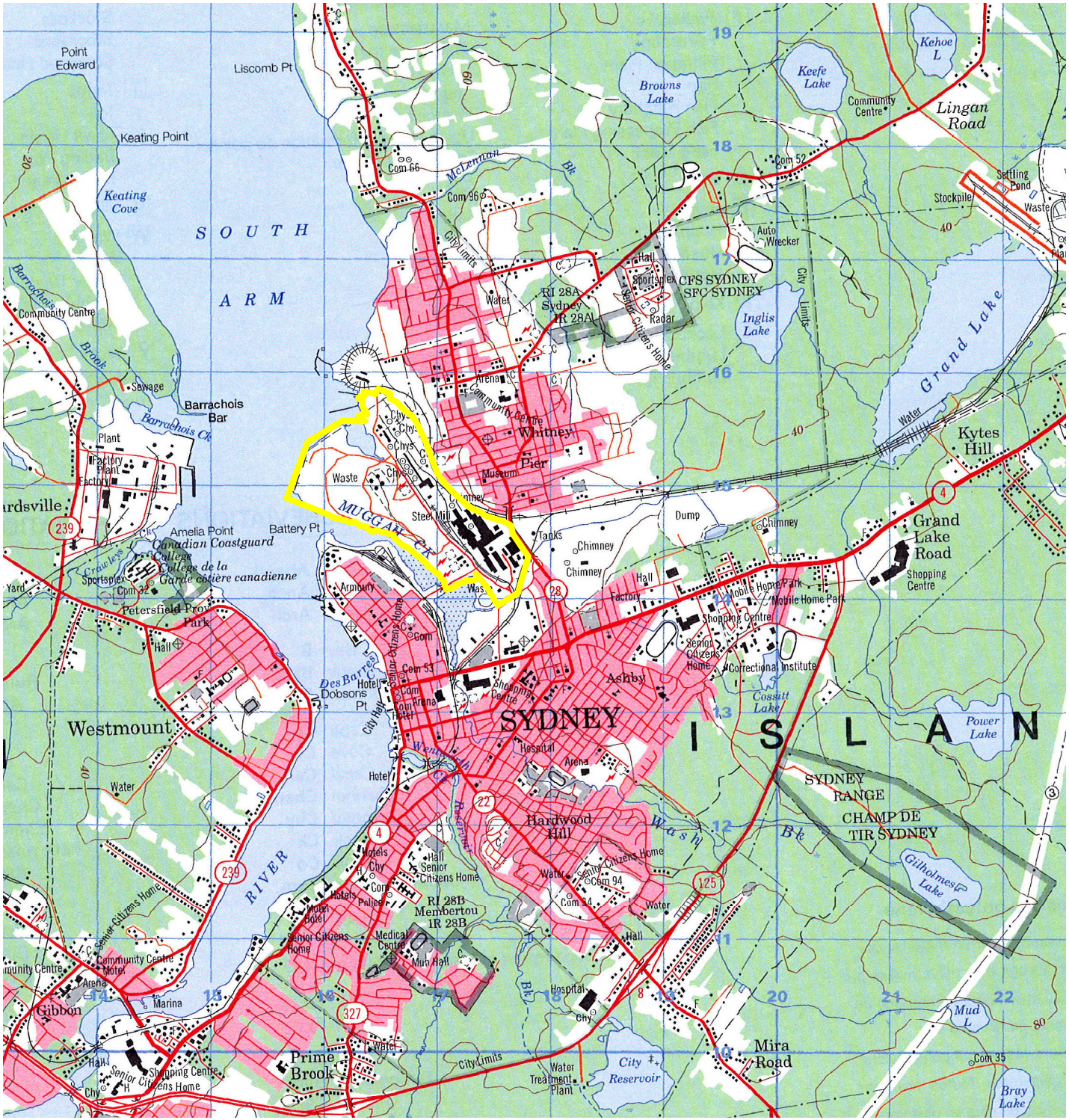
1.0 Introduction

Nova Scotia Lands Incorporated (NS Lands) is a Crown Corporation of the Province of Nova Scotia responsible for the Long Term Maintenance and Monitoring Program (LTMM) implemented at Harbourside Commercial Park (HCP) (Figure 1.0-1). NS Lands retained Dillon Consulting Limited to conduct the LTMM program, which consists of an annual groundwater sampling program carried out in late fall. The groundwater sampling program has been ongoing at HCP for several years. Environmental Site Assessments (ESAs) conducted to date throughout the HCP have identified several groundwater constituents of interest in excess of evaluation criteria (i.e., petroleum hydrocarbons (PHCs), polycyclic aromatic hydrocarbons (PAHs), mercury, various other metals and vinyl chloride).

Groundwater monitoring was completed between November 25, 2015 and December 11, 2015 and included measurement of hydraulic head levels and sample collection (i.e., for PHCs, PAHs and metals analysis) from select monitor wells at HCP. This document contains the details of the 2015 groundwater monitoring event. Section 1.0 outlines 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 provided in Section 5.0. Data tables and supporting information are found in Appendices referenced throughout the document.

1.1 Scope of Work

The LTMM program for the HCP consists of an annual groundwater sampling program conducted in late fall to coincide with increased rainfall. The 2015 program included measurement of hydraulic head levels and sample collection from specific monitor wells on the HCP site (Figure 1.1-1). In accordance with the request for proposal (RFP) NSLAND57 Groundwater Monitoring Services, the 2015 groundwater monitoring event was scheduled to include 32 water level measurements, checking eight monitor/recovery wells for product, and the collection of 25 groundwater samples for select analysis (i.e., PHCs, PAHs and metals).



NS Lands
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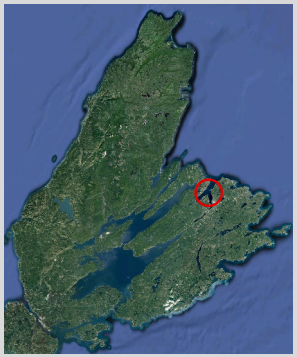
HARBOURSIDE COMMERCIAL PARK

2015 GROUNDWATER MONITORING EVENT

SITE LOCATION

Figure 1.0-1

Harbourside Commercial Park



0 250 500 1,000 1,500 m SCALE 1:68202

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

Province of Nova Scotia Mapping
MAP CREATED BY: MCL
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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HARBOURSIDE COMMERCIAL PARK

2015 GROUNDWATER MONITORING EVENT

STUDY AREA

FIGURE 1.1-1

0 50 100 200 300 m

MAP DRAWING INFORMATION:
Province of Nova Scotia Mapping
SLR Monitoring Recommendations drawing dated April 17, 2014

MAP CREATED BY: NJW
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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 (SSHSP) for groundwater monitoring. The SSHSP includes site specific information, such as, local emergency contact information and hospital routes, as well as, but not limited to the following:

- Identification of site activities and potential hazards;
- Description of safe work practices and procedures;
- Description of PPE;
- Identification of safety training and first aid requirements; and,
- Identification of emergency response procedures.

The project manager reviewed the SSHSP with field personnel prior to their mobilizing to the site. Field personnel were responsible for following the SSHSP, including conducting a job hazard analysis upon arrival to the site. Dillon team members also abided by the procedures governing access to the NS Lands sites and the Portside Aggregates site, which is part of the HCP groundwater monitoring area.

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

As summarized in Table B-1 (Appendix B), two field duplicates, three trip blanks, one equipment blank and one field blank were collected during the 2015 monitoring event. Relative percent differences were calculated between sample and associated field duplicate results.

Laboratory QC

Analytical services were contracted by NS Lands to Maxxam Analytics Inc. (Maxxam) in Sydney, Nova Scotia. Maxxam is accredited to ISO 17025 by the Standards Council of Canada. Laboratory SOPs are based on accepted (e.g., USEPA, EPS, Atlantic PIRI, MSAMS) standard referenced industry protocols and were validated by Maxxam prior to use. Maxxam 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 Groundwater Sampling

The HCP groundwater sampling program has been ongoing for several years with the sampling program being reduced over time. The HCP program currently consists of 25 monitor wells requiring sampling. The field component of the 2015 groundwater monitoring event involved the following activities:

- Measurement of Hydraulic Head Levels;
- Low Flow Purging;
- Low Flow Groundwater Sample Collection; and,
- Data Compilation/Assessment and Reporting.

2.3.1 Measurement of Hydraulic Head Levels

The number of monitor wells measured for water levels was 32 (i.e., 25 sampling and eight monitor/recovery wells that were checked for product). 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 during purging.

2.3.2 Sample Collection

Using a peristaltic pump, groundwater was removed from 18 of the 25 monitor wells scheduled for sampling in the HCP area until select field parameters stabilized, including water level. The rate of flow (0.1 to 0.4 L/minute) at each well was controlled by an in-line valve. A 12-volt stainless steel submersible pump (i.e., SS MONSOON) was used for the other 7 wells, which are installed at depths beyond the capacity of a peristaltic pump. The stainless steel pump was decontaminated prior to use in the first well and following sampling of each subsequent well. The water level was measured at 3-minute intervals with an effort made 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 of water was removed. In instances where stabilization of turbidity provided some challenges, additional parameters including dissolved oxygen (DO) and oxidation reduction potential (ORP) were referenced to confirm stabilized conditions.

2.3.3 Groundwater Analysis

Pursuant to RFP NSLAND57 Groundwater Monitoring Services, groundwater samples were analyzed for PHCs, PAHs and dissolved metals, as listed in Table 2.3.4-1. 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 Maxxam in Sydney, Nova Scotia for analysis.

Table 2.3.4- 1 Water Quality Analytical Suite of Parameters

PHC	PAHs	Metals (dissolved)	
Benzene	Acenaphthene	Aluminum	Strontium
Toluene	Acenaphthylene	Antimony	Thallium
Ethylbenzene	Anthracene	Arsenic	Tin
Total Xylenes	Benzo(a)anthracene	Barium	Titanium
C6-C10 (Less BTEX)	Benzo(a)pyrene	Beryllium	Uranium
>C10-C16 Hydrocarbons	Benzo(b)fluoranthene	Bismuth	Vanadium
>C16-C21 Hydrocarbons	Benzo(j)fluoranthene	Boron	Zinc
>C21-<C32 Hydrocarbons	Benzo(k)fluoranthene	Cadmium	

Table 2.3.4- 1 Water Quality Analytical Suite of Parameters

PHC	PAHs	Metals (dissolved)
Modified TPH (Tier I)	Benzo(g,h,i)perylene	Chromium
	Chrysene	Cobalt
	Dibenz(a,h)anthracene	Copper
	Fluoranthene	Iron
	Fluorene	Lead
	Indeno(1,2,3-cd)pyrene	Manganese
	Naphthalene	Mercury (Total)
	Perylene	Molybdenum
	Phenanthrene	Nickel
	Pyrene	Phosphorus
	1-Methylnaphthalene	Selenium
	2-Methylnaphthalene	Silver
		Strontium
		Thallium

Note:
During the 2015 LTMM program, groundwater samples were collected at four monitor wells (i.e., SCU10-001-MW, SCU10-002-MW, SCU10-003-MW and SCU10-004-MW) for volatile organic chemistry (VOC) analysis. This sampling, although conducted in conjunction with the LTMM program, was scheduled as part of a soil vapour assessment. The results of the groundwater VOC sampling at these four monitor well locations are presented separately in the "Soil Vapour Assessment in the Vicinity of Protocase Building No. 2 Harbourside Commercial Park, Sydney, Nova Scotia" report prepared by Dillon in February 2016.

2.4 Data Compilation/Assessment

Maxxam provided analytical results in a database compatible format, alleviating potential errors associated with manual entry. Data tables generated as part of the 2015 program also include historical groundwater monitoring data. The following parameters with concentrations above applicable standards were selected as indicator parameters for HCP site:

- PAHs (acenaphthylene and anthracene);
- Metals (i.e., sodium, barium and selenium); and,
- Presence/extent of LNAPL or DNAPL.

2.4.1 Regulatory Framework

The remedial criteria used for this assessment were the July 2013 Nova Scotia Contaminated Sites Regulations (NS CSR) Tier I Environmental Quality Standards (EQS) for groundwater. 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 PAHs and metals in

groundwater at non-potable sites), the Ontario Ministry of the Environment (MOE) Groundwater Standards for use under Ontario's Environmental Protection Act were used.

2.4.2 Groundwater Quality Trend Analysis – Mann Kendall

Mann-Kendall analysis as a non-parametric statistic test routinely used to assess the stability of solute plume (i.e., stable, decreasing, or increasing). 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.

Based on a review of the analytical results from the 2015 monitoring event and historical monitoring events, select parameters with concentrations above applicable guidelines were selected for Mann-Kendall analysis. These include PAH indicator parameters acenaphthylene and/or anthracene and inorganic chemistry indicator parameters sodium, barium and/or selenium.

Up to six rounds (if available) of groundwater analytical data collected during historical monitoring events to the 2015 monitoring event were applied for performing the trend analysis for the indicator parameters. In certain situations, Mann-Kendall analysis results may be biased due to elevated laboratory detection limits. Non-detected data on the Mann-Kendall analysis of indicator parameters was identified and confirmed the influence of non-detected data is minimal.

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 HCP Findings
- Section 3.4 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 historical recordings at the Sydney A station indicates that precipitation of 1488 millimeters (mm) was recorded for 2015, which is comparable to the normal value of yearly precipitation (i.e., as recorded between 1981 and 2010) of 1517 mm (http://climate.weather.gc.ca). The monthly precipitation recorded for November 2015 was 71.4 mm and for December 2015 was 144.0 mm, which is similar to the monthly normal of 167 mm at the Sydney station (i.e., as recorded between 1981-2010).

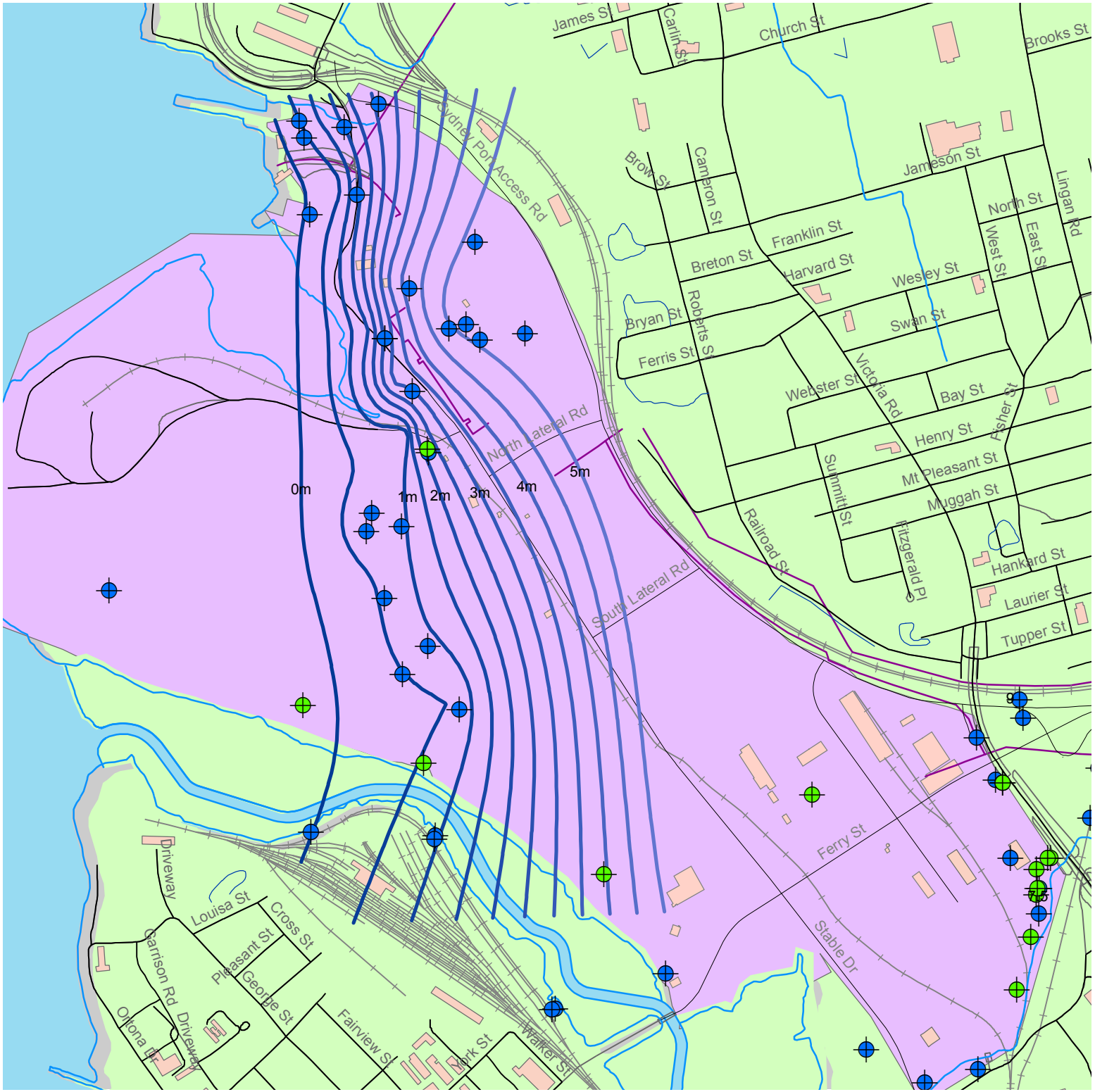
3.2 Groundwater Flow and Hydraulic Head Levels

NS Lands provided Dillon with elevation survey for 29 of 33 monitor wells included in the LTMM program at the HCP site. Accordingly, the hydraulic heads of 29 wells were calculated to plot the equipotential groundwater contours for the 2015 monitoring event. The groundwater contours were applied to evaluate the groundwater flow pattern and direction within the unconsolidated till and/or fill unit (Figure 3.2-1).

The available equipotential contour plot for the unconsolidated material (i.e., the fill/till) indicates that the groundwater flow direction is west toward Sydney Harbour.

3.3 HCP Findings

Historical environmental site assessments conducted to date throughout HCP (Figure 3.3-1) have identified elevated concentrations of organic and inorganic parameters in groundwater above the applicable guidelines (e.g., PHCs, PAHs, mercury, various other metals and vinyl chloride). Results of the 2015 monitoring program indicate an elevated (i.e., above applicable criteria) Modified TPH concentration at one location (i.e., SCU10-004-MW), elevated concentrations of PAHs at five locations (i.e., SCU10-004-MW, SCU20-013-MW, SCU20-014-MW, SCU20-016-MW and SCU20-017-MW), and elevated concentrations of metals (i.e. sodium, barium and/or selenium) at two locations (i.e., SCU27-002-MW and SCU32-003-MW) in groundwater.



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2015 GROUNDWATER MONITORING EVENT

Equipotential Groundwater Contours Fill TIII
FIGURE 3.2-1

LEGEND

Equipotential Groundwater Contours
6m Groundwater Elevations are measured in meters above sea level (mASL)

Harbourside Commercial Park

Active Water Level

Active Sample

0 50 100 200 300 m

N W E S

MAP DRAWING INFORMATION:
Province of Nova Scotia Mapping
SLR Monitoring Recommendations drawing dated April 17, 2014

MAP CREATED BY: MCL
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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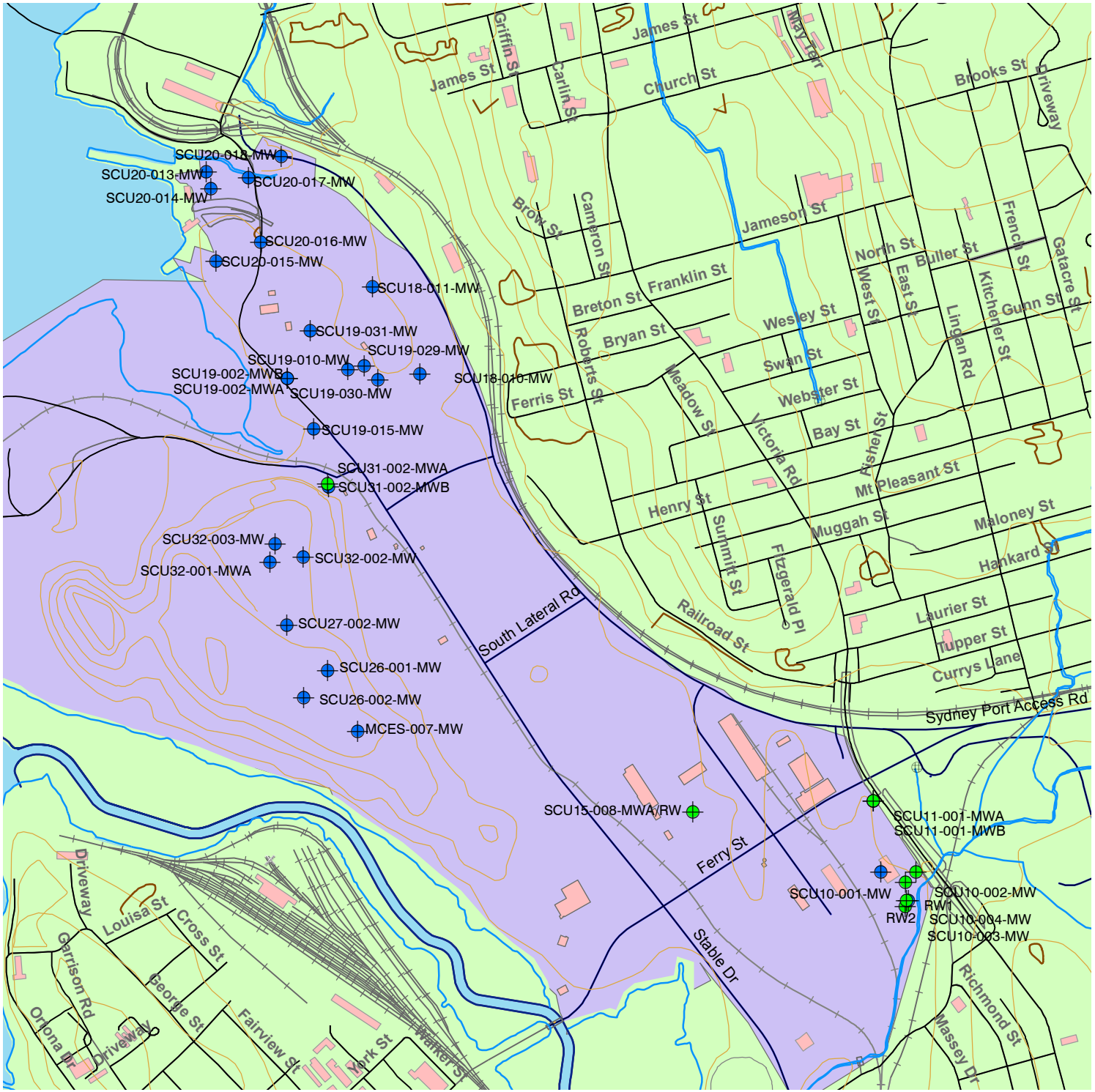

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HARBOURSIDE COMMERCIAL PARK

2015 GROUNDWATER MONITORING EVENT

AREA FEATURES

FIGURE 3.3-1

LEGEND

Harbourside Commercial Park

Monitoring Wells

Sample

Water Level

0 50 100 200 300 m

MAP DRAWING INFORMATION:
Province of Nova Scotia Mapping
SLR Monitoring Recommendations drawing dated April 17, 2014

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

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PROJECT: 14-1360
STATUS: FINAL
DATE:12/21/15

3.3.1 HCP Groundwater Quality

Analytical data, including available historical data for reference, are presented in Appendix A (Tables A-1 (TPH/BTEX), A-2 (PAHs) and A-3 (metals)). As stated previously, the LTMM 2015 Groundwater Monitoring Program included the collection of 25 samples for analysis from monitor wells located on the HCP site. Table 3.3.1-1 summarizes the select indicator parameter concentrations for select monitor wells exhibiting concentrations above applicable guideline criteria.

Table 3.3.1- 1 HCP – Summary of Indicator Parameter Concentrations

Well ID		Organic Parameter	
	Date	Acenaphthylene (ug/L)	Anthracene (ug/L)
NSE Tier I EQS1		750	-
MOE Table 32		1.8	2.4
SCU10-004-MW	Nov 2010	7.5	2.4
	Oct 2011	10	13
	Nov 2012	34	38
	Dec 2013	20	4.0
	Dec 2015	410	1100
SCU20-013-MW	Nov 2010	26	2.7
	Oct 2011	18	3.1
	Nov 2012	29	2.0
	Dec 2013	34	4.0
	Dec 2014	29	2.2
	Nov 2015	32	3.7
SCU20-014-MW	Nov 2010	3.4	-
	Oct 2011	7.2	-
	Nov 2012	4.6	-
	Dec 2013	5.7	-
	Dec 2014	9.3	-
	Nov 2015	6.2	-
SCU20-016-MW	Nov 2010	1.2	-
	Oct 2011	3.7	-
	Nov 2012	2.2	-
	Dec 2013	3.1	-
	Dec 2014	2.4	-
	Nov 2015	2.8	-
SCU20-017-MW	Nov 2010	6.4	-
	Oct 2011	4.4	-
	Nov 2012	0.98	-
	Dec 2013	3.7	-
	Nov 2015	3.6	-

Table 3.3.1- 1 HCP – Summary of Indicator Parameter Concentrations

Well ID	Organic Parameter		
	Date	Acenaphthylene (ug/L)	Anthracene (ug/L)
NSE Tier I EQS1		750	-
MOE Table 32		1.8	2.4
SCU20-017-MW	Nov 2010	6.4	-
	Oct 2011	4.4	-
	Nov 2012	0.98	-
	Dec 2013	3.7	-
	Dec 2014	2.9	-
	Nov 2015	3.6	-
SCU32-001-MWA	Nov 2011	-	0.84
	Dec 2013	-	7.4
	Dec 2014	-	1.4
	Nov 2015	-	1.8
SCU32-003-MW	Nov 2011	0.56	0.76
	Dec 2013	1.3	8.7
	Dec 2014	1.9	0.89

Well ID	Inorganic Parameter			
	Date	Sodium (ug/L)	Barium (ug/L)	Selenium
NSE Tier I EQS1		-	-	-
MOE Table 32		2,300,000	29,000	63
SCU27-002-MW	July 2012	5,700,000	8700	-
	Nov 2012	4,900,000	7300	-
	Dec 2013	5,200,000	23,000	-
	Dec 2014	4,900,000	30,000	-
	Nov 2015	4,900,000	30,000	-
SCU32-003-MW	Nov 2011	-	-	28
	Dec 2013	-	-	7.1
	Dec 2014	-	-	68

Notes:
- Not assessed as parameter is below applicable guidelines.
1 - Nova Scotia Tier I Environment Environmental Quality Standards for Groundwater (Coarse Grained Soil, Non-potable Groundwater Commercial/Industrial Site) 2013
2 - Ontario Ministry of Environment, Table 3 Full Depth Generic Site Condition Standards, Non-potable Groundwater (Coarse Grained Soil) 2011
Underline Exceeds NSE EQS
Bold exceeds MOE Table 3 Standards

During the 2015 monitoring event, the following sampling well exhibited concentrations above the Tier I EQS standards:

- SCU10-004-MW: The Modified TPH concentrations of 62 mg/L exceeded the Tier I EQS of 20 mg/L. The naphthalene concentration of 11,000 ug/L exceeded the Tier I EQS of 7000 ug/L.

Five of the twenty-five monitor wells sampled on the HCP site had organic parameter concentrations above the MOE standards, as follows:

- SCU10-004-MW: Eighteen of the twenty PAH parameters analyzed exceeded the corresponding MOE standards;
- SCU20-013-MW: The acenaphthylene concentration of 32 ug/L exceeded the MOE standard of 1.8 ug/L and the anthracene concentration of 2.4 ug/L exceeded the MOE standard of 2.4 ug/L;
- SCU20-014-MW: The acenaphthylene concentration of 6.2 ug/L exceeded the MOE standard of 1.8 ug/L;
- SCU20-016-MW: The acenaphthylene concentration of 2.8 ug/L exceeded the MOE standard of 1.8 ug/L; and,
- SCU20-017-MW: The acenaphthylene concentration of 3.6, the benzo(g.h.i)perylene concentration of 0.27, and the indeno(1,2,3-cd)pyrene concentration of 0.25 ug/L exceeded the MOE standards of 1.8 ug/L, 0.2 ug/L and 0.2 ug/L, respectively.

No Tier I EQS standards are available for inorganic parameters (i.e., on a non-potable site). Two of the twenty-five monitor wells sampled on the HCP site had inorganic parameter concentrations above the MOE standards, as follows:

- SCU27-002-MW: The sodium and barium concentrations of 4,900,000 ug/L and 30,000 ug/L exceeded the MOE standards of 2,300,000 ug/L and 29,000 ug/L, respectively; and,
- SCU32-003-MW: The selenium concentration of 77 ug/L exceeded the MOE standard of 63 ug/L.

Analytical results for two monitor wells (i.e., SCU20-013-MW and SCU20-014-MW) were also compared to the Tier II EQS Pathway Specific Standards (PSS) for groundwater with 10X Tier I EQS surface water values and >10 meters from a surface water body (i.e., Sydney Harbour). Monitor well SCU20-013-MW exhibited PAH concentrations above the 10X Tier I EQS for surface water, including naphthalene, 1-methylnaphthalene, 2-methylnaphthalene and pyrene. Monitor well SCU20-014-MW exhibited PAH concentrations above the 10X Tier I EQS for surface water including naphthalene and pyrene. The modified TPH concentration in both SCU20-013-MW and SCU20-014-MW are also above the 10X Tier I EQS for surface water. No other parameters (i.e. BTEX and metals) contained concentrations above the 10X Tier I EQS at these two monitor well locations.

The 2015 monitoring event identified the presence of DNAPL at three monitor well locations, including SCU10-002-MW, SCU10-004-MW and SCU32-001-MWA.

3.3.2 Product Check

Observations recorded in the field during DNAPL and LNAPL checks are presented in Table 3.3.2-1.

Table 3.3.2- 1 HCP Summary of Product Check

Well ID	Field Observations
SCU10-002-MW	Oil/water interface probe did not detect product. DNAPL observed on the interface probe. Strong hydrocarbon odour.
SCU10-003-MW	Oil/water interface probe did not detect product, no product observed, no hydrocarbon odour.
SCU10-004-MW*	Oil/water interface probe did not detect product. DNAPL observed on the interface probe. Strong hydrocarbon odour.
SCU11-001-MWA	Oil/water interface probe did not detect product, no product observed, no hydrocarbon odour.
SCU11-001-MWB	Oil/water interface probe did not detect product, no product observed, no hydrocarbon odour.
SCU15-008-MWA/RW	Oil/water interface probe did not detect product, slight hydrocarbon odour, sheen visually noted on groundwater within the well.
SCU31-002-MWA	Oil/water interface probe did not detect product, no product observed, no hydrocarbon odour.
SCU32-001-MWA*	Oil/water interface probe did not detect product. Product observed on monitor well PVC and sample tubing. Product measurement obtained via bailer cut indicated approximately 2 millimeter (mm) thickness. Hydrocarbon odour. DNAPL observed during groundwater sample collection. DNAPL sample collected and submitted for characterization. Results indicate fuel oil fraction.
RW1	Oil/water interface probe did not detect product, no product observed, no hydrocarbon odour.
RW2	Oil/water interface probe did not detect product, no product observed, no hydrocarbon odour.

Note:
* Denotes sampling well

3.3.3 Trend Analysis

The groundwater quality trend analysis for the 2015 monitoring event was based on the available analytical results (i.e., four rounds of sampling events are required) for select parameters with concentrations above the applicable guidelines at the above seven sampling locations. Three monitor wells (i.e., SCU10-004-MW, SCU20-013-MW and SCU27-002-MW) contained concentration(s) of indicator parameters exhibiting an increasing or potentially increasing concentration trend during the 2015 monitoring event (i.e., acenaphthylene exhibited increasing concentration trends in both SCU10-004-MW and SCU20-013-MW; anthracene exhibited a potentially increasing trend in SCU20-013-MW and barium exhibited a potentially increasing trend in SCU27-002-MW).

Results of Mann-Kendall analysis for HCP are presented in Table 3.3.2-2. The Mann-Kendall analysis was conducted based on the available analytical data, including the 2015 analytical results.

Table 3.3.2- 2 HCP – Trend Analysis Summary

Well ID	Parameters	Trend
SCU10-004-MW	Acenaphthylene	Increasing
	Anthracene	Increasing
SCU20-013-MW	Acenaphthylene	Potentially Increasing*
	Anthracene	Stable
SCU20-014-MW	Acenaphthylene	Stable
SCU20-016-MW	Acenaphthylene	Stable
SCU20-017-MW	Acenaphthylene	Stable
SCU27-002-MW	Barium	Potentially Increasing*
	Sodium	Stable
SCU32-001-MWA	Anthracene	Stable
SCU32-003-MW	Acenaphthylene	Stable
	Anthracene	Fluctuating
	Selenium	Stable
	Sodium	Stable

NOTE:

* Parameter is potentially increasing; however, likely fluctuating due to high concentrations above the linear calibration range for the laboratory instrument (i.e., where analytical precision is low and fluctuations are high). Further monitoring will be required to confirm.

3.4 QC Summary

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

- Section 3.4.1 Relative Percent Difference (RPD)
- Section 3.4.2 Laboratory Matrix Spikes, Spikes Blank and Method Blanks
- Section 3.4.3 Trip Blanks
- Section 3.4.4 Equipment Blanks
- Section 3.5.5 Holding Times

Two field duplicates, three trip blanks, one equipment blank and one field blank were collected during the 2015 monitoring event, as presented in Table B-1 (Appendix B).

3.4.1 Relative Percent Difference

Two 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), as presented in Tables B-1 to B-4 (Appendix B).

3.4.2 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:

- Groundwater duplicate results are outside the acceptable limit for analytes benzo(a)anthracene, benzo(b)fluoranthene, benzo(g.h.i)perylene, benzo(a)pyrene, chrysene and naphthalene and for monitor wells SCU19-002-MWB, SCU19-010-MW, SCU32-002-MW and SCU32-003-MW, as well as the Field Blank FB-001 and the Equipment Blank EB-002; and,
- Silver had recovery for the spiked blank within laboratory quality control acceptance limits, and less than 10% of compounds in multi-component analysis in violation for monitor wells SCU19-002-MWB, SCU19-010-MW, SCU20-017-MW, SCU31-002-MWB. SCU32-003-MW, as well as Field Duplicate FD-012, Field Blank FB-001 and Equipment Blank EB-002. The silver concentration in these monitor wells was below the RDL.

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

3.4.3 Trip Blanks

Volatile organic compounds were not detected in the three trip blanks.

3.4.4 Equipment and Field Blank

One equipment blank was collected during the 2015 groundwater monitoring program. Results are as follows:

- Concentrations of BTEX/TPH were below laboratory detection limits; and,
- Detectable concentrations of fluoranthene (0.21 ug/L), fluorine (0.013 ug/L), phenanthrene (0.029 ug/L), pyrene (0.018 ug/L), calcium (110 ug/L), copper (3.3 ug/L) and zinc (27 ug/L).

The detectable concentrations of metals in the equipment blank are considered low and not likely to affect the interpretation of groundwater sample results.

One field blank was collected during the 2015 groundwater monitoring program. The field blank was collected in conjunction with the equipment blank to determine if interference from the ambient atmospheric particles was present. Results are as follows:

- Concentrations of BTEX/TPH and PAHs were below laboratory detection limits; and,
- Detectable concentrations of aluminum (5.4 ug/L), calcium (110 ug/L) and strontium (4.5 ug/L).

3.4.5 Holding Times

There were no holding time exceedences.

4.0 Summary

The HCP 2015 monitoring event was conducted in accordance to RFP NSLAND57 Groundwater Monitoring Services. Findings were compared to July 2013 NS CSR Tier I EQS for groundwater. Where Tier I EQS were not available, applicable MOE standards were used.

During the 2015 monitoring event, the following sampling well exhibited petroleum hydrocarbon concentrations above the Tier I EQS standards:

- SCU10-004-MW: Modified TPH.

Where Tier I EQS are not available (e.g., for most PAHs and for metals in groundwater at non-potable sites), the MOE Groundwater Standards for use under Ontario's Environmental Protection Act were used. Analytical results indicate that five monitor wells contained PAH concentrations above the MOE standards as follows:

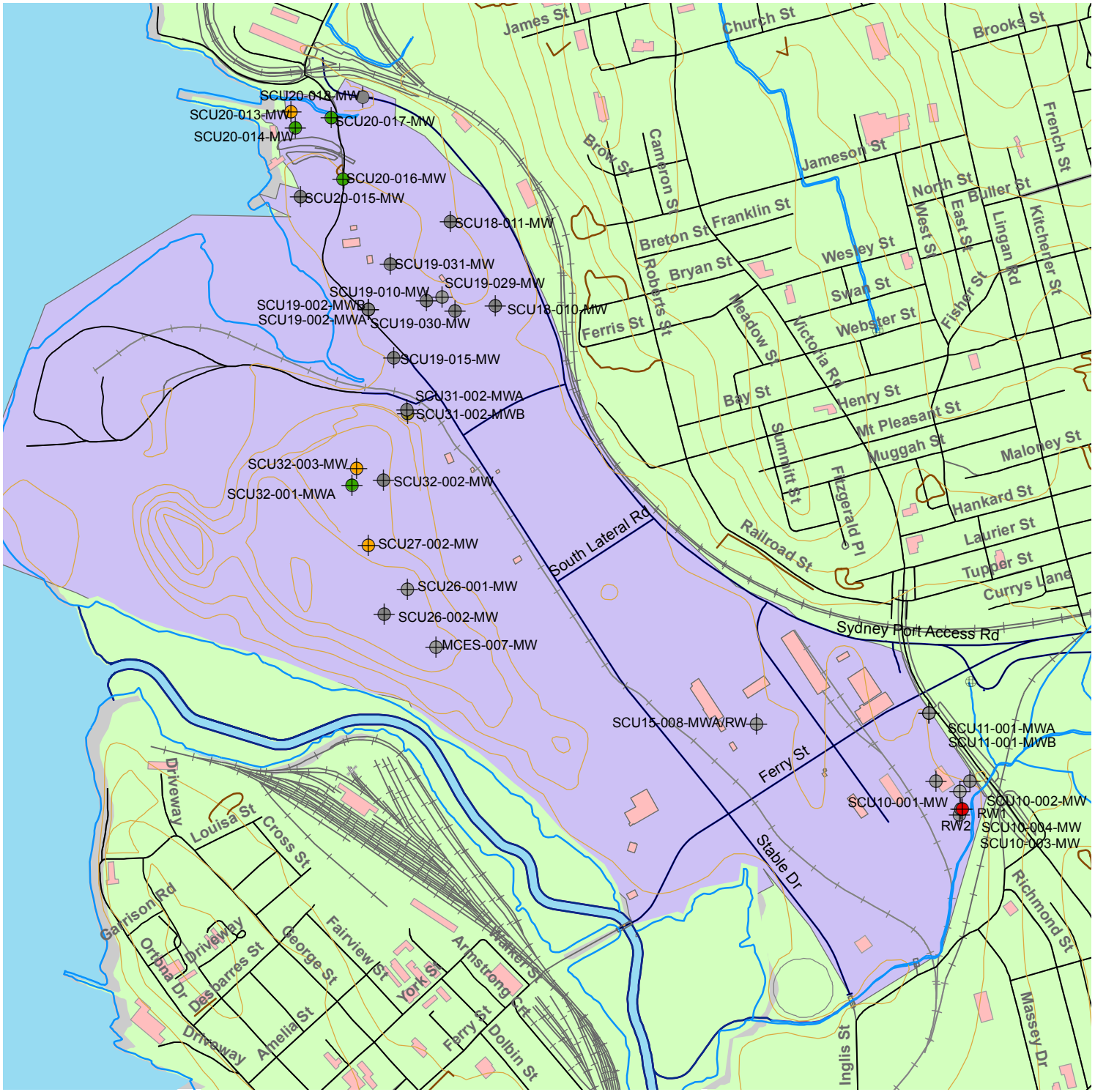
- SCU10-004-MW: Eighteen of the twenty PAH parameters analyzed.
- SCU20-013-MW: acenaphthylene and anthracene;
- SCU20-014-MW: acenaphthylene;
- SCU20-016-MW: acenaphthylene; and,
- SCU20-017-MW: acenaphthylene, benzo(g.h.i)perylene and indeno(1,2,3-cd)pyrene.

Two monitor wells contained metals concentrations above the MOE standards as follows:

- SCU27-002-MW: sodium and barium; and,
- SCU32-003-MW: selenium and sodium.

In most instances, concentrations were comparable to historical findings. Statistical analysis suggests that selected indicator parameter concentration trends in three monitor wells contained concentration(s) of indicator parameters exhibiting an increasing or potentially increasing concentration trend during the 2015 monitoring event (i.e., acenaphthylene exhibited increasing concentration trends in both SCU10-004-MW and SCU20-013-MW; anthracene exhibited a potentially increasing trend in SCU20-013-MW and barium exhibited a potentially increasing trend in SCU27-002-MW), as presented in Figure 4.0-1.

The available equipotential contour plot for the unconsolidated material (i.e., the fill/till) indicates that the groundwater flow direction is west toward Sydney Harbour.



NS Lands
nova scotia lands

HARBOURSIDE COMMERCIAL PARK

2015 GROUNDWATER MONITORING EVENT

INDICATOR PARAMETER CONCENTRATION TREND

FIGURE 4.0-1

LEGEND

Trend Analysis

- Increasing
- Fluctuating
- Stable
- Monitoring Well
- **Harbourside Commercial Park**

0 50 100 200 300 m

MAP DRAWING INFORMATION:
Province of Nova Scotia Mapping
SLR Monitoring Recommendations drawing dated April 17, 2014

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

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

DILLON CONSULTING

PROJECT: 14-1360
STATUS: FINAL
DATE: 03/03/16

5.0 Recommendations

Review of the 2015 groundwater sampling results, considered in context of historical data associated with the HCP site, suggests that the Fall 2016 groundwater monitoring program continue to include the scheduled 32 water level measurements, checking eight monitor/recovery wells for product, and the collection of 25 groundwater samples for select analysis. It is recommended that the groundwater monitoring program continue to include sampling for PHCs, PAHs and metals parameters.

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 NOVEMBER/DECEMBER 2015 HCP
GROUNDWATER ANALYTICAL RESULTS - BTEX/TPH

Sample Location (Total Well Depth)	Sample Date	BTEX Concentration (mg/L)				Petroleum Hydrocarbons (mg/L)						
		Benzene	Toluene	E. Benzene	Xylenes	C6 - C10	C10 - C21	C10 - C16	C16-C21	C21 - C32	Modified TPH	Reached Baseline at C32
NSE Tier 1 EQS[1]		20	20	20	20	-	-	-	-	-	20	-
SCU10-001-MW (3.761 m)	12/19/14	<0.001	<0.001	<0.001	<0.002	<0.01	-	0.060	<0.05	<0.1	<0.1	-
	12/11/15	<0.0010	<0.0010	<0.0010	<0.0020	0.012	-	<0.050	<0.050	<0.10	<0.10	-
SCU10-004-MW (5.771 m)	11/21/09	1	0.22	0.17	4.2	<0.010	54	-	-	1.5	56	Yes
	11/22/09	0.017	0.002	0.003	0.012	0.02	0.4	-	-	<0.50	<0.50	Yes
	11/23/09	0.077	0.005	0.006	0.027	0.03	-	0.7	<0.20	<0.50	0.7	Yes
	11/24/09	0.057	0.006	0.006	0.053	0.09	-	1.8	0.24	<0.50	2.2	Yes
	11/25/09	0.18	0.097	0.074	0.35	0.79	-	13 *	2.2	1	17	Yes
	11/26/09	0.11	0.011	0.013	0.062	0.16	-	1.9	0.14	<0.10	2.2	Yes
	12/19/14	NM	NM	NM	NM	NM	-	NM	NM	NM	NM	-
	12/11/15	0.20	0.13	0.081	0.37	0.54	-	42	12	8.0	63	Yes
SCU18-010-MW (4.941 m)	3/26/10	0.002	0.002	<0.0010	0.007	<0.010	-	<0.20	<0.20	<0.50	<0.50	Yes
	3/27/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	3/28/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.10	0.07	0.1	0.3	Yes
	3/29/10	0.0014	0.0013	<0.0010	0.0036	<0.010	-	0.094	0.07	<0.50	0.16	Yes
	3/30/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
	12/18/14	<0.001	<0.001	<0.001	<0.002	<0.01	-	0.056	0.058	0.14	0.25	Yes
	11/25/15	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.067	<0.050	<0.10	<0.10	-
SCU18-011-MW (4.392 m)	3/31/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/1/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/2/10[D]	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/3/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/4/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/5/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
	12/18/14	<0.001	<0.001	<0.001	<0.002	<0.01	-	<0.05	0.056	<0.1	<0.1	-
	11/25/15	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
SCU19-002-MWA (8.459 m)	4/6/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	<0.20	-	-	<0.50	<0.50	-
	4/7/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/8/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/9/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/10/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
	12/17/14	<0.001	<0.001	<0.001	<0.002	<0.01	-	<0.05	<0.05	<0.1	<0.1	-
	12/2/15	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
SCU19-002-MWB (21.129 m)	4/11/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	<0.20	-	-	<0.50	<0.50	-
	4/12/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/13/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/14/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/15/10[D]	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/16/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	0.11	0.11	Yes
	12/17/14	<0.001	<0.001	<0.001	<0.002	<0.01	-	<0.05	<0.05	<0.1	<0.1	-
	11/30/15	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
SCU19-010-MW (8.142 m)	4/17/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	<0.20	-	-	<0.50	<0.50	-
	4/18/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.064	0.17	0.23	0.46	Yes
	4/19/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	0.084	0.14	0.23	Yes
	12/18/14	<0.001	<0.001	<0.001	<0.002	<0.01	-	<0.05	0.12	0.23	0.35	Yes
	11/30/15	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.073	0.12	0.16	0.35	Yes

TABLE A-1
LTMM GROUNDWATER MONITORING EVENT NOVEMBER/DECEMBER 2015 HCP
GROUNDWATER ANALYTICAL RESULTS - BTEX/TPH

Sample Location (Total Well Depth)	Sample Date	BTEX Concentration (mg/L)				Petroleum Hydrocarbons (mg/L)						
		Benzene	Toluene	E. Benzene	Xylenes	C6 - C10	C10 - C21	C10 - C16	C16-C21	C21 - C32	Modified TPH	Reached Baseline at C32
NSE Tier 1 EQS[1]		20	20	20	20	-	-	-	-	-	20	-
SCU19-015-MW (6.479 m)	4/20/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	<0.20	-	-	<0.50	<0.50	-
	4/21/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/22/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/23/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/24/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/25/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
	12/18/14	<0.001	<0.001	<0.001	<0.002	<0.01	-	<0.05	<0.05	<0.1	<0.1	-
	12/2/15	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
SCU19-029-MW (5.633 m)	4/26/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/27/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/28/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	4/29/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
	12/18/14	<0.001	<0.001	<0.001	<0.002	<0.01	-	<0.05	0.085	0.13	0.21	Yes
	11/25/15	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
SCU19-030-MW (4.993 m)	4/30/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.28	0.4	0.2	0.8	Yes
	5/1/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.24	0.33	0.1	0.7	Yes
	5/2/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.17	0.21	0.15	0.53	Yes
	5/3/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.15	0.19	0.15	0.49	Yes
	12/18/14	<0.001	<0.001	<0.001	<0.002	<0.01	-	0.15	0.19	0.16	0.5	Yes
	11/25/15	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.12	0.11	<0.10	0.23	Yes
SCU19-031-MW (7.398 m)	5/4/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	5/5/10[D]	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	5/6/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	5/7/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	0.055	<0.50	<0.50	-
	5/8/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
	12/16/14	<0.001	<0.001	<0.001	<0.002	<0.01	-	<0.05	0.057	0.12	0.18	Yes
	11/25/15	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
SCU20-013-MW (7.952 m)	5/9/10	0.014	0.026	0.011	0.077	0.12	-	1.3	0.6	<0.50	2.0	Yes
	5/10/10	0.016	0.028	0.012	0.081	0.13	-	2.9	1.6	1.5	6.2	Yes
	5/11/10	0.011	0.018	0.008	0.056	0.06	-	2.3	1.5	1.0	4.8	Yes
	5/12/10	0.01	0.016	0.0071	0.053	0.093	-	2.3	1.3	1.3	4.9	Yes
	5/13/10	0.011	0.016	0.0069	0.053	0.10	-	2.2	1.0	0.80	4.2	Yes
	12/16/14	0.011	0.016	0.0075	0.057	0.097	-	2.1	0.98	1.1	4.2	Yes
	11/25/15	0.012	0.017	0.0081	0.062	0.082	-	2.2	1.0	1.3	4.6	Yes
SCU20-014-MW (7.777 m)	5/14/10	0.002	0.003	<0.0010	0.006	<0.010	-	0.3	<0.20	<0.50	<0.50	-
	5/15/10	0.003	0.002	<0.0010	0.005	<0.010	-	0.3	<0.20	<0.50	<0.50	-
	5/16/10	0.003	0.002	<0.0010	0.005	<0.010	-	0.54**	0.54**	0.4	1.5	Yes
	5/17/10	0.0023	0.0021	<0.0010	0.0049	0.013	-	0.35	0.34	0.26	0.96	Yes
	5/18/10	0.0027	0.0021	<0.0010	0.0048	0.019	-	0.35	0.27	0.24	0.87	Yes
	12/16/14	0.004	0.0034	<0.001	0.0076	0.014	-	0.64	0.55	0.64	1.8	Yes
	11/25/15	0.0034	0.0029	<0.0010	0.0064	<0.010	-	0.48	0.43	0.46	1.4	Yes
SCU20-015-MW (9.617 m)	5/19/10	0.003	0.001	<0.0010	0.003	<0.010	-	0.3	<0.20	<0.50	<0.50	Yes
	5/20/10	0.003	0.001	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	5/21/10	0.002	<0.0010	<0.0010	<0.0020	<0.010	-	0.20	0.20	0.3	0.7	Yes
	5/22/10	0.0024	0.001	<0.0010	<0.0020	<0.010	-	0.099	0.13	0.16	0.39	Yes
	5/23/10	0.0021	<0.0010	<0.0010	<0.0020	<0.010	-	0.14	0.12	0.21	0.48	Yes
	12/16/14	0.0025	0.0012	<0.001	<0.002	0.011	-	0.32	0.3	0.52	1.2	Yes
	11/25/15	0.0024	<0.0010	<0.0010	<0.0020	<0.010	-	0.089	0.092	0.21	0.39	Yes

TABLE A-1
LTMM GROUNDWATER MONITORING EVENT NOVEMBER/DECEMBER 2015 HCP
GROUNDWATER ANALYTICAL RESULTS - BTEX/TPH

Sample Location (Total Well Depth)	Sample Date	BTEX Concentration (mg/L)				Petroleum Hydrocarbons (mg/L)						
		Benzene	Toluene	E. Benzene	Xylenes	C6 - C10	C10 - C21	C10 - C16	C16-C21	C21 - C32	Modified TPH	Reached Baseline at C32
NSE Tier 1 EQS[1]		20	20	20	20	-	-	-	-	-	20	-
SCU20-016-MW (9.524 m)	5/24/10	0.002	0.001	<0.0010	<0.0020	<0.010	-	0.7	0.2	<0.50	0.9	Yes
	5/25/10	0.001	<0.0010	<0.0010	<0.0020	<0.010	-	0.3	0.3	<0.50	0.5	Yes
	5/26/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.35	0.33	0.3	1.0	Yes
	5/27/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.21	0.2	0.19	0.59	Yes
	5/28/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.32	0.29	0.27	0.87	Yes
	12/16/14	<0.001	<0.001	<0.001	<0.002	<0.01	-	0.25	0.33	0.39	0.97	Yes
	11/25/15	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.30	0.31	0.42	1.0	Yes
SCU20-017-MW (7.311 m)	5/29/10	0.005	0.006	<0.0010	0.009	<0.010	-	0.4	<0.20	<0.50	<0.50	Yes
	5/30/10	0.002	0.002	<0.0010	0.005	<0.010	-	0.4	<0.20	<0.50	<0.50	Yes
	5/31/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.21	0.09	0.1	0.4	Yes
	6/1/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.093	<0.20	<0.50	<0.50	Yes
	6/2/10	0.0017	0.0015	<0.0010	<0.0020	0.011	-	0.26	0.15	0.19	0.61	Yes
	12/16/14	0.0012	0.0014	<0.001	<0.002	<0.01	-	0.33	0.21	0.29	0.83	Yes
	11/25/15	0.0014	0.0013	<0.0010	<0.0020	<0.010	-	0.23	0.13	0.14	0.50	Yes
SCU20-018-MW (5.054 m)	6/3/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	6/4/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	6/5/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	6/6/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	6/7/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
	12/16/14	<0.001	<0.001	<0.001	<0.002	<0.01	-	<0.05	<0.05	<0.1	<0.1	-
	11/25/15	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
SCU26-001-MW (25.16 m)	6/18/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	<0.20	-	-	<0.50	<0.50	-
	6/19/10	0.005	0.003	<0.0010	0.008	5.3	12	-	-	4.5	26	Yes
	6/20/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	6/21/10	<0.0010	<0.0010	<0.0010	<0.0020	0.015	-	0.096	0.1	0.13	0.34	Yes
	6/22/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.089	<0.050	0.12	0.21	Yes
	12/17/14	<0.001	<0.001	<0.001	<0.002	<0.01	-	0.063	<0.05	<0.1	<0.1	-
	11/27/15	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.054	<0.050	<0.10	<0.10	Yes
SCU26-002-MW (30.33 m)	6/23/10	0.01	0.0061	<0.0010	0.0059	0.05	<0.20	-	-	<0.50	<0.50	-
	6/24/10	0.034	0.026	0.0015	0.022	0.050	-	0.29	0.070	<0.50	0.41	Yes
	6/25/10	0.018	0.015	<0.0010	0.013	0.052	-	0.37	0.18	0.13	0.72	Yes
	6/26/10[D]	0.017	0.014	<0.0010	0.012	0.049	-	0.35	0.16	0.18	0.74	Yes
	6/27/10	0.023	0.018	0.0011	0.016	0.066	-	0.31	0.13	0.12	0.63	Yes
	12/17/14[D]	0.014	0.010	<0.001	0.0084	0.027	-	0.15	<0.05	<0.1	0.18	Yes
	12/17/14	0.014	0.010	<0.001	0.0085	0.028	-	0.16	<0.05	<0.1	0.19	Yes
	11/27/15	0.016	0.011	<0.0010	0.0089	0.014	-	0.17	0.055	<0.10	0.24	Yes
SCU27-002-MW (44.98 m)	6/28/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	6/29/10[D]	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	0.053	0.14	0.19	Yes
	6/30/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	7/1/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	0.063	0.14	0.20	Yes
	12/17/14	<0.001	<0.001	<0.001	<0.002	<0.01	-	<0.05	<0.05	<0.1	<0.1	-
	11/27/15	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-

TABLE A-1
LTMM GROUNDWATER MONITORING EVENT NOVEMBER/DECEMBER 2015 HCP
GROUNDWATER ANALYTICAL RESULTS - BTEX/TPH

Sample Location (Total Well Depth)	Sample Date	BTEX Concentration (mg/L)				Petroleum Hydrocarbons (mg/L)						
		Benzene	Toluene	E. Benzene	Xylenes	C6 - C10	C10 - C21	C10 - C16	C16-C21	C21 - C32	Modified TPH	Reached Baseline at C32
NSE Tier 1 EQS[1]		20	20	20	20	-	-	-	-	-	20	-
SCU31-002-MWB (23.445 m)	7/2/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	<0.20	-	-	<0.50	<0.50	-
	7/3/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	7/4/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	7/5/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	0.061	<0.50	<0.50	-
	7/6/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
	7/7/10[D]	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
	12/18/14[D]	<0.001	<0.001	<0.001	<0.002	<0.01	-	<0.05	<0.05	<0.1	<0.1	-
	12/18/14	<0.001	<0.001	<0.001	<0.002	<0.01	-	<0.05	<0.05	<0.1	<0.1	-
	12/2/15[D]	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
	12/2/15	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
SCU32-001-MWA (22.17 m)	7/18/10	<0.0010	0.004	<0.0010	<0.0020	<0.0010	-	0.32	0.15	<0.10	0.5	Yes
	7/19/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.99	0.82	0.56	2.4	Yes
	12/17/14	0.0013	<0.001	<0.001	<0.002	<0.01	-	0.50	0.44	0.41	1.4	Yes
	11/27/15	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	0.51	0.53	0.43	1.5	Yes
SCU32-002-MW (21.50 m)	7/23/10	0.0011	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
	12/18/14	0.0011	<0.001	<0.001	<0.002	<0.01	-	0.055	0.064	0.13	0.25	Yes
	11/30/15	0.0011	<0.0010	<0.0010	<0.0020	<0.010	-	0.056	0.059	<0.10	0.11	Yes
SCU32-003-MW (22.74 m)	7/24/10	<0.0010	0.008	<0.0010	<0.0020	<0.010	-	0.22	0.1	<0.10	0.3	Yes
	7/25/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	2.1	2.5	1.9	6.6	Yes
	12/18/14	0.0027	0.0013	<0.001	<0.002	<0.01	-	0.58	0.27	0.27	1.1	Yes
	11/30/15	0.0023	0.0012	<0.0010	<0.0020	<0.010	-	0.61	0.46	0.38	1.5	Yes
MCES-007-MW (30.83 m)	8/3/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	<0.20	-	-	<0.50	<0.50	-
	8/4/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	8/5/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.20	<0.20	<0.50	<0.50	-
	8/6/10	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
	12/17/14	<0.001	<0.001	<0.001	<0.002	<0.01	-	<0.05	<0.05	<0.1	<0.1	-
	11/27/15[D]	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-
	11/27/15	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	-	<0.050	<0.050	<0.10	<0.10	-

NOTES:
D - Field Duplicate
NM - Not Measured or not analyzed.
mg/L - milograms per litre
- No applicable guideline criteria.
1 - Nova Scotia Environment Tier 1 Evironmental Quality Standards for Groundwater (Coarse Grained Soil, Non-potable Groundwater Commercial/Industrial Site) 2013
Underline Exceeds NSE EQS
SCU10-004-MW was not sampled during the 2014 monitoring event due to product in the well
The DNAPL in SCU32-003-MWA was sampled during the 2015 LTMM monitoring event. The groundwater column in the monitor well was sampled above the DNAPL in the well.
Historical data (i.e., pre-2014) tabulated by SLR Consulting (Canada) Ltd. during historic assessment work.
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 NOVEMBER/DECEMBER 2015 HCP
GROUNDWATER ANALYTICAL RESULTS - PAH

Sample Location (Total Well Depth)	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
	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
NSE Tier 1 EQS[1]		-	750	-	-	-	-	-	-	-	-	-	-	-	-	38000	38000	7000	-	-	-
MOE Table 3[2]		600	1.8	2.4	4.7	0.81	0.75	0.2	-	0.4	1	0.52	130	400	0.2	1800	1800	1400	-	580	68
SCU10-001-MW (3.761 m)	12/19/14	3.9	0.63	1.5	0.30	0.18	0.14	0.057	0.084	0.081	0.30	0.020	1.7	4.4	0.056	5.3	9.9	16	0.038	6.9	1.0
	12/11/15	0.024	<0.020	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.018	0.040	<0.010	0.053	0.15	<0.20	<0.010	0.011	0.018
SCU10-004-MW (5.771 m)	9/17/04	**1580**	**194**	**590**	**205**	**111**	**128**	*<1*	NM	**52**	**173**	**11.2**	**882**	**1420**	**41**	**2400**	**4150**	**11900**	---	**2510**	**553**
	11/19/08	18	**2.2**	1.7	0.37	0.12	0.08	0.01	NM	0.11	0.32	<0.01	2.4	10	0.01	19	14	21	0.02	5.1	1.7
	11/10/10	37	**7.5**	2.4	0.28	0.23	0.15	0.09	NM	0.12	0.26	0.03	2.4	18	0.09	38 *	37 *	180 *	0.04	15	1.6
	10/31/11	51 **	**10**	**13**	3.1	**1.7**	**1.1**	**0.61**	NM	**0.73**	**2.5**	0.27	13	39 **	**0.74**	74 **	71 **	68 **	0.28	47	8.7
	11/23/12	230 **	**34 ****	**38 ****	**5.3**	**1.9**	**1.4**	**0.58**	NM	**1.5**	**4.0**	0.15	38 **	140 **	**0.75**	380 **	590 **	**2400 ****	0.32	170 **	18
	12/2/13	53 **	**20**	**4.0**	0.34	0.20	0.14	0.077	0.090	0.089	0.29	0.027	3.5	31	0.072	85 **	80 **	680 **	0.043	24	2.3
	12/19/14	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
	12/11/15	**2800**	**410**	**1100**	**360**	**190**	**130**	**67**	110	**87**	**310**	**29**	**1500**	**2700**	**67**	**3300**	**6400**	**11000**	41	**5300**	**980**
SCU18-010-MW (4.941 m)	9/7/10	1.6	**1.9**	0.92	0.12	0.02	0.04	0.01	NM	0.01	0.12	<0.01	1.8	3.4	<0.01	6.1	7.1	45	<0.01	2.4	1.2
	11/17/10	0.60	0.48	0.35	0.06	0.03	0.02	0.01	NM	0.02	0.08	<0.01	0.64	1.2	0.01	1.3	0.23	<0.02	<0.01	0.93	0.55
	10/28/11	0.50	0.56	0.35	0.07	0.04	0.02	0.02	NM	0.02	0.09	<0.01	0.61	1.1	0.02	1.8	1.7	12	0.01	0.81	0.61
	11/22/12	0.33	0.50	0.19	0.089	0.053	0.041	0.027	NM	0.058	0.087	<0.01	0.35	0.64	0.025	1.5	2.0	31 **	0.016	0.53	0.33
	11/29/13	0.29	0.19	0.11	0.13	0.096	0.068	0.054	0.051	0.045	0.12	0.018	0.37	0.28	0.053	0.67	0.099	<0.20	0.031	0.29	0.41
	12/18/14	0.20	0.29	0.11	0.13	0.14	0.12	0.076	0.068	0.065	0.16	0.021	0.36	0.37	0.066	0.68	0.12	<0.2	0.035	0.23	0.33
	11/25/15	0.20	0.22	0.088	0.021	0.019	0.017	0.013	0.012	0.010	0.023	<0.010	0.21	0.35	0.011	0.12	<0.050	<0.20	<0.010	0.22	0.22
SCU18-011-MW (4.392 m)	9/7/10	0.02	0.01	<0.01	0.01	<0.01	<0.01	<0.01	NM	<0.01	0.01	<0.01	0.03	0.02	<0.01	<0.05	<0.05	<0.2	<0.01	0.03	0.03
	11/17/10	0.02	0.03	0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.02	0.04	<0.01	0.05	0.06	0.3	<0.01	0.05	0.02
	11/17/10[D]	0.03	0.04	0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.03	0.04	<0.01	0.06	0.07	0.3	<0.01	0.05	0.02
	10/28/11	0.02	<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	<0.02	<0.01	0.02	0.01
	11/22/12	0.060	<0.01	0.045	0.042	0.033	0.023	0.016	NM	0.032	0.046	<0.01	0.13	0.062	0.015	<0.05	<0.05	<0.02	<0.01	0.17	0.095
	11/29/13	0.049	0.012	0.016	0.021	0.015	0.011	<0.010	<0.010	<0.010	0.019	<0.010	0.044	0.041	<0.010	<0.050	<0.050	<0.20	<0.010	0.052	0.038
	12/18/14	0.078	0.037	0.029	0.061	0.058	0.047	0.027	0.027	0.027	0.073	<0.01	0.15	0.071	0.024	0.067	<0.05	0.24	0.013	0.11	0.11
	11/25/15	0.10	0.031	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.030	0.11	<0.010	0.061	<0.050	<0.20	<0.010	0.016	0.019
SCU19-002-MWA (8.459 m)	9/15/05	0.47	0.43	0.29	0.15	0.12	0.09	0.06	NM	0.12	0.17	0.03	0.4	0.75	0.07	2.4	2.4	12	0.04	1.6	0.34
	11/18/10	0.85	0.65	0.27	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.15	1.5	<0.01	2.5	2.5	14	<0.01	1.4	0.09
	10/26/11	0.6	0.39	0.14	0.02	0.02	0.02	<0.01	NM	0.01	0.02	<0.01	0.13	0.95	<0.01	1.9	1.3	12	<0.01	0.92	0.09
	11/21/12	0.19	0.087	0.055	0.023	0.016	0.013	0.010	NM	0.018	0.021	<0.01	0.068	0.28	0.010	0.49	0.26	2.5	<0.01	0.30	0.054
	11/27/13	0.32	0.13	0.083	0.030	0.026	0.020	0.015	0.013	0.013	0.032	<0.010	0.12	0.39	0.013	0.79	0.31	3.8	<0.010	0.47	0.089
	12/17/14	0.70	0.18	0.18	0.38	0.36	0.30	0.19	0.17	0.18	0.44	0.057	0.87	0.54	0.18	1.5	0.21	2.2	0.072	0.68	0.68
	12/2/15	0.4	0.11	0.055	0.029	0.017	0.016	0.016	0.015	0.024	0.029	<0.010	0.097	0.34	0.015	0.73	0.19	1.8	<0.010	0.28	0.07
SCU19-002-MWB (21.129 m)	11/18/10	<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	<0.02	<0.01	0.02	<0.01
	10/26/11	<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	<0.02	<0.01	<0.01	<0.01
	11/21/12	0.037	<0.01	0.011	0.024	0.022	0.011	0.013	NM	0.021	0.030	<0.01	0.063	<0.01	0.011	<0.05	<0.05	<0.02	<0.01	0.056	0.053
	11/21/12[D]	0.032	<0.01	<0.01	0.015	0.011	0.011	<0.01	NM	0.011	0.016	<0.01	0.032	<0.01	<0.01	<0.05	<0.05	<0.02	<0.01	0.026	0.029
	11/27/13	0.019	<0.010	0.030	0.026	0.020	0.016	0.012	<0.010	0.010	0.030	<0.010	0.093	0.025	0.011	<0.050	<0.050	<0.20	<0.010	0.15	0.081
	12/17/14	0.085	0.049	<0.01	0.012	0.012	0.011	<0.01	<0.01	<0.01	0.016	<0.01	0.034	0.072	<0.01	0.24	0.16	1.0	<0.01	0.056	0.030
	11/30/15	0.018	<0.010	0.04	0.073	0.072	0.056	0.041	0.034	0.036	0.084	0.02	0.2	0.025	0.044	<0.050	<0.050	<0.20	0.015	0.18	0.15
SCU19-010-MW (8.142 m)	9/20/05	1.6	<0.01	0.07	0.01	0.01	<0.01	<0.01	NM	<0.01	0.01	<0.01	0.04	0.54	0.01	1.7	2.3	10	<0.01	0.38	0.03
	11/27/12	0.49	<0.01	0.013	0.017	0.012	0.015	0.011	NM	0.014	0.017	0.010	0.020	0.17	0.013	0.52	0.60	4.0	0.011	0.049	0.030
	12/1/13	0.24	<0.020 *	0.031	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.013	0.10	<0.010	0.17	0.15	0.84	<0.010	0.048	0.025
	12/18/14	0.044	0.014	0.027	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.026	0.036	<0.01	0.073	0.059	0.39	<0.01	0.027	0.030
	11/30/15	2.4	0.027	0.074	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.019	1.1	<0.010	2.1	3.0	15	<0.010	0.58	0.037

TABLE A-2
LTMM GROUNDWATER MONITORING EVENT NOVEMBER/DECEMBER 2015 HCP
GROUNDWATER ANALYTICAL RESULTS - PAH

Sample Location (Total Well Depth)	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
	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
NSE Tier 1 EQS[1]		-	750	-	-	-	-	-	-	-	-	-	-	-	-	38000	38000	7000	-	-	-
MOE Table 3[2]		600	1.8	2.4	4.7	0.81	0.75	0.2	-	0.4	1	0.52	130	400	0.2	1800	1800	1400	-	580	68
SCU19-015-MW (6.479 m)	9/22/05	<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	<0.02	<0.01	0.01	<0.01
	11/18/10	0.01	0.03	0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.01	0.03	<0.01	<0.05	0.05	0.3	<0.01	0.04	0.01
	7/27/11	<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	<0.02	<0.01	0.01	<0.01
	10/26/11	<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	<0.02	<0.01	0.03	0.01
	11/23/12	0.46	0.052	0.22	0.067	0.030	0.027	0.011	NM	0.031	0.061	<0.01	0.29	0.50	0.013	0.49	0.89	2.8	<0.01	0.95	0.19
	11/29/13	<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	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	<0.010
	12/18/14	0.037	0.018	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.029	0.043	<0.01	0.10	0.081	0.39	<0.01	0.051	0.022
	12/02/15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.018	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.02	0.016
SCU19-029-MW (5.633 m)	7/28/11	<0.01	<0.01	0.02	<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	<0.02	<0.01	0.03	0.01
	10/28/11	<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	<0.02	<0.01	<0.01	0.01
	11/27/12	<0.01	<0.01	0.012	0.030	0.022	0.026	0.016	NM	0.026	0.027	0.012	0.039	0.011	0.019	<0.05	<0.05	<0.02	0.013	0.033	0.038
	12/7/13	0.026	0.020	0.041	0.091	0.090	0.072	0.047	0.047	0.043	0.080	0.014	0.16	0.030	0.044	<0.050	<0.050	<0.20	0.026	0.12	0.15
	12/18/14	0.062	0.016	0.081	0.13	0.10	0.090	0.043	0.052	0.050	0.16	0.013	0.34	0.079	0.037	0.084	0.084	0.36	0.024	0.32	0.27
	11/25/15	<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
SCU19-030-MW (4.993 m)	7/28/11	1.10	0.02	0.25	0.04	<0.01	<0.01	<0.01	NM	<0.01	0.05	<0.01	0.82	0.57	<0.01	0.21	0.22	1.00	<0.01	0.76	0.52
	10/28/11	0.62	0.03	0.10	0.05	0.01	<0.01	<0.01	NM	<0.01	0.05	<0.01	0.70	0.48	<0.01	<0.05	<0.05	<0.02	<0.01	0.04	0.49
	11/27/12	0.46	0.012	0.015	0.063	0.026	0.026	0.019	NM	0.030	0.060	0.012	0.66	0.23	0.021	<0.05	<0.05	<0.02	0.014	0.047	0.45
	12/7/13	0.53	<0.060 *	<0.060 *	0.038	0.020	0.018	<0.010	<0.010	<0.010	0.040	<0.010	0.62	0.18	<0.010	<0.050	<0.050	<0.20	<0.010	<0.040 *	0.45
	12/18/14	0.41	<0.04	<0.05	0.033	<0.01	<0.01	<0.01	<0.01	<0.01	0.043	<0.01	0.65	0.13	<0.01	0.087	0.08	0.35	<0.01	<0.04	0.45
	11/25/15	0.46	<0.020	<0.050	0.032	<0.010	<0.010	<0.010	<0.010	<0.010	0.029	<0.010	0.7	<0.060	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	0.49
SCU19-031-MW (7.398 m)	7/27/11	0.07	0.02	0.03	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.05	0.04	<0.01	<0.05	<0.05	<0.02	<0.01	0.04	0.04
	7/27/11[D]	0.07	0.02	0.03	0.02	0.02	0.02	0.02	NM	0.02	0.04	<0.01	0.12	0.04	0.01	<0.05	<0.05	<0.02	0.01	0.05	0.09
	10/26/11	0.04	0.01	0.03	<0.01	<0.01	<0.01	<0.01	NM	<0.01	0.01	<0.01	0.10	0.02	<0.01	<0.05	<0.05	<0.02	<0.01	0.04	0.08
	11/27/12	0.010	<0.01	0.014	0.032	0.026	0.032	0.021	NM	0.031	0.031	0.011	0.058	0.015	0.024	<0.05	<0.05	<0.02	0.013	0.047	0.052
	11/27/13	0.060	0.017	0.055	0.036	0.025	0.017	0.011	0.011	0.011	0.035	<0.010	0.14	0.077	<0.010	<0.050	0.063	<0.20	<0.010	0.22	0.11
	12/16/14	0.062	0.089	0.022	0.059	0.065	0.047	0.043	0.029	0.028	0.058	0.011	0.13	0.054	0.038	0.17	0.065	0.22	0.016	0.085	0.11
	11/25/15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.026	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	<0.010	0.025
SCU20-013-MW (7.952 m)	9/3/10	5.1	**18**	1.8	0.11	0.04	0.04	0.01	NM	0.02	0.12	<0.01	0.92	11	0.01	28	40	460	0.01	8.0	0.57
	11/17/10	6.9	**26**	**2.7**	0.18	0.11	0.07	0.03	NM	0.05	0.19	0.02	1.6	14	0.03	39	59	670	0.02	12	0.98
	10/27/11	6.8	**18**	**3.1**	0.08	0.02	0.01	0.01	NM	0.01	0.09	<0.01	1.3	15	0.01	42	31	530	<0.01	13	0.78
	11/21/12	4.8	**29 ****	2.0	0.33	0.13	0.082	0.050	NM	0.12	0.20	0.016	1.4	10	0.045	48 **	63 **	850 **	0.031	8.4	0.92
	11/26/13	7.6	**34**	**4.0**	0.50	0.23	0.19	0.083	0.12	0.11	0.44	0.031	2.8	17	0.088	42 **	68 **	770 **	0.062	18	1.8
	12/16/14	4.3	**29**	2.2	0.18	0.079	0.053	0.027	0.038	0.037	0.15	0.011	1.3	11	0.027	30	49	470	0.019	9.3	0.82
	11/25/15	8.3	**32**	**3.7**	0.072	0.011	<0.010	<0.010	<0.010	<0.010	0.06	<0.010	1.6	18	<0.010	40	66	380	<0.010	14	0.92
SCU20-014-MW (7.777 m)	9/3/10	1.1	**2.8**	0.72	0.16	0.10	0.07	0.05	NM	0.05	0.17	0.02	0.79	3.3	0.05	5.9	9.2	44	0.03	3.3	0.58
	11/17/10	0.93	**3.4**	0.85	0.13	0.10	0.06	0.05	NM	0.05	0.14	0.01	0.80	2.6	0.04	4.4	6.3	25	0.02	2.9	0.56
	10/27/11	1.7	**7.2**	1.4	0.18	0.13	0.08	0.07	NM	0.05	0.19	0.03	1.2	4.8	0.07	9.3	13	89	0.03	5.6	0.81
	11/22/12	1.4	**4.6**	1.0	0.15	0.072	0.054	0.033	NM	0.071	0.14	<0.01	0.96	3.5	0.034	7.1	8.9	76 **	0.021	4.0	0.67
	11/26/13	2.1	**5.7**	1.1	0.23	0.14	0.12	0.064	0.068	0.069	0.20	0.019	1.4	4.2	0.065	8.7	11	84 **	0.041	5.4	1.0
	12/16/14	2.1	**9.3**	1.8	0.63	0.44	0.30	0.21	0.21	0.23	0.57	0.062	2.4	6.0	0.2	12	15	100	0.11	6.8	1.8
	11/25/15	2.2	**6.2**	1.1	0.093	0.041	0.034	0.019	0.023	0.02	0.094	<0.010	1	4.4	0.017	9.8	12	110	<0.010	4.8	0.76
SCU20-015-MW (9.617 m)	9/3/10	1.5	**4.1**	1.2	0.05	0.01	<0.01	<0.01	NM	<0.01	0.06	<0.01	0.65	3.8	<0.01	8.3	11	29	<0.01	4.0	0.42
	11/17/10	0.91	1.3	1.1	0.18	0.14	0.08	0.05	NM	0.06	0.20	0.02	1.0	2.5	0.05	2.9	3.8	13	0.03	4.4	0.69
	10/27/11	0.47	0.83	1.1	0.99	0.68	0.53	**0.29**	NM	0.26	0.97	0.11	2.3	1.1	**0.28**	1.1	1.1	1.5	0.15	2.8	1.8
	11/22/12	0.40	0.55	0.24	0.16	0.082	0.051	0.035	NM	0.077	0.15	<0.01	0.41	0.53	0.032	1.2	1.3	7.2	0.019	0.66	0.33
	11/26/13	0.68	0.96	0.50	0.30	0.20	0.15	0.084	0.12	0.10	0.29	0.024	0.93	1.0	0.073	2.6	2.8	11	0.049	1.9	0.76
	12/16/14	0.49	1.1	0.68	0.46	0.27	0.17	0.11	0.12	0.13	0.48	0.036	1.2	1.1	0.1	2.0	2.1	7.8	0.055	1.9	0.97
	11/25/15	0.57	0.71	0.3	0.07	0.029	0.021	0.013	0.017	0.014	0.066	<0.010	0.41	0.74	0.011	1.5	1.9	9.6	<0.010	1.1	0.29

TABLE A-2
LTMM GROUNDWATER MONITORING EVENT NOVEMBER/DECEMBER 2015 HCP
GROUNDWATER ANALYTICAL RESULTS - PAH

Sample Location (Total Well Depth)	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
	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
NSE Tier 1 EQS[1]		-	750	-	-	-	-	-	-	-	-	-	-	-	-	38000	38000	7000	-	-	-
MOE Table 3[2]		600	1.8	2.4	4.7	0.81	0.75	0.2	-	0.4	1	0.52	130	400	0.2	1800	1800	1400	-	580	68
SCU20-016-MW (9.524 m)	9/7/10	4.9	0.48	0.55	0.03	0.01	0.01	<0.01	NM	<0.01	0.04	<0.01	0.42	3.9	<0.01	12	15	190	<0.01	4.3	0.28
	11/17/10	1.9	1.2	0.27	0.01	<0.01	<0.01	<0.01	NM	<0.01	0.02	<0.01	0.27	1.8	<0.01	3.5	3.8	39	<0.01	1.2	0.22
	10/27/11	3.1	**3.7**	0.55	0.02	0.01	<0.01	<0.01	NM	<0.01	0.03	<0.01	0.35	3.4	<0.01	6.5	7.2	120	<0.01	2.5	0.34
	11/22/12	1.8	**2.2**	0.40	0.011	<0.01	<0.01	<0.01	NM	<0.01	0.013	<0.01	0.23	2.1	<0.01	3.6	3.9	47 **	<0.01	1.6	0.19
	11/26/13	2.7	**3.1**	0.37	0.033	0.030	0.023	0.013	0.013	0.013	0.042	<0.010	0.35	3.1	0.013	5.3	5.9	46 **	<0.010	1.8	0.33
	12/16/14	1.9	**2.4**	0.21	0.015	<0.01	<0.01	<0.01	<0.01	<0.01	0.017	<0.01	0.31	2.1	<0.01	3.8	2.0	5.1	<0.01	0.18	0.30
	11/25/15	2.6	**2.8**	0.33	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	0.014	<0.010	0.34	3.1	<0.010	4.3	2.5	9.3	<0.010	0.84	0.29
SCU20-017-MW (7.311 m)	9/7/10	2.9	**7.7**	0.91	0.11	0.04	0.03	0.02	NM	0.02	0.12	<0.01	1.4	5.4	0.02	11	12	91	0.01	5.8	0.87
	11/17/10	2.6	**6.4**	0.88	0.19	0.15	0.10	0.07	NM	0.07	0.19	0.02	1.4	4.9	0.07	9.2	9.8	52	0.04	5.2	0.87
	10/27/11	1.8	**4.4**	1.5	0.39	0.32	0.24	0.15	NM	0.17	0.38	0.06	1.8	4.1	0.14	5.8	6.3	31 **	0.08	5.4	1.3
	11/21/12	0.56	0.98	0.39	0.093	0.052	0.057	0.027	NM	0.057	0.10	<0.01	0.53	1.2	0.026	1.6	1.5	7.8	0.013	1.5	0.37
	11/26/13	1.8	**3.7**	1.2	0.62	0.44	0.33	0.19	0.24	0.22	0.56	0.060	2.2	3.6	0.18	5.5	5.9	37 **	0.10	5.0	1.6
	12/16/14	1.2	**2.9**	1.3	0.82	0.5	0.33	**0.23**	0.23	0.27	0.74	0.067	2.5	2.9	**0.22**	4.0	4.2	28	0.12	4.3	1.8
	11/25/15	1.7	**3.6**	1.2	0.76	0.55	0.47	**0.27**	0.3	0.28	0.75	0.09	2.5	3.7	**0.25**	5.1	5.8	29	0.13	5.1	1.9
SCU20-018-MW (5.054 m)	9/7/10	0.08	0.07	0.10	0.09	0.07	0.06	0.04	NM	0.04	0.09	0.02	0.21	0.10	0.03	0.11	0.09	0.5	0.02	0.27	0.19
	11/17/10	0.03	0.02	0.02	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.02	0.03	<0.01	<0.05	<0.05	<0.02	<0.01	0.04	0.02
	10/27/11	0.06	0.04	0.07	0.03	0.02	0.02	0.01	NM	<0.01	0.04	<0.01	0.09	0.09	0.01	0.08	0.07	0.5	<0.01	0.26	0.09
	11/21/12	0.023	<0.01	0.021	0.040	0.026	0.024	0.014	NM	0.026	0.039	<0.01	0.073	0.027	0.013	<0.05	<0.05	<0.02	<0.01	0.060	0.068
	11/26/13	0.014	<0.010	0.019	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.032	0.026	<0.010	<0.050	<0.050	<0.20	<0.010	0.045	0.028
	12/16/14	0.10	0.017	0.15	0.27	0.21	0.16	0.096	0.10	0.10	0.27	0.028	0.55	0.08	0.089	0.18	0.062	0.35	0.05	0.41	0.44
	11/25/15	<0.010	<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	<0.010	0.011
SCU26-001-MW (25.16 m)	7/26/03	0.19	0.36	<0.01	<0.01	0.06	<0.01	<0.01	NM	<0.01	0.09	<0.01	0.6	<0.01	<0.01	<0.05	<0.05	2.1	<0.01	1.1	0.32
	7/11/12	0.13	0.26	0.24	0.53	0.51	0.37	**0.28**	NM	**0.51**	0.56	0.070	1.3	0.42	**0.26**	0.94	0.68	1.4	0.13	1.1 ***	0.98
	11/26/12	0.25	0.44	0.74	0.67	0.44	0.28	0.18	NM	0.39	0.58	0.051	1.7	0.76	**0.24**	1.7	1.3	3.3	0.11	1.7	1.2
	12/5/13	0.33	0.60	0.47	0.25	0.18	0.15	0.093	0.091	0.086	0.23	0.025	1.4	1.0	0.078	1.7	1.5	4.4	0.046	2.0	0.91
	12/17/14	0.16	0.34	0.14	0.03	0.021	0.011	0.014	<0.01	<0.01	0.029	<0.01	0.48	0.51	0.011	0.99	0.74	1.8	<0.01	0.9	0.27
	11/27/15	0.24	0.36	0.29	0.016	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	0.73	0.73	<0.010	1.1	0.78	1.7	<0.010	1.5	0.40
SCU26-002-MW (30.33 m)	7/26/03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	<0.01	1	<0.01	---	---	7.2	---	1.7	<0.01
	7/11/12	0.30	0.63	0.26	0.030	<0.01	<0.01	<0.01	NM	<0.01	0.020	<0.01	0.38	1.0	<0.01	8.5	12	7.4	<0.01	1.6 ***	0.22
	11/26/12	0.47	0.75	0.41	0.13	0.074	0.072	0.038	NM	0.076	0.10	0.012	0.73	1.3	0.047	9.8	13	8.4	0.020	2.3	0.46
	11/26/12[D]	0.51	0.82	0.42	0.099	0.046	0.047	0.024	NM	0.049	0.075	<0.01	0.70	1.4	0.032	11	14	10	0.011	2.4	0.43
	12/5/13	0.33	0.63	0.24	0.11	0.10	0.086	0.051	0.056	0.050	0.11	0.015	0.60	1.0	0.044	7.9	9.0	6.6	0.032	1.8	0.44
	12/17/14[D]	0.33	0.83	0.31	0.051	<0.01	<0.01	<0.01	<0.01	<0.01	0.043	<0.01	0.64	1.2	<0.01	6.7	9.6	6.3	<0.01	2.0	0.38
	12/17/14	0.29	0.85	0.34	0.049	<0.01	<0.01	<0.01	<0.01	<0.01	0.043	<0.01	0.60	1.1	<0.01	6.6	9.7	6.4	<0.01	2.0	0.35
	11/27/15	0.33	0.75	0.43	0.047	<0.010	<0.010	<0.010	<0.010	<0.010	0.038	<0.010	0.69	1.2	<0.010	7.4	11	7.7	<0.010	2.2	0.41
SCU27-002-MW (44.98 m)	7/26/03	<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	<0.02	<0.01	<0.01	<0.01
	7/4/12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.020	0.010	<0.01	<0.05	<0.05	<0.02	<0.01	0.030	0.020
	7/4/12[D]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.020	0.010	<0.01	<0.05	<0.05	<0.02	<0.01	0.030	0.020
	11/26/12	0.016	<0.01	0.011	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.017	0.017	<0.01	<0.05	<0.05	<0.02	<0.01	0.050	0.013
	12/5/13	0.058	0.017	0.13	0.18	0.18	0.14	0.089	0.087	0.082	0.18	0.024	0.45	0.096	0.076	<0.050	<0.050	<0.20	0.046	0.47	0.40
	12/17/14	0.025	0.014	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.017	0.023	<0.01	0.082	0.081	0.47	<0.01	0.031	0.015
	11/27/15	<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

TABLE A-2
LTMM GROUNDWATER MONITORING EVENT NOVEMBER/DECEMBER 2015 HCP
GROUNDWATER ANALYTICAL RESULTS - PAH

Sample Location (Total Well Depth)	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
	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
NSE Tier 1 EQS[1]		-	750	-	-	-	-	-	-	-	-	-	-	-	-	38000	38000	7000	-	-	-
MOE Table 3[2]		600	1.8	2.4	4.7	0.81	0.75	0.2	-	0.4	1	0.52	130	400	0.2	1800	1800	1400	-	580	68
SCU31-002-MWB (23.445 m)	9/22/05	<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	<0.02	<0.01	<0.01	<0.01
	11/16/10	<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	<0.02	<0.01	0.02	0.01
	10/25/11	<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	<0.02	<0.01	0.03	0.02
	11/21/12	0.019	<0.01	0.014	0.032	0.033	0.027	0.024	NM	0.029	0.031	<0.01	0.067	0.010	0.018	<0.05	<0.05	<0.02	<0.01	0.068	0.063
	12/7/13[D]	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.020	0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.031	0.019
	12/7/13	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.016	<0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.029	0.016
	12/18/14[D]	0.061	0.032	0.036	0.072	0.080	0.061	0.053	0.032	0.036	0.085	0.012	0.20	0.074	0.039	0.14	0.12	0.76	0.020	0.20	0.17
	12/18/14	0.046	0.028	0.028	0.051	0.050	0.038	0.026	0.020	0.021	0.064	<0.01	0.13	0.058	0.020	0.11	0.11	0.61	0.011	0.14	0.11
	12/2/15[D]	<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	0.017	0.01
	12/02/15	<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	0.015	<0.010
SCU32-001-MWA (22.17 m)	11/24/11	1.1	0.81	0.84	0.11	0.06	0.04	0.03	NM	0.02	0.12	<0.01	1.1	2.8	0.03	8.1	2.7	2.8	0.02	5.2	0.7
	12/5/13	5.3	1.8	**7.4**	**13**	**8.0**	**6.1**	**3.1**	4.0	**3.8**	**12**	**0.91**	23	8.8	**3.0**	15	4.1	3.3	1.9	39 **	20
	12/17/14	1.1	0.91	1.4	1.4	**1.1**	**0.87**	**0.54**	0.55	**0.55**	**1.6**	0.15	5	2.4	**0.5**	2.5	2	6.6	0.26	7.2	3.6
	11/27/15	1.4	0.7	1.8	0.83	0.39	0.28	0.17	0.18	0.18	0.88	0.06	4.2	2.7	0.15	3.6	2.4	8.4	0.1	8.7	2.9
SCU32-002-MW (21.50 m)	11/25/11	0.23	0.34	0.41	0.14	0.09	0.04	0.04	NM	0.03	0.14	0.01	0.65	0.44	0.04	0.74	0.54	7.7	0.03	1.2	0.46
	12/5/13	0.65	0.62	1.5	2.7	**2.8**	2.1	1.4	1.3	**1.3**	**2.6**	0.38	6.9	1.2	**1.2**	0.91	0.8	6.7	0.68	6.7	5.80
	12/18/14	0.21	0.31	0.31	0.35	0.31	0.25	0.14	0.15	0.14	0.41	0.044	1.0	0.48	0.13	0.50	0.50	4.3	0.063	1.5	0.75
	11/30/15	0.23	0.38	0.21	0.023	<0.010	<0.010	<0.010	<0.010	<0.010	0.022	<0.010	0.3	0.48	<0.010	0.71	0.69	7.6	<0.010	1.1	0.21
SCU32-003-MW (22.74 m)	11/25/11	0.89	0.56	0.76	0.07	0.01	<0.01	<0.01	NM	<0.01	0.07	<0.01	1.1	1.9	<0.01	3.5	1.50	2.4	<0.01	3.3	0.72
	12/5/13	4.4	1.3	**8.7**	**19**	**11**	**8.4**	**4.3**	5.6	**5.3**	**17**	**1.3**	33	6.7	**4.2**	5.2	2.9	4.0	2.6	35	27
	12/18/14	1.6	**1.9**	0.89	0.20	0.17	0.12	0.080	0.078	0.073	0.25	0.021	1.6	3.5	0.065	3.1	2.6	8.5	0.039	5.2	0.97
	11/30/15	1.5	1.8	1.2	0.12	0.11	0.076	0.057	0.05	0.045	0.13	0.02	1.4	3.2	0.046	2.4	2.2	7.6	0.028	5.9	0.86
MCES-007-MW (30.83 m)	7/26/03	0.27	0.7	<0.01	<0.01	<0.01	<0.01	<0.01	NM	<0.01	<0.01	<0.01	0.74	0.97	<0.01	1.4	1.2	3.9	0.34	<0.01	0.34
	7/11/12	0.020	<0.01	0.050	0.15	0.13	0.10	0.080	NM	0.12	0.16	0.020	0.29	0.030	0.080	<0.05	<0.05	<0.02	0.040	0.2 ***	0.25
	11/27/12	0.052	0.024	0.18	0.45	0.35	0.34	0.17	NM	0.30	0.39	0.048	0.72	0.077	**0.23**	0.050	0.063	<0.02	0.077	0.44	0.60
	12/5/13	<0.010	<0.010	0.015	0.015	0.019	0.014	0.014	<0.010	<0.010	0.018	<0.010	0.039	0.010	<0.010	<0.050	<0.050	<0.20	<0.010	0.015	0.042
	12/17/14	0.21	0.59	0.26	0.018	<0.01	<0.01	<0.01	<0.01	<0.01	0.016	<0.01	0.49	0.76	<0.01	0.93	0.97	3.0	<0.01	1.5	0.27
	11/27/15[D]	0.22	0.51	0.37	0.027	<0.010	<0.010	<0.010	<0.010	<0.010	0.021	<0.010	0.61	0.700	<0.010	0.76	0.85	2.5	<0.010	1.8	0.36
	11/27/15	0.2	0.45	0.33	0.03	0.01	<0.010	<0.010	<0.010	<0.010	0.021	<0.010	0.58	0.76	<0.010	0.75	0.81	2.1	<0.010	1.7	0.33

NOTES:

D - Field Duplicate

NM - Not Measured or not analyzed

µg/L - micrograms per litre

- No applicable guideline criteria.

1 - Nova Scotia Environment Evironmental Quality Standards for Groundwater (Coarse Grained Soil, Non-potable Groundwater Commercial/Industrial Site) 2013

2 - Ontario Ministry of Environment, Table 3 Full Depth Generic Site Condition Standards in a Non-potable Groundwater (Coarse Grained Soil) 2011

Underline Exceeds NSE EQS

Bold exceeds MOE Table 3 Standards

Benzo(j)fluoranthene was historically not included in PAH analysis.

* Elevated PAH RDL(s) due to matrix / co-extractive interference.

**Elevated PAH RDL(s) due to sample dilution.

*** PAH RDL(s) elevated due to detection of compound in blank.

SCU10-004-MW was not sampled during the 2014 monitoring event due to product in the well

The DNAPL in SCU32-003-MWA was sampled during the 2015 LTMM monitoring event. The groundwater column in the monitor well was sampled above the DNAPL in the well.

Historical data (i.e., pre-2014) tabulated by SLR Consulting (Canada) Ltd. During historic assessment work.

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-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER/DECEMBER 2015 HCP
GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Total Well Depth)	Sample Date	Dissolved Aluminum (Al)	Dissolved Antimony (Sb)	Dissolved Arsenic (As)	Dissolved Barium (Ba)	Dissolved Beryllium (Be)	Dissolved Bismuth (Bi)	Dissolved Boron (B)	Dissolved Cadmium (Cd)	Dissolved Calcium (Ca)	Dissolved Chromium (Cr)	Dissolved Cobalt (Co)	Dissolved Copper (Cu)	Dissolved Iron (Fe)	Dissolved Lead (Pb)	Dissolved Magnesium (Mg)	Dissolved Manganese (Mn)	Mercury total (Hg)	Dissolved Molybdenum (Mo)	Dissolved Nickel (Ni)	Dissolved Phosphorus (P)	Dissolved Potassium (K)	Dissolved Selenium (Se)	Dissolved Silver (Ag)	Dissolved Sodium (Na)	Dissolved Strontium (Sr)	Dissolved Thallium (Tl)	Dissolved Tin (Sn)	Dissolved Titanium (Ti)	Dissolved Uranium (U)	Dissolved Vanadium (V)	Dissolved Zinc (Zn)
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NSE Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard MOE Table 3[2]		-	20000	1900	29000	67	-	45000	2.7	-	810	66	87	-	25	-	-	0.29	9200	490	-	-	63	1.5	2300000	-	510	-	-	420	250	1100
SCU10-001-MW (3.761 m)	12/19/14	120	<1	<1	37	<1	<2	86	0.34	120000	<1	0.79	<2	110	0.78	12000	11000	<0.013	<2	2.1	<100	7800	<1	<0.1	37000	420	<0.1	<2	<2	0.23	<2	35
	12/11/15	15	<1.0	<1.0	69	<1.0	<2.0	80	0.13	97000	<1.0	1.4	<2.0	190	<0.50	11000	16000	<0.013	<2.0	3.7	140	6500	<1.0	<0.10	43000	380	<0.10	<2.0	<2.0	0.33	<2.0	8.3
SCU10-004-MW (5.771 m)	9/17/04	101	<0.40	15.7	87.2	<0.50	NM	<100	<0.017	244000	<1.0	<1.0	<2.0	<100	NM	1330	10	<0.013	<4.0	<3.0	<100	10000	3	<0.10	151000	1160	<0.80	<20	NM	<0.15	10	2
	11/19/08	<5.0	1.2	4.3	56	<0.50	<2.0	<100	<0.017	130000	<1.0	<1.0	<2.0	<100	<1.0	6000	14	<0.013	6.9	<3.0	<100	13000	3.1	<0.10	140000	550	<0.80	<20	<3.0	2.4	8.0	<5.0
	11/10/10	13	<0.40	8.1	49	<0.50	<2.0	<100	<0.017	100000	<1.0	<1.0	<2.0	<100	<1.0	5000	83	<0.013	6.6	<3.0	<100	9000	1.9	<0.10	92000	470	<0.80	<20	<3.0	1.6	7.5	<5.0
	11/23/12	<5.0	<0.40	0.96	78	<0.50	<2.0	110	<0.017	99000	<1.0	<1.0	<2.0	<100	<1.0	10000	21	0.023	<4.0	<3	<100	<600	<1.0	<0.10	13000	6200	<0.80	<20	<3.0	2	<2.0	<5.0
	12/2/13	39	<1.0	11	57	<1.0	<2.0	69	<0.010	100000	<1.0	<0.40	<2.0	110	<0.50	3600	73	<0.013	5.4	<2.0	<100	10000	1.2	<0.10	100000	540	<0.10	<2.0	2.9	1.2	7.3	6.2
	12/19/14	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	NM	NM
	12/11/15	35	<1.0	11	41	<1.0	<2.0	62	0.044	83000	<1.0	<0.40	<2.0	110	<0.50	2800	51	<0.013	6.1	<2.0	170	11000	1.2	<0.10	150000	440	<0.10	<2.0	<2.0	0.8	4.9	<5.0
SCU18-010-MW (4.941 m)	9/7/10	40	1.1	7.5	26	<0.50	<2.0	<100	<0.017	170000	<1.0	<1.0	<2.0	<100	<1.0	240	<4.0	NM	29	<3.0	<100	12000	3.6	<0.10	38000	740	<0.80	<20	<3.0	<0.15	98	<5.0
	11/17/10	33	<0.40	6.5	33	<0.50	<2.0	<100	<0.017	250000	1.7	<1.0	<2.0	120	<1.0	880	<4.0	0.025	28	<3.0	<100	11000	9.8	<0.10	23000	1000	<0.80	<20	<3.0	<0.15	130	<5.0
	11/28/11	140	1.8	5.5	39	<0.50	<2.0	<100	<0.017	2200000	3.1	<1.0	<2.0	380	1.2	1400	15	0.017	22	<3.0	<100	12000	2.3	<0.10	20000	830	<0.80	<20	<3.0	0.38	140	<5.0
	11/22/12	31	3.2	6.6	39	<0.50	<2.0	<100	<0.017	200000	2.3	<1.0	<2.0	130	<1.0	830	<4.0	0.021	20	<3.0	<100	14000	2.8	<0.10	20000	890	<0.80	<20	<3.0	<0.15	110	<5.0
	11/29/13	27	1.4	7.2	33	<1.0	<2.0	59	<0.010	180000	2.9	<0.40	<2.0	69	<0.50	750	3.7	0.013	20	<2.0	100	13000	1.4	<0.10	26000	790	<0.10	<2.0	<2.0	0.45	54	6.2
	12/18/14	120	2.8	6.2	37	<1	<2	74	0.052	160000	4.8	<0.4	2.8	160	0.52	2300	8.2	<0.013	17	<2	<100	12000	2.1	<0.1	18000	700	<0.1	<2	2.5	1.5	67	<5
	11/25/15	8.6	2.9	5.8	44	<1.0	<2.0	84	<0.010	140000	3.7	<0.40	2.2	94	<0.50	1700	<2.0	<0.013	15	<2.0	<100	11000	2.2	<0.10	19000	640	<0.10	<2.0	<2.0	0.51	82	<5.0
SCU18-011-MW (4.392 m)	9/7/10	36	<0.40	3.5	25	<0.50	<2.0	230	<0.017	160000	<1.0	<1.0	<2.0	1300	<1.0	39000	350	NM	9.3	<3.0	<100	10000	<1.0	<0.10	20000	520	<0.80	<20	<3.0	0.43	<2.0	<5.0
	11/17/10	16	<0.40	3.4	22	<0.50	<2.0	180	<0.017	150000	<1.0	<1.0	<2.0	1300	<1.0	39000	330	<0.013	8.9	<3.0	<100	9800	1.4	<0.10	17000	560	<0.80	<20	<3.0	<0.15	<2.0	<5.0
	11/17/10[D]	17	<0.40	3.5	22	<0.50	<2.0	170	<0.017	150000	<1.0	<1.0	<2.0	1300	<1.0	36000	330	<0.013	9.1	<3.0	<100	9400	2.2	<0.10	17000	540	<0.80	<20	<3.0	<0.15	<2.0	<5.0
	10/28/11	21	<0.40	3.4	20	<0.50	<2.0	180	<0.017	130000	<1.0	<1.0	<2.0	740	<1.0	24000	230	0.013	9.6	<3.0	<100	11000	<1.0	<0.10	19000	470	<0.80	<20	<3.0	<0.15	<2.0	<5.0
	11/22/12	<5.0	<0.40	3.6	23	<0.50	<2.0	<100	<0.017	150000	<1.0	<1.0	<2.0	<100	<1.0	24000	210	<0.013	<4.0	<3.0	<100	14000	<1.0	<0.10	29000	620	<0.80	<20	<3.0	<0.15	<2.0	<5.0
	11/29/13	23	<1.0	4.3	21	<1.0	<2.0	150	<0.010	150000	<1.0	<0.40	<2.0	830	<0.50	24000	330	<0.013	11	<2.0	<100	14000	<1.0	<0.10	21000	750	<0.10	<2.0	<2.0	<0.10	<2.0	8.2
	12/18/14	110	<1	3.5	22	<1	<2	130	0.076	140000	<1	<0.4	<2	470	<0.5	17000	300	<0.013	13	3.8	<100	16000	<1	<0.1	22000	800	<0.1	<2	2.2	<0.1	<2	<5
	11/25/15	9.8	<1.0	3.2	20	<1.0	<2.0	130	<0.010	130000	<1.0	<0.40	<2.0	110	<0.50	15000	240	<0.013	13	2.0	<100	16000	<1.0	<0.10	19000	720	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
SCU19-002-MWA (8.459 m)	9/20/05	<5.0	<0.40	<0.60	67	<0.50	<2.0	<100	0.61	770000	<1.0	<1.0	<2.0	<100	<1.0	140000	120	<0.013	<4.0	<3.0	<100	37000	35	<0.10	1000000	41000	<0.80	<20	<3.0	<0.15	<2.0	55
	11/18/10	<5.0	<0.40	<0.60	130	<0.50	<2.0	<100	<0.017	450000	<1.0	<1.0	<2.0	<100	<1.0	190000	85	<0.013	<4.0	<3.0	<100	62000	<1.0	<0.10	1600000	18000	<0.80	<20	<3.0	<0.15	<2.0	<5.0
	10/26/11	20	<0.40	2.4	98	<0.50	<2.0	560	0.049	490000	<1.0	1.3	<2.0	110	<1.0	130000	55	<0.013	6.4	6.4	<100	38000	7.3	<0.10	990000	24000	<0.80	<20	<3.0	0.28	<2.0	<5.0
	11/21/12	17	<0.40	5.2	83	<0.50	<2.0	410	<0.017	610000	<1.0	1.1	<2.0	340	<1.0	130000	83	<0.013	6.2	<3.0	<100	31000	12	<0.10	760000	33000	<0.80	<20	<3.0	0.61	3	<5.0
	11/27/13	38	<1.0	1.0	56	<1.0	<2.0	430	<0.010	460000	<1.0	<0.40	<2.0	800	0.52	93000	88	<0.013	5.2	<2.0	250	22000	<1.0	<0.10	560000	26000	<0.10	<2.0	<2.0	0.80	<2.0	7.3
	12/17/14	28	<1	1.4	65	<1	<2	410	0.024	400000	<1	<0.4	<2	330	<0.5	75000	80	0.035	5.4	<2	<100	20000	<1	<0.1	430000	22000	<0.1	<2	<2	0.8	<2	8.7
	12/02/15	28	<1.0	1.1	57	<1.0	<2.0	410	<0.010	430000	<1.0	<0.40	<2.0	480	<0.50	84000	79	<0.013	6	<2.0	<100	20000	<1.0	<0.10	500000	23000	<0.10	<2.0	<2.0	0.76	<2.0	<5.0
SCU19-002-MWB (21.129 m)	9/22/05	<5.0	<0.40	<0.60	49	<0.50	<2.0	<100	2.2	1200000	<1.0	<1.0	<2.0	<100	<1.0	170000	600	<0.013	<4.0	<3.0	25000	25000	49	<0.10	730000	100000	<0.80	<20	<3.0	5.2	<2.0	<5.0
	11/18/10	<5.0	<0.40	<0.60	63	<0.50	<2.0	<100	<0.017	1400000	<1.0	<1.0	<2.0	1200	<1.0	180000	630	<0.013	<4.0	<3.0	<100	20000	<1.0	<0.10	310000	150000	<0.80	<20	<3.0	<0.15	<2.0	<5.0
	10/26/11	9.5	<0.40	9.7	47	<0.50	<2.0	490	<0.017	120000	2.4	3.5	<2.0	1000	<1.0	160000	530	<0.013	<4.0	17	<100	19000	21	<0.10	540000	120000	<0.80	<20	3.2	3.7	<2.0	5.4
	11/21/12	12	<0.40	11	83	<0.50	<2.0	440	<0.017	1600000	<1.0	3.5	<2.0	1500	<1.0	180000	650	<0.013	<4.0	7.2	<100	22000	37	<0.10	410000	140000	<0.80	<20	<3.0	2	<2.0	6.4
	11/21/12[D]	22	<0.40	12	83	<0.50	<2.0	590	<0.017	1600000	<1.0	3.9	<2.0	3000	<1.0	190000	630	0.013	<4.0	14	<100	22000	46	<0.10	420000	140000	<0.80	<20	<3.0	1.8	<2.0	5.9
	11/27/13	39	<1.0	8.0	66	<1.0	<2.0	470	<0.010	1800000	<1.0	<0.40	<2.0	2400	0.76	180000	600	<0.013	2.8	<2.0	120	23000	<1.0	<0.10	280000	150000	<0.10	<2.0	<2.0	1.2	<2.0	11
	12/17/14	18	<1	7.7	69	<1	<2	460	0.035	1700000	<1	<0.4	<2	2100	0.97	180000	570	<0.013	2.7	<2	<100	22000	<1	<0.1	274000	170000	<0.1	<2	<2	1.2	<2	10
	11/30/15	<50	<10	<10	61	<10	<20	<500	<0.10	1600000	<10	<4.0	<20	1900	<5.0	180000	570	0.013	<20	<20	<1000	22000	<10	<1.0	330000	150000	<1.0	<20	<20	1.6	<20	<50
SCU19-010-MW (8.142 m)	7/26/03	29	<0.40	11	75	<0.50	<2.0	260	<0.017	130000	<1.0	<1.0	<2.0	<100	<1.0	16000	510	<0.013	11	<3.0	220	530	1.9	<0.10	100000	490	<0.80	<20	<3.0	1.7	4.3	2.9
	11/27/12	25	<0.40	6.2	57	<0.50	<2.0	290	<0.017	130000	<1.0	<1.0	<2.0	140	<1.0	8400	120	NM	14	<3.0	<100	35000	6.2	<0.10	48000	530	<0.80	<20	<3.0	0.43	25	<5.0
	12/1/13	27	<1.0	4.4	48	<1.0	<2.0	260	0.012	130000	6.2	<0.40	<2.0	320	<0.50	NM	63	<0.013	13	<2.0	140	28000	3.0	<0.10	31000	490	<0.10	<2.0	<2.0	0.31	38	5.9
	12/18/14	37	<1	2.8	40	<1	<2	280	0.036	99000	12	<0.4	2.3	290	<0.5	10000	17	<0.013	10	<2	110	20000	3	<0.1	24000	380	<0.1	<2	<2	0.64	25	<5
	11/30/15	38	<1.0	5.0	32	<1.0	<2.0	260	<0.010	80000	<1.0	<0.40	<2.0	150	<0.50	3900	42	0.022	9.9	<2.0	150	27000	1.5	<0.10	49000	310	<0.10	<2.0	<2.0	0.26	6.5	<5.0
SCU19-015-MW (6.479 m)	9/15/05	9.7	<0.40	2.2	41	<0.50	<2.0	200	<0.017	150000	<1.0	<1.0	<2.0	<100	<1.0	4900	41	<0.013	<4.0	<3.0	<100	26000	1.5	<0.10	24000	570	<0.80	<20	<3.0	2.6	4.9	<5.0
	11/18/10	14	<0.40	1.4	58	<0.50	<2.0	460	0.025	320000	<1.0	<1.0	<2.0	<100	<1.0	10000	71	<0.013	<4.0	<3.0	<100	36000	4.2	<0.10	53000	1600	<0.80	<20	<3.0	6.6	5.3	<5.0
	7/27/11	13	<0.40	1.4	38	<0.50	<2.0	420	0.022	290000	<1.0	<1.0	<2.0	<100	<1.0	11000	58	NM	<4.0	<3.0	<100	27000	4.1	<0.10	27000	1300	<0.80	<20	<3.0	3.7	4.2	<5.0
	10/26/11	110	1.6	1.2	41	<0.50	<2.0	520	<0.017	350000	<1.0	<1.0	<2.0	<100	<1.0	12000	64	<0.013	<4.0	<3.0	<100	29000	19	<0.10	33000	<2.0	<0.80	<20	5.4	32	7.7	<5.0
	11/23/12	7	<0.40	2.3	37	<0.50	<2.0	620	<0.017	450000	<1.0	<1.0	<2.0	2800	<1.0	13000	570	<0.013	4	<3.0	<100	30000	17	<0.10	24000	2000	<0.80	<20	<3.0	24	7.8	<5.0
	11/29/13	7.2	<1.0	1.4	28	<1.0	<2.0	540	<0.010	370000	<1.0	<0.40	<2.0	65	<0.50	9800	38	<0.013	2.3	<2.0	<100	25000	22	<0.10	27000	1600	<0.10	<2.0	<2.0	7.3	8.7	7.0
	12/18/14	47	<1	1.4	28	<1	<2	540	0.026	400000	<1	<0.4	<2	360	<0.5	9700	170	<0.013	2.8	<2	<100	21000	20	<0.1	14000	1700	<0.1	<2	2.1	10	9.2	<5
	12/2/15	11	<1.0	1.2	29	<1.0	<2.0	490	<0.010	330000	<1.0	<0.40	<2.0	<50	<0.50	8100	3.5	<0.013	2.1	<2.0	<100	21000	20	<0.10	22000	1500	<0.10	<2.0	<2.0	6.2	7.5	<5.0
SCU19-029-MW (5.633 m)	7/28/11	400	<0.40	8.6	44	<0.50	<2.0	630	0.033	7400	<1.0	<1.0	<2.0	400	2.7	650	4100	NM	17	<3.0	520	22000	1.4	<0.10	250000	66	<0.80	<20	11	0.98	2.4	8.3
	10/28/11	250	<0.40	12	46	<0.50	<2.0	600	0.035	20000	<1.0	<1.0	<2.0	360	1.5	6700	1000	0.17	21	<3.0	720	27000	<1.0	<0.10	280000	340	<0.80	<20	6.1	0.80	<2.0	<5.0
	11/27/12	390	<0.40	18	66	<0.50	<2.0	610	<0.017	26000	<1.0	<1.0	<2.0	1200	<1.0	5600	2200	NM	22	<3.0	810	27000	<1.0	<0.10	240000	120	<0.80	<20	5.9	0.4	3.1	5.7
	12/7/13	240	<1.0	14	52	<1.0	<2.0	570	0.028	20000	<1.0	0.57	<2.0	850	0.54	4900	1500	<0.013	19	<2.0	790	26000	<1.0	<0.10	230000	100	<0.10	<2.0	6.7	0.35	<2.0	37
	12/18/14	85	<1	13	76	<1	<2	430	0.031	59000	<1	<0.4	<2	1500	<0.5	7200	2800	<0.013	15	<2	480	24000	<1	<0.1	160000	240	<0.1	<2	<2	0.17	<2	6
	11/25/15	76	<1.0	11	45	<1.0	<2.0	680	<0.010	16000	<1.0	<0.40	<2.0	410	<0.50	3800	1100	<0.013	19	<2.0	560	23000	<1.0	<0.10	230000	88	<0.10	<2.0	2.2	0.18	<2.0	<5.0

TABLE A-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER/DECEMBER 2015 HCP
GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Total Well Depth)	Sample Date	Dissolved Aluminum (Al)	Dissolved Antimony (Sb)	Dissolved Arsenic (As)	Dissolved Barium (Ba)	Dissolved Beryllium (Be)	Dissolved Bismuth (Bi)	Dissolved Boron (B)	Dissolved Cadmium (Cd)	Dissolved Calcium (Ca)	Dissolved Chromium (Cr)	Dissolved Cobalt (Co)	Dissolved Copper (Cu)	Dissolved Iron (Fe)	Dissolved Lead (Pb)	Dissolved Magnesium (Mg)	Dissolved Manganese (Mn)	Mercury total (Hg)	Dissolved Molybdenum (Mo)	Dissolved Nickel (Ni)	Dissolved Phosphorus (P)	Dissolved Potassium (K)	Dissolved Selenium (Se)	Dissolved Silver (Ag)	Dissolved Sodium (Na)	Dissolved Strontium (Sr)	Dissolved Thallium (Tl)	Dissolved Tin (Sn)	Dissolved Titanium (Ti)	Dissolved Uranium (U)	Dissolved Vanadium (V)	Dissolved Zinc (Zn)
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NSE Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard MOE Table 3[2]		-	20000	1900	29000	67	-	45000	2.7	-	810	66	87	-	25	-	-	0.29	9200	490	-	-	63	1.5	2300000	-	510	-	-	420	250	1100
SCU19-030-MW (4.993 m)	7/28/11	28	<0.40	1.4	110	<0.50	<2.0	310	<0.017	190000	<1.0	<1.0	<2.0	200	1.6	810	5900	NM	<4.0	3.1	<100	17000	5	<0.10	66000	830	<0.80	<20	<3.0	1.40	<2.0	<5.0
	10/28/11	370	<0.40	0.60	82	<0.50	<2.0	310	0.024	190000	<1.0	<1.0	<2.0	510	5.2	56000	620	<0.013	<4.0	<3.0	<100	16000	1.0	<0.10	51000	800	<0.80	<20	8.5	1.8	<2.0	10
	11/27/12	17	<0.40	0.63	79	<0.50	<2.0	210	<0.017	230000	<1.0	<1.0	<2.0	<100	<1.0	53000	560	NM	<4.0	<3.0	<100	16000	<1.0	<0.10	37000	1000	<0.80	<20	<3.0	1.5	<2.0	<5.0
	12/7/13	23	<1.0	<1.0	61	<1.0	<2.0	210	<0.010	200000	<1.0	<0.40	<2.0	<50	0.52	37000	370	<0.013	<2.0	<2.0	130	15000	1.1	<0.10	27000	770	<0.10	<2.0	3.3	1.1	<2.0	<5.0
	12/18/14	130	<1	<1	52	<1	<2	180	0.048	170000	<1	<0.4	<2	180	1.1	29000	300	<0.013	<2	<2	100	12000	1.5	<0.1	22000	700	<0.1	<2	3.1	0.73	<2	<5
	11/25/15	<5.0	<1.0	<1.0	50	<1.0	<2.0	230	<0.010	170000	<1.0	<0.40	<2.0	<50	<0.50	26000	240	<0.013	<2.0	<2.0	<100	15000	<1.0	<0.10	29000	690	<0.10	<2.0	<2.0	0.80	<2.0	<5.0
SCU19-031-MW (7.398 m)	7/27/11	110	<0.40	3.30	48	<0.50	<2.0	340	0.025	180000	<1.0	1.3	<2.0	640	3.9	580	38000	NM	9.5	3.7	<100	36000	<1.0	<0.10	72000	680	<0.80	<20	<3.0	2.3	<2.0	<5.0
	7/27/11[D]	65	<0.40	3.40	49	<0.50	<2.0	350	0.020	180000	<1.0	1.3	<2.0	460	1.7	580	38000	NM	9.5	3.6	<100	36000	1.1	<0.10	71000	690	<0.80	<20	<3.0	2.3	<2.0	<5.0
	10/26/11	130	0.68	3	53	<0.50	<2.0	330	0.044	170000	1.1	<1.0	<2.0	970	<1.0	40000	840	<0.013	8.5	<3.0	<100	39000	1.8	<0.10	77000	710	<0.80	<20	4.8	2.7	<2.0	9.1
	11/27/12	13	<0.40	2.4	46	<0.50	<2.0	280	<0.017	150000	<1.0	<1.0	<2.0	<100	<1.0	47000	1100	NM	12	<3.0	<100	43000	2.7	<0.10	100000	940	<0.80	<20	<3.0	3.1	<2.0	5.7
	11/27/13	16	<1.0	3.3	95	<1.0	<2.0	360	<0.010	160000	1.7	0.45	<2.0	570	<0.50	46000	1200	<0.013	8.2	<2.0	<100	42000	2.1	<0.10	60000	780	<0.10	<2.0	<2.0	2.7	<2.0	13
	12/16/14	13	<1	2.1	69	<1	<2	300	0.041	130000	2.5	<0.4	<2	<50	<0.5	42000	220	<0.013	7.6	<2	<100	37000	1.9	<0.1	98000	760	<0.1	<2	<2	3.3	3	6.7
	11/25/15	5.0	<1.0	2.4	36	<1.0	<2.0	440	<0.010	120000	<1.0	<0.40	<2.0	170	<0.50	37000	1700	<0.013	8.2	<2.0	<100	39000	<1.0	<0.10	98000	750	<0.10	<2.0	<2.0	2.4	<2.0	<5.0
SCU20-013-MW (7.952 m)	9/3/10	220	5.3	14	77	<5.0	<20	<1000	0.29	160000	<10	<10	<20	<1000	<10	<600	<40	NM	85	46	<1000	41000	<10	<1.0	310000	1800	<8.0	<200	<30	<1.5	46	<50
	11/17/10	170	<0.40	11	87	<0.50	<2.0	<100	0.19	140000	<1.0	<1.0	<2.0	<100	<1.0	<60	<4.0	0.026	30	40	<100	40000	9.1	<0.10	190000	1800	<0.80	<20	<3.0	<0.15	46	<5.0
	10/27/11	94	<0.40	11	85	<0.50	<2.0	<100	<0.017	120000	3.9	<1.0	<2.0	<100	<1.0	<60	<4.0	0.036	84	32	<100	36000	11	<0.10	150000	1500	<0.80	<20	<3.0	<0.15	33	<5.0
	11/21/12	130	<0.40	15	98	<0.50	<2.0	<100	<0.017	150000	<1.0	<1.0	<2.0	<100	<1.0	<60	<4.0	0.017	57	39	<100	50000	2.8	<0.10	150000	1800	<0.80	<20	<3.0	<0.15	29	<5.0
	11/26/13	130	<1.0	13	89	<1.0	<2.0	57	<0.010	130000	<1.0	<0.40	<2.0	<50	<0.50	<100	<2.0	0.013	47	35	140	47000	<1.0	<0.10	140000	1500	<0.10	<2.0	<2.0	<0.10	21	5.5
	12/16/14	150	<1	12	100	<1	<2	<50	0.039	130000	<1	<0.4	<2	<50	<0.5	<100	2.6	<0.013	67	35	120	47000	3.3	<0.1	16000	1500	<0.1	<2	<2	<0.1	21	5.4
	11/25/15	140	<1.0	13	91	<1.0	<2.0	<50	<0.010	120000	<1.0	<0.40	<2.0	<50	<0.50	<100	<2.0	<0.013	60	34	<100	46000	<1.0	<0.10	120000	1500	<0.10	<2.0	<2.0	<0.10	17	<5.0
SCU20-014-MW (7.777 m)	9/3/10	60	0.63	7.9	27	<0.50	<2.0	<100	<0.017	170000	<1.0	<1.0	<2.0	<100	<1.0	<60	<4.0	-	54	22	200	15000	2.2	<0.10	56000	470	<0.80	<20	<3.0	<0.15	8.1	<5.0
	11/17/10	85	<0.40	9.2	34	<0.50	<2.0	110	<0.017	160000	<1.0	<1.0	<2.0	<100	<1.0	<60	<4.0	0.071	63	23	240	20000	11	<0.10	58000	530	<0.80	<20	<3.0	<0.15	7.3	<5.0
	10/27/11	130	1.2	9.1	37	<0.50	<2.0	<100	<0.017	140000	<1.0	<1.0	<2.0	<100	1.8	<60	<4.0	0.057	63	44	260	22000	14	<0.10	56000	550	<0.80	<20	<3.0	<0.15	<2.0	<5.0
	11/22/12	150	<0.40	10	41	<0.50	<2.0	<100	<0.017	160000	<1.0	<1.0	<2.0	<100	<1.0	<60	<4.0	0.039	41	49	210	30000	2.9	<0.10	51000	690	<0.80	<20	<3.0	<0.15	5	<5.0
	11/26/13	170	<1.0	9.3	31	<1.0	<2.0	100	<0.010	150000	<1.0	<0.40	<2.0	<50	<0.50	<100	<2.0	0.048	40	31	330	27000	4.3	<0.10	51000	620	<0.10	<2.0	<2.0	<0.10	2.1	6.6
	12/16/14	270	<1	9.5	38	<1	<2	72	0.038	140000	<1	<0.4	<2	<50	<0.5	<100	<2	0.07	42	61	400	29000	10	<0.1	56000	740	<0.1	<2	<2	<0.1	5.7	<5
	11/25/15	280	<1.0	11	35	<1.0	<2.0	83	<0.010	130000	<1.0	<0.40	<2.0	<50	<0.50	<100	<2.0	0.052	35	47	310	28000	2.0	<0.10	52000	680	<0.10	<2.0	<2.0	<0.10	2.3	<5.0
SCU20-015-MW (9.617 m)	9/3/10	31	0.54	11	28	<0.50	<2.0	<100	<0.017	320000	<1.0	<1.0	<2.0	<100	<1.0	520	9.5	NM	43	7.4	<100	15000	<1.0	<0.10	58000	770	<0.80	<20	<3.0	<0.15	59	<5.0
	11/17/10	24	<0.40	13	20	<0.50	<2.0	<100	<0.017	280000	<1.0	<1.0	<2.0	<100	<1.0	440	15	<0.013	49	3.3	<100	14000	1.1	<0.10	50000	690	<0.80	<20	<3.0	<0.15	5.8	<5.0
	10/27/11	200	2.9	16	21	<0.50	<2.0	<100	0.018	210000	5	<1.0	<2.0	440	2.1	420	31	0.017	42	8.3	100	13000	<1.0	<0.10	40000	540	<0.80	<20	9.8	<0.15	5.5	<5.0
	11/22/12	45	<0.40	16	18	<0.50	<2.0	<100	<0.017	210000	33	<1.0	<2.0	160	<1.0	<60	4.5	<0.013	41	6.3	<100	16000	1.2	<0.10	43000	530	<0.80	<20	<3.0	<0.15	3.6	<5.0
	11/26/13	42	<1.0	15	19	<1.0	<2.0	78	<0.010	210000	<1.0	<0.40	<2.0	<50	<0.50	<100	<2.0	<0.013	42	5.0	110	15000	<1.0	<0.10	41000	530	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12/16/14	47	<1	15	22	<1	<2	73	0.02	190000	<1	<0.4	<2	<50	<0.5	<100	<2	<0.013	42	6.6	<100	14000	<1	<0.1	40000	450	<0.1	<2	<2	<0.1	3.3	<5
	11/25/15	30	<1.0	18	17	<1.0	<2.0	91	<0.010	160000	<1.0	<0.40	<2.0	<50	<0.50	<100	<2.0	<0.013	36	5.2	<100	13000	<1.0	<0.10	36000	380	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
SCU20-016-MW (9.524 m)	9/7/10	130	<0.40	5.8	42	<0.50	<2.0	<100	<0.017	200000	<1.0	<1.0	<2.0	<100	<1.0	280	<4.0	NM	66	46	<100	32000	3.0	<0.10	67000	950	<0.80	<20	<3.0	<0.15	2.2	<5.0
	11/17/10	26	<0.40	6.4	30	<0.50	<2.0	130	0.024	130000	<1.0	<1.0	<2.0	<100	<1.0	2800	4.3	<0.013	53	38	<100	24000	3.4	<0.10	39000	730	<0.80	<20	<3.0	<0.15	11	6.0
	10/27/11	30	1.1	8.8	32	<0.50	<2.0	160	0.024	140000	3.4	<1.0	<2.0	<100	<1.0	840	<4.0	<0.013	53	30	<100	23000	1.6	<0.10	36000	750	<0.80	<20	<3.0	<0.15	9.6	<5.0
	11/22/12	31	<0.40	8	32	<0.50	<2.0	140	<0.017	130000	<1.0	<1.0	<2.0	<100	<1.0	1200	<4.0	<0.013	38	14	<100	25000	1.2	<0.10	36000	670	<0.80	<20	<3.0	<0.15	11	<5.0
	11/26/13	95	<1.0	9.0	34	<1.0	<2.0	140	<0.010	140000	<1.0	<0.40	<2.0	<50	<0.50	160	<2.0	<0.013	38	25	110	28000	<1.0	<0.10	37000	870	<0.10	<2.0	<2.0	<0.10	11	6.8
	12/16/14	110	<1	6.1	39	<1	<2	100	0.039	160000	<1	<0.4	<2	<50	<0.5	180	<2	<0.013	33	24	<100	24000	1.7	<0.1	26000	890	<0.1	<2	<2	<0.1	26	<5
	11/25/15	86	<1.0	8.1	36	<1.0	<2.0	130	<0.010	130000	<1.0	<0.40	<2.0	<50	<0.50	100	<2.0	<0.013	34	17	<100	23000	<1.0	<0.10	35000	740	<0.10	<2.0	<2.0	<0.10	29	<5.0
SCU20-017-MW (7.311 m)	9/7/10	180	<0.40	4.6	62	<0.50	<2.0	<100	<0.017	160000	<1.0	<1.0	<2.0	<100	<1.0	<60	<4.0	NM	6.9	6.3	<100	11000	5.0	<0.10	27000	890	<0.80	<20	<3.0	<0.15	4.2	<5.0
	11/17/10	230	<0.40	6.4	59	<0.50	<2.0	<100	<0.017	160000	3.1	<1.0	<2.0	<100	<1.0	<60	<4.0	<0.013	30	8.6	<100	13000	14	<0.10	32000	820	<0.80	<20	<3.0	<0.15	3.1	<5.0
	10/27/11	49	0.86	5.2	62	<0.50	<2.0	<100	<0.017	110000	2.8	<1.0	<2.0	<100	<1.0	3200	<4.0	0.015	6.3	3.9	<100	7000	1.2	<0.10	18000	770	<0.80	<20	<3.0	0.32	<2.0	<5.0
	11/21/12	23	<0.40	4.4	69	<0.50	<2.0	<100	<0.017	140000	<1.0	<1.0	<2.0	<100	<1.0	7800	11	<0.013	8.8	<3.0	<100	8600	3.1	<0.10	21000	900	<0.80	<20	<3.0	1.2	4.8	<5.0
	11/26/13	100	<1.0	7.9	56	<1.0	<2.0	110	<0.010	160000	<1.0	<0.40	<2.0	<50	<0.50	<100	<2.0	<0.013	14	26	170	13000	2.4	<0.10	36000	910	<0.10	<2.0	<2.0	<0.10	2.7	7.6
	12/16/14	150	<1	6.7	52	<1	<2	90	0.053	150000	<1	<0.4	<2	<50	<0.5	<100	<2	0.025	18	16	120	12000	11	<0.1	26000	820	<0.1	<2	<2	<0.1	5.9	<5
	11/25/15	180	<1.0	6.9	58	<1.0	<2.0	94	<0.010	160000	<1.0	<0.40	<2.0	<50	<0.50	<100	<2.0	<0.013	7.0	12	<100	13000	3.4	<0.10	27000	910	<0.10	<2.0	<2.0	<0.10	3.7	<5.0

TABLE A-3
LTMM GROUNDWATER MONITORING EVENT NOVEMBER/DECEMBER 2015 HCP
GROUNDWATER ANALYTICAL RESULTS - INORGANIC CHEMISTRY

Sample Location (Total Well Depth)	Sample Date	Dissolved Aluminum (Al)	Dissolved Antimony (Sb)	Dissolved Arsenic (As)	Dissolved Barium (Ba)	Dissolved Beryllium (Be)	Dissolved Bismuth (Bi)	Dissolved Boron (B)	Dissolved Cadmium (Cd)	Dissolved Calcium (Ca)	Dissolved Chromium (Cr)	Dissolved Cobalt (Co)	Dissolved Copper (Cu)	Dissolved Iron (Fe)	Dissolved Lead (Pb)	Dissolved Magnesium (Mg)	Dissolved Manganese (Mn)	Mercury total (Hg)	Dissolved Molybdenum (Mo)	Dissolved Nickel (Ni)	Dissolved Phosphorus (P)	Dissolved Potassium (K)	Dissolved Selenium (Se)	Dissolved Silver (Ag)	Dissolved Sodium (Na)	Dissolved Strontium (Sr)	Dissolved Thallium (Tl)	Dissolved Tin (Sn)	Dissolved Titanium (Ti)	Dissolved Uranium (U)	Dissolved Vanadium (V)	Dissolved Zinc (Zn)
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NSE Tier 1 EQS[1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standard MOE Table 3[2]		-	20000	1900	29000	67	-	45000	2.7	-	810	66	87	-	25	-	-	0.29	9200	490	-	-	63	1.5	2300000	-	510	-	-	420	250	1100
SCU20-018-MW (5.054 m)	9/7/10	<50	<4.0	<6.0	38	5.0	20	1000	0.17	330000	<10	<10	<20	<1000	<10	13000	<40	NM	<40	<30	<1000	7700	<10	<1.0	13000	1100	<8.0	<200	<30	<1.5	<20	<5.0
	11/17/10	14	<0.40	2.4	37	<0.50	<2.0	<100	<0.017	290000	<1.0	<1.0	<2.0	<100	<1.0	21000	46	<0.013	6.9	<3.0	<100	6000	4.3	<0.10	10000	1700	<0.80	<20	<3.0	1.7	10	<5.0
	10/27/11	15	1.3	2.6	32	<0.50	<2.0	<100	<0.017	350000	<1.0	<1.0	<2.0	<100	<1.0	22000	160	<0.013	5.4	<3.0	<100	5500	<1.0	<0.10	14000	3700	<0.80	<20	3.3	2.6	8	<5.0
	11/21/12	100	<0.40	3.7	34	<0.50	<2.0	<100	<0.017	520000	<1.0	1.1	<2.0	<100	<1.0	22000	400	<0.013	4.8	<3.0	<100	4300	1.3	<0.10	16000	9300	<0.80	<20	4.2	2.1	4.8	<5.0
	11/26/13	13	<1.0	2.2	26	<1.0	<2.0	88	<0.010	380000	<1.0	<0.40	<2.0	180	<0.50	25000	300	<0.013	3.5	<2.0	<100	5100	1.2	<0.10	14000	5500	<0.10	<2.0	<2.0	2.3	6.7	7.5
	12/16/14	15	<1	2	24	<1	<2	73	0.092	460000	<1	0.44	<2	220	<0.5	26000	480	<0.013	3.1	<2	<100	3600	<1	<0.1	16000	8400	<0.1	<2	<2	2	3.4	7.6
	11/25/15	<5.0	<1.0	1.8	25	<1.0	<2.0	78	<0.010	330000	<1.0	<0.40	<2.0	75	<0.50	21000	250	<0.013	3.0	<2.0	<100	4200	1.1	<0.10	13000	4900	<0.10	<2.0	<2.0	1.8	6.5	<5.0
SCU26-001-MW (25.16 m)	7/26/03	42	<0.40	<0.60	520	<0.50	<2.0	<100	<0.017	320000	<1.0	<1.0	<2.0	720	<1.0	<60	<4.0	<0.013	6.4	<3.0	<100	20000	1.5	<0.10	23000	2200	<0.80	<20	<3.0	<0.15	<2.0	<5.0
	7/11/12	42	<0.40	<0.60	450	<0.50	<2.0	<100	<0.017	420000	<1.0	<1.0	<2.0	150	<1.0	<60	<4.0	0.059	4.5	3.2	<100	28000	3.5	<0.10	28000	2700	<0.80	<20	<3.0	<0.15	<2.0	<5.0
	11/26/12	29	<0.40	1.7	440	<0.50	<2.0	<100	<0.017	380000	3.1	<1.0	<2.0	310	<1.0	110	<4.0	NM	4.2	<3.0	<100	26000	7.7	<0.10	31000	2900	<0.80	<20	<3.0	<0.15	7.5	<5.0
	12/5/13	25	<1.0	<1.0	440	<1.0	<2.0	<50	<0.010	370000	3.6	<0.40	<2.0	<50	0.53	<100	<2.0	0.027	3.8	<2.0	<100	27000	5.1	<0.10	29000	2700	<0.10	7.5	<2.0	<0.10	<2.0	<5.0
	12/17/14	19	<1	<1	480	<1	<2	<50	0.013	380000	<1	<0.4	<2	<50	<0.5	<100	<2	<0.013	4.2	<2	<100	27000	8.0	<0.1	26000	2800	<0.1	<2	<2	<0.1	<2	<5
	11/27/15	14	<1.0	<1.0	460	<1.0	<2.0	<50	<0.010	390000	<1.0	<0.40	<2.0	<50	<0.50	<100	<2.0	<0.013	4.4	<2.0	<100	26000	4.1	<0.10	26000	2800	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
SCU26-002-MW (30.33 m)	7/11/12	22	<0.40	<0.60	420	<0.50	<2.0	<100	<0.017	450000	<1.0	<1.0	<2.0	100	<1.0	<60	<4.0	<0.013	4.3	4.1	<100	37000	4.7	<0.10	30000	3200	<0.80	<20	<3.0	<0.15	<2.0	<5.0
	11/26/12	80	<0.40	<0.60	420	<0.50	<2.0	<100	<0.017	400000	<1.0	<1.0	<2.0	<100	<1.0	<60	<4.0	NM	<4.0	<3.0	<100	35000	<1.0	<0.10	32000	3100	<0.80	<20	<3.0	<0.15	<2.0	<5.0
	11/26/12[D]	94	<0.40	1	420	<0.50	<2.0	<100	<0.017	400000	2.5	<1.0	<2.0	<100	<1.0	<60	<4.0	NM	4.4	<3.0	<100	37000	5.4	<0.10	35000	3300	<0.80	<20	<3.0	<0.15	3.9	5.9
	12/5/13	49	<1.0	<1.0	420	<1.0	<2.0	<50	<0.010	390000	<1.0	<0.40	<2.0	<50	<0.50	<100	<2.0	0.045	5.1	<2.0	<100	35000	4.3	<0.10	33000	3100	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	12/17/14[D]	27	<1	<1	490	<1	<2	<50	<0.01	410000	<1	<0.4	<2	<50	<0.5	<100	<2	<0.013	3.8	<2	<100	36000	9.7	<0.1	28000	3400	<0.1	<2	<2	<0.1	<2	<5
	12/17/14	28	<1	<1	510	<1	<2	<50	0.017	410000	<1	<0.4	<2	<50	0.53	<100	3	<0.013	3.4	<2	<100	37000	11	<0.1	28000	3300	<0.1	<2	<2	<0.1	<2	<5
	11/27/15	20	<1.0	<1.0	460	<1.0	<2.0	<50	<0.010	430000	<1.0	<0.40	<2.0	<50	<0.50	<100	<2.0	<0.013	4.4	<2.0	<100	36000	4.3	<0.10	28000	3300	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
SCU27-002-MW (44.98 m)	7/26/03	<5.0	<0.40	30	15000	<0.50	<2.0	3100	<0.017	1200000	<1.0	<1.0	<2.0	49000	<1.0	630000	8600	<0.013	4.5	**1000**	<100	91000	<1.0	<0.10	**5100000**	70000	<0.80	<20	9	14	<2.0	<5.0
	7/4/12	<5.0	<0.40	<0.60	8700	<0.50	<2.0	<100	<0.017	1400000	<1.0	<1.0	<2.0	63000	<1.0	770000	7300	<0.013	<4.0	<3.0	<100	110000	<1.0	<0.10	**5700000**	84000	<0.80	<20	<3.0	<0.15	<2.0	<5.0
	7/4/12[D]	<5.0	<0.40	21	9300	<0.50	<2.0	3100	<0.017	1400000	<1.0	<1.0	<2.0	61000	<1.0	730000	7200	<0.013	<4.0	<3.0	<100	110000	28	<0.10	**4800000**	83000	<0.80	<20	<3.0	<0.15	<2.0	<5.0
	11/26/12	<5.0	<0.40	23	7300	<0.50	<2.0	2900	<0.017	1200000	<1.0	<1.0	<2.0	65000	<1.0	660000	7900	<0.013	<4.0	<3.0	<100	100000	21	<0.10	**4900000**	76000	<0.80	<20	<3.0	3.5	<2.0	<5.0
	12/5/13	<50	<10	<10	23000	<10	<20	2700	<0.10	1200000	<10	<4.0	<20	44000	<5.0	700000	4900	<0.013	<20	<20	<1000	96000	<10	<1.0	**5200000**	78000	<1.0	<20	<20	3.8	<20	<50
	12/17/14	18	<1	5.5	**30000**	<1	<2	2500	<0.1	1300000	<1	<0.4	<2	56000	<0.5	660000	5600	0.013	<2	<2	<100	90000	<1	<0.1	**4900000**	92000	<0.1	<2	<2	3.2	<2	31
	11/27/15	<50	<10	<10	**30000**	<10	<20	2600	<0.10	1300000	<10	<4.0	<20	53000	<5.0	680000	5000	<0.013	<20	<20	<1000	87000	<10	<1.0	**4900000**	96000	<1.0	<20	<20	4.1	<20	<50
SCU31-002-MWB (23.445 m)	8/17/05	<5.0	<0.40	<0.60	3200	<0.50	<2.0	<100	<0.017	1200000	<1.0	<1.0	<2.0	<100	<1.0	11000	<4.0	<0.013	<4.0	<3.0	<100	<600	<1.0	<0.10	<300	850	<0.80	<20	<3.0	3	**650**	-
	11/16/10	15	<0.40	<0.60	29	<0.50	<2.0	520	0.025	510000	<1.0	1.3	<2.0	<100	<1.0	110000	520	<0.013	<4.0	<3.0	<100	21000	<1.0	0.28	1500000	19000	<0.80	<20	<3.0	8.4	<2.0	<5.0
	10/25/11	440	9.1	<0.60	28	<0.50	<2.0	<100	<0.017	380000	<1.0	<1.0	<2.0	<100	<1.0	96000	440	<0.013	<4.0	47	<100	17000	13	<0.10	1300000	13000	<0.80	<20	<3.0	7.1	<2.0	32
	11/21/12	8.7	<0.40	6.4	47	<0.50	<2.0	560	<0.017	500000	<1.0	1.1	<2.0	<100	<1.0	100000	560	<0.013	4	<3	<100	23000	15	<0.10	1600000	18000	<0.80	<20	<3.0	6.5	4.4	<5.0
	12/7/13	14	<1.0	1.5	29	<1.0	<2.0	540	<0.010	480000	<1.0	<0.40	<2.0	100	<0.50	99000	530	<0.013	3.0	<2.0	<100	21000	<1.0	<0.10	1500000	17000	<0.10	<2.0	<2.0	7.0	<2.0	<5.0
	12/7/13[D]	23	<1.0	1.5	29	<1.0	<2.0	540	0.012	490000	<1.0	<0.40	<2.0	100	<0.50	98000	530	<0.013	3.0	<2.0	100	21000	<1.0	<0.10	1500000	17000	<0.10	<2.0	<2.0	7.1	<2.0	<5.0
	12/18/14[D]	140	1.1	1.3	86	<1	<2	550	0.025	450000	<1	<0.4	<2	240	<0.5	99000	560	<0.013	3	<2	<100	22000	<1	<0.1	1500000	17000	<0.1	<2	3.5	6.6	<2	7.5
	12/18/14	30	1.3	1.4	81	<1	<2	570	0.024	450000	<1	<0.4	<2	220	<0.5	100000	560	<0.013	3.1	<2	<100	21000	<1	<0.1	1500000	17000	<0.1	<2	<2	6.4	<2	7.2
	12/2/15[D]	<50	<10	<10	33	<10	<20	570	<0.10	440000	<10	<4.0	<20	<500	<5.0	100000	540	<0.013	<20	<20	<1000	20000	<10	<1.0	1500000	17000	<1.0	<20	<20	6.5	<20	<50
	12/2/15	<50	<10	<10	32	<10	<20	570	<0.10	440000	<10	<4.0	<20	<500	<5.0	99000	520	<0.013	<20	<20	<1000	20000	<10	<1.0	1500000	17000	<1.0	<20	<20	6.8	<20	<50
SCU32-001-MWA (22.17 m)	11/24/11	25	<0.40	1	98	<0.50	<2.0	<100	<0.017	270000	<1.0	<1.0	<2.0	<100	<1.0	<60	<4.0	<0.013	71	<3.0	<100	68000	17	<0.10	97000	1900	<0.80	20	<3.0	<0.15	3.7	<5.0
	12/5/13	360	<1.0	1.6	94	<1.0	<2.0	<50	0.011	220000	<1.0	<0.40	5.8	<50	<0.50	180	2.0	<0.013	58	<2.0	<100	45000	4.7	<0.10	64000	2300	<0.10	8.6	<2.0	<0.10	9.4	5.2
	12/17/14	130	<1	1.0	120	<1	<2	<50	<0.1	250000	<1	<0.4	<2	180	0.78	200	10	0.018	620	<2	<100	340000	40	<0.1	400000	2100	<0.1	<2	4.5	<0.1	2.0	5.7
	11/27/15	16	<1.0	<1.0	99	<1.0	<2.0	<50	<0.10	280000	<1.0	<0.40	<2.0	<50	<0.50	<100	<2.0	<0.013	190	<2.0	<100	150000	8.5	<0.10	190000	2000	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
SCU32-002-MW (21.50 m)	11/25/11	680	<0.40	4.7	46	<0.50	<2.0	<100	<0.017	210000	<1.0	<1.0	<2.0	<100	<1.0	<60	<4.0	<0.013	48	<3.0	<100	24000	7.3	<0.10	84000	960	<0.80	<20	<3.0	<0.15	<2.0	<5.0
	12/5/13	670	<1.0	5.0	47	<1.0	<2.0	<50	<0.010	200000	<1.0	<0.40	<2.0	180	<0.50	<100	2.1	<0.013	42	<2.0	<100	29000	3.9	<0.10	76000	920	<0.10	7.8	<2.0	<0.10	<2.0	<5.0
	12/18/14	700	<1	2.8	61	<1	<2	<50	0.054	230000	<1	<0.4	<2	<50	<0.5	<100	<2	<0.013	21	<2	<100	29000	9.5	<0.1	72000	1100	<0.1	<2	<2	<0.1	<2	<5
	11/30/15	510	<1.0	4.6	42	<1.0	<2.0	<50	<0.010	200000	<1.0	<0.40	<2.0	<50	<0.50	<100	<2.0	<0.013	41	<2.0	<100	27000	2.6	<0.10	59000	890	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
SCU32-003-MW (22.74 m)	11/25/11	<50	<4.0	<6.0	150	<5.0	<20	<100	<0.17	250000	<10	<10	<20	<1000	<10	<600	<40	<0.013	130	<30	<1000	80000	28	<1.0	98000	2200	<8.0	<200	<30	<1.5	<20	<50
	12/5/13	79	<1.0	<1.0	130	<1.0	<2.0	<50	0.014	250000	<1.0	<0.40	<2.0	<50	<0.50	<100	<2.0	<0.013	58	<2.0	<100	67000	7.1	<0.10	90000	2700	<0.10	6.9	<2.0	<0.10	3.9	<5.0
	12/18/14	40	<1	<1	140	<1	<2	<50	<0.1	240000	<1	<0.4	<2	<50	<0.5	<100	<2	<0.013	83	<2	<1000	630000	**68**	<0.1	780000	2100	<0.1	<2	<2	<0.1	2.9	<5
	11/30/15	<50	<10	<10	130	<10	<20	<500	<0.10	240000	<10	<4.0	31	<500	<5.0	<1000	<20	<0.013	580	<20	<1000	530000	**77**	<1.0	680000	1900	<1.0	<20	<20	<1.0	<20	<50
MCES-007-MW (30.83 m)	7/26/03	<5.0	<0.40	<0.60	490	<0.50	<2.0	<100	<0.017	380000	<1.0	<1.0	<2.0	690	<1.0	<60	<4.0	<0.013	1.8	<3.0	<100	31000	<1.0	<0.10	35000	2500	<0.80	<20	<3.0	<0.15	<2.0	-
	7/11/12	10	1.2	2.3	23	<0.50	<2.0	<100	<0.017	22000	3.8	<1.0	<2.0	<100	<1.0	600	<4.0	0.013	<4.0	<3.0	<100	4100	1.2	<0.10	21000	160	<0.80	<20	<3.0	0.24	32	<5.0
	11/27/12	38	1.1	2.2	63	<0.50	<2.0	<100	<0.017	56000	9.6	<1.0	<2.0	<100	<1.0	<60	<4.0	NM	6.2	<3.0	<100	8200	1.1	<0.10	54000	510	<0.80	<20	<3.0	<0.15	34	<5.0
	12/5/13	5.0	1.0	1.0	1.0	1.0	2.0	50	0.010	100	1.0	0.40	2.0	50	0.50	100	2.0	<0.013	2.0	2.0	100	100	1.0	0.10	100	2.0	0.10	2.0	2.0	0.10	2.0	5.0
	12/17/14	24	<1	<1	580	<1	<2	<50	0.022	410000	<1	<0.4	<2	<50	<0.5	<100	<2	<0.013	2.1	<2	<100	35000	12	<0.1	33000	3400	<0.1	<2	<2	<0.1	<2	<5
	11/27/15[D]	52	<1.0	<1.0	580	<1.0	<2.0	<50	<0.010	430000	<1.0	<0.40	<2.0	<50	<0.50	<100	2.8	<0.013	2.7	<2.0	<100	34000	4.5	<0.10	30000	3200	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0
	11/27/15	57	<1.0	<1.0	580	<1.0	<2.0	<50	<0.010	430000	<1.0	<0.40	<2.0	<50	<0.50	<100	5.5	0.020	2.3	<2.0	<100	34000	5.5	<0.10	30000	3200	<0.10	<2.0	<2.0	<0.10	<2.0	<5.0

NOTES:

D - Field Duplicate

NM - Not Measured or not analyzed

µg/L - micrograms per litre

- No applicable guideline criteria.

1 - Nova Scotia Environment Evironmental Quality Standards for Groundwater (Coarse Grained Soil, Non-potable Groundwater Commercial/Industrial Site) 2013

2 - Ontario Ministry of Environment, Table 3 Full Depth Generic Site Condition Standards in a Non-potable Groundwater (Coarse Grained Soil) 2011

Underline Exceeds NSE EQS

Bold exceeds MOE Table 3 Standards

SCU10-004-MW was not sampled during the 2014 monitoring event due to product in the well

The DNAPL in SCU32-003-MWA was sampled during the 2015 LTMM monitoring event. The groundwater column in the monitor well was sampled above the DNAPL in the well.

Historical data (i.e., pre-2014) tabulated by SLR Consulting (Canada) Ltd. During historic assessment work.

This summary is to be used in conjunction with, not as a replacement of, the Laboratory Certificates of Analysis, which contain QA/QC information

Appendix B

QC Tables

TABLE B-1
LTMM GROUNDWATER MONITORING EVENT NOVEMBER/DECEMBER 2015 HCP
SUMMARY OF FIELD DUPLICATES AND TRIP BLANKS

FD	Date Sampled	TB	Date Sampled	EB	Date Sampled	FB	Date Sampled
FD-011 - B5O5448	11/27/2015	TB-012 - B5O2857	11/25/2015	EB-002 - B5O6016	11/30/2015	FB-001 - B5O6016	11/30/2015
FD-012 - B5O8246	12/2/2015	TB-013 - B5O5448	11/27/2015				
		TB-014 - B5O6016	11/30/2015				

Notes:
FD - Field Duplicate
TB - Trip Blank
EB - Equipment Blank
FB - Field Blank

TABLE B-2
LTMM GROUNDWATER MONITORING EVENT DECEMBER 2014 HCP
RPD FOR FIELD DUPLICATES (GROUNDWATER) - BTEX/TPH

Sample Location	Sample	Type	Sample Date	Benzene	Toluene	E. Benzene	Xylenes	C6-C10	C10-C16	C16-C21	C21-C32	Modified TPH
				mg/L								
MCES-007-MW	FD-011	Field Duplicate	11/27/2015	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	<0.050	<0.050	<0.10	<0.10
	FD-011	Regular	11/27/2015	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	<0.050	<0.050	<0.10	<0.10
	FD-011	RPD (%)	11/27/2015	NA	NA	NA	NA	NA	NA	NA	NA	NA
SCU31-002-MWB	FD-012	Field Duplicate	12/2/2015	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	<0.050	<0.050	<0.10	<0.10
	FD-012	Regular	12/2/2015	<0.0010	<0.0010	<0.0010	<0.0020	<0.010	<0.050	<0.050	<0.10	<0.10
	FD-012	RPD (%)	12/2/2015	NA	NA	NA	NA	NA	NA	NA	NA	NA

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.
FD - Field Duplicate
RPD - Relative Percent Difference

Appendix C

Laboratory Certificates

Your Project #: 4104251070
Site#: HARBOURSIDE COMMERCIAL PARK
Site Location: HARBOURSIDE COMMERCIAL PARK
Your C.O.C. #: 538679

Attention:Nadine Wambolt

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

Report Date: 2015/12/22
Report #: R3823504
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B5P6629
Received: 2015/12/11, 17:00

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
TEH in Water (PIRI) (1)	1	2015/12/16	2015/12/16	ATL SOP 00113	Atl. RBCA v3 m
TEH in Water (PIRI) (1)	1	2015/12/16	2015/12/17	ATL SOP 00113	Atl. RBCA v3 m
Mercury - Total (CVAA,LL) (1)	2	2015/12/16	2015/12/17	ATL SOP 00026	EPA 245.1 R3 m
Metals Water Diss. MS (as rec'd) (1)	1	N/A	2015/12/16	ATL SOP 00058	EPA 6020A R1 m
Metals Water Diss. MS (as rec'd) (1)	1	N/A	2015/12/17	ATL SOP 00058	EPA 6020A R1 m
PAH in Water by GC/MS (SIM) (1)	1	2015/12/17	2015/12/19	ATL SOP 00103	EPA 8270D 2007 m
PAH in Water by GC/MS (SIM) (1)	1	2015/12/17	2015/12/21	ATL SOP 00103	EPA 8270D 2007 m
VPH in Water (PIRI) (1)	2	N/A	2015/12/17	ATL SOP 00118	Atl. RBCA v3 m
ModTPH (T1) Calc. for Water (1)	2	N/A	2015/12/17	N/A	Atl. RBCA v3 m

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 Maxxam Bedford

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Natalie MacAskill, Sr. Project Manager
Email: NMacAskill@maxxam.ca
Phone# (902)567-1255 Ext:17

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Job #: B5P6629
Report Date: 2015/12/22

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

MERCURY BY COLD VAPOUR AA (WATER)

Maxxam ID		BNE116	BNE117		
Sampling Date		2015/12/11	2015/12/11		
COC Number		538679	538679		
	UNITS	**SCU10-001-MW**	**SCU10-004-MW**	**RDL**	**QC Batch**
Metals					
Total Mercury (Hg)	ug/L	<0.013	<0.013	0.013	4315980

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 465 George St., Unit G, Sydney, NS, B1P 1K5 Tel:902 567 1255 Toll Free: 888 535 7770 Fax: 902 539 6504 www.maxxam.ca

Maxxam Job #: B5P6629
Report Date: 2015/12/22

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

ELEMENTS BY ICP/MS (WATER)

Maxxam ID		BNE116	BNE117		
Sampling Date		2015/12/11	2015/12/11		
COC Number		538679	538679		
	UNITS	SCU10-001-MW	SCU10-004-MW	RDL	QC Batch
Metals					
Dissolved Aluminum (Al)	ug/L	15	35	5.0	4315259
Dissolved Antimony (Sb)	ug/L	<1.0	<1.0	1.0	4315259
Dissolved Arsenic (As)	ug/L	<1.0	11	1.0	4315259
Dissolved Barium (Ba)	ug/L	69	41	1.0	4315259
Dissolved Beryllium (Be)	ug/L	<1.0	<1.0	1.0	4315259
Dissolved Bismuth (Bi)	ug/L	<2.0	<2.0	2.0	4315259
Dissolved Boron (B)	ug/L	80	62	50	4315259
Dissolved Cadmium (Cd)	ug/L	0.13	0.044	0.010	4315259
Dissolved Calcium (Ca)	ug/L	97000	83000	100	4315259
Dissolved Chromium (Cr)	ug/L	<1.0	<1.0	1.0	4315259
Dissolved Cobalt (Co)	ug/L	1.4	<0.40	0.40	4315259
Dissolved Copper (Cu)	ug/L	<2.0	<2.0	2.0	4315259
Dissolved Iron (Fe)	ug/L	190	110	50	4315259
Dissolved Lead (Pb)	ug/L	<0.50	<0.50	0.50	4315259
Dissolved Magnesium (Mg)	ug/L	11000	2800	100	4315259
Dissolved Manganese (Mn)	ug/L	16000	51	2.0	4315259
Dissolved Molybdenum (Mo)	ug/L	<2.0	6.1	2.0	4315259
Dissolved Nickel (Ni)	ug/L	3.7	<2.0	2.0	4315259
Dissolved Phosphorus (P)	ug/L	140	170	100	4315259
Dissolved Potassium (K)	ug/L	6500	11000	100	4315259
Dissolved Selenium (Se)	ug/L	<1.0	1.2	1.0	4315259
Dissolved Silver (Ag)	ug/L	<0.10	<0.10	0.10	4315259
Dissolved Sodium (Na)	ug/L	43000	150000	100	4315259
Dissolved Strontium (Sr)	ug/L	380	440	2.0	4315259
Dissolved Thallium (Tl)	ug/L	<0.10	<0.10	0.10	4315259
Dissolved Tin (Sn)	ug/L	<2.0	<2.0	2.0	4315259
Dissolved Titanium (Ti)	ug/L	<2.0	<2.0	2.0	4315259
Dissolved Uranium (U)	ug/L	0.33	0.80	0.10	4315259
Dissolved Vanadium (V)	ug/L	<2.0	4.9	2.0	4315259
Dissolved Zinc (Zn)	ug/L	8.3	<5.0	5.0	4315259

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 465 George St., Unit G, Sydney, NS, B1P 1K5 Tel:902 567 1255 Toll Free: 888 535 7770 Fax: 902 539 6504 www.maxxam.ca

Maxxam Job #: B5P6629
Report Date: 2015/12/22

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Maxxam ID		BNE116		BNE117		
Sampling Date		2015/12/11		2015/12/11		
COC Number		538679		538679		
	UNITS	SCU10-001-MW	RDL	SCU10-004-MW	RDL	QC Batch
Polyaromatic Hydrocarbons						
1-Methylnaphthalene	ug/L	0.053	0.050	3300	50	4317426
2-Methylnaphthalene	ug/L	0.15	0.050	6400	50	4317426
Acenaphthene	ug/L	0.024	0.010	2800	10	4317426
Acenaphthylene	ug/L	<0.020 (1)	0.020	410	10	4317426
Anthracene	ug/L	<0.010	0.010	1100	10	4317426
Benzo(a)anthracene	ug/L	<0.010	0.010	360	10	4317426
Benzo(a)pyrene	ug/L	<0.010	0.010	190	10	4317426
Benzo(b)fluoranthene	ug/L	<0.010	0.010	130	10	4317426
Benzo(g,h,i)perylene	ug/L	<0.010	0.010	67	10	4317426
Benzo(j)fluoranthene	ug/L	<0.010	0.010	110	10	4317426
Benzo(k)fluoranthene	ug/L	<0.010	0.010	87	10	4317426
Chrysene	ug/L	<0.010	0.010	310	10	4317426
Dibenz(a,h)anthracene	ug/L	<0.010	0.010	29	10	4317426
Fluoranthene	ug/L	0.018	0.010	1500	10	4317426
Fluorene	ug/L	0.040	0.010	2700	10	4317426
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	0.010	67	10	4317426
Naphthalene	ug/L	<0.20	0.20	11000	200	4317426
Perylene	ug/L	<0.010	0.010	41	10	4317426
Phenanthrene	ug/L	0.011	0.010	5300	10	4317426
Pyrene	ug/L	0.018	0.010	980	10	4317426
Surrogate Recovery (%)						
D10-Anthracene	%	99		1040 (2)		4317426
D14-Terphenyl	%	84		125 (3)		4317426
D8-Acenaphthylene	%	103		1900 (2)		4317426

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Elevated PAH RDL(s) due to matrix / co-extractive interference.
(2) PAH surrogate(s) not within acceptance limits due to sample dilution / product interference.
(3) Elevated PAH RDL(s) due to sample dilution.

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Maxxam Job #: B5P6629
Report Date: 2015/12/22

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

ATLANTIC RBCA HYDROCARBONS (WATER)

Maxxam ID		BNE116		BNE117		
Sampling Date		2015/12/11		2015/12/11		
COC Number		538679		538679		
	UNITS	SCU10-001-MW	RDL	SCU10-004-MW	RDL	QC Batch
Petroleum Hydrocarbons						
Benzene	mg/L	<0.0010	0.0010	0.20	0.010	4315893
Toluene	mg/L	<0.0010	0.0010	0.13	0.010	4315893
Ethylbenzene	mg/L	<0.0010	0.0010	0.081	0.010	4315893
Total Xylenes	mg/L	<0.0020	0.0020	0.37	0.020	4315893
C6 - C10 (less BTEX)	mg/L	0.012	0.010	0.54	0.10	4315893
>C10-C16 Hydrocarbons	mg/L	<0.050	0.050	42 (1)	0.25	4315275
>C16-C21 Hydrocarbons	mg/L	<0.050	0.050	12 (1)	0.25	4315275
>C21-<C32 Hydrocarbons	mg/L	<0.10	0.10	8.0	0.10	4315275
Modified TPH (Tier1)	mg/L	<0.10	0.10	63	0.25	4312053
Reached Baseline at C32	mg/L	NA	N/A	Yes	N/A	4315275
Hydrocarbon Resemblance	mg/L	NA	N/A	COMMENT (2)	N/A	4315275
Surrogate Recovery (%)						
Isobutylbenzene - Extractable	%	105		95		4315275
n-Dotriacontane - Extractable	%	112		120		4315275
Isobutylbenzene - Volatile	%	102		100		4315893

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

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GENERAL COMMENTS

Results relate only to the items tested.

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Maxxam Job #: B5P6629
Report Date: 2015/12/22

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
4315259	BAN	Matrix Spike	Dissolved Aluminum (Al)	2015/12/16		97	%	80 - 120
			Dissolved Antimony (Sb)	2015/12/16		87	%	80 - 120
			Dissolved Arsenic (As)	2015/12/16		99	%	80 - 120
			Dissolved Barium (Ba)	2015/12/16		NC	%	80 - 120
			Dissolved Beryllium (Be)	2015/12/16		104	%	80 - 120
			Dissolved Bismuth (Bi)	2015/12/16		99	%	80 - 120
			Dissolved Boron (B)	2015/12/16		104	%	80 - 120
			Dissolved Cadmium (Cd)	2015/12/16		104	%	80 - 120
			Dissolved Calcium (Ca)	2015/12/16		NC	%	80 - 120
			Dissolved Chromium (Cr)	2015/12/16		99	%	80 - 120
			Dissolved Cobalt (Co)	2015/12/16		98	%	80 - 120
			Dissolved Copper (Cu)	2015/12/16		95	%	80 - 120
			Dissolved Iron (Fe)	2015/12/16		99	%	80 - 120
			Dissolved Lead (Pb)	2015/12/16		99	%	80 - 120
			Dissolved Magnesium (Mg)	2015/12/16		NC	%	80 - 120
			Dissolved Manganese (Mn)	2015/12/16		NC	%	80 - 120
			Dissolved Molybdenum (Mo)	2015/12/16		103	%	80 - 120
			Dissolved Nickel (Ni)	2015/12/16		98	%	80 - 120
			Dissolved Phosphorus (P)	2015/12/16		107	%	80 - 120
			Dissolved Potassium (K)	2015/12/16		NC	%	80 - 120
			Dissolved Selenium (Se)	2015/12/16		92	%	80 - 120
			Dissolved Silver (Ag)	2015/12/16		63 (1)	%	80 - 120
			Dissolved Sodium (Na)	2015/12/16		NC	%	80 - 120
			Dissolved Strontium (Sr)	2015/12/16		NC	%	80 - 120
			Dissolved Thallium (Tl)	2015/12/16		100	%	80 - 120
			Dissolved Tin (Sn)	2015/12/16		106	%	80 - 120
			Dissolved Titanium (Ti)	2015/12/16		102	%	80 - 120
			Dissolved Uranium (U)	2015/12/16		102	%	80 - 120
			Dissolved Vanadium (V)	2015/12/16		102	%	80 - 120
			Dissolved Zinc (Zn)	2015/12/16		93	%	80 - 120
4315259	BAN	Spiked Blank	Dissolved Aluminum (Al)	2015/12/16		99	%	80 - 120
			Dissolved Antimony (Sb)	2015/12/16		101	%	80 - 120
			Dissolved Arsenic (As)	2015/12/16		99	%	80 - 120
			Dissolved Barium (Ba)	2015/12/16		101	%	80 - 120
			Dissolved Beryllium (Be)	2015/12/16		104	%	80 - 120
			Dissolved Bismuth (Bi)	2015/12/16		102	%	80 - 120
			Dissolved Boron (B)	2015/12/16		103	%	80 - 120
			Dissolved Cadmium (Cd)	2015/12/16		102	%	80 - 120
			Dissolved Calcium (Ca)	2015/12/16		102	%	80 - 120
			Dissolved Chromium (Cr)	2015/12/16		100	%	80 - 120
			Dissolved Cobalt (Co)	2015/12/16		100	%	80 - 120
			Dissolved Copper (Cu)	2015/12/16		100	%	80 - 120
			Dissolved Iron (Fe)	2015/12/16		101	%	80 - 120
			Dissolved Lead (Pb)	2015/12/16		101	%	80 - 120
			Dissolved Magnesium (Mg)	2015/12/16		104	%	80 - 120
			Dissolved Manganese (Mn)	2015/12/16		101	%	80 - 120
			Dissolved Molybdenum (Mo)	2015/12/16		101	%	80 - 120
			Dissolved Nickel (Ni)	2015/12/16		102	%	80 - 120
			Dissolved Phosphorus (P)	2015/12/16		106	%	80 - 120
			Dissolved Potassium (K)	2015/12/16		100	%	80 - 120
			Dissolved Selenium (Se)	2015/12/16		100	%	80 - 120
			Dissolved Silver (Ag)	2015/12/16		99	%	80 - 120
			Dissolved Sodium (Na)	2015/12/16		104	%	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 Strontium (Sr)	2015/12/16		99	%	80 - 120
			Dissolved Thallium (Tl)	2015/12/16		101	%	80 - 120
			Dissolved Tin (Sn)	2015/12/16		102	%	80 - 120
			Dissolved Titanium (Ti)	2015/12/16		102	%	80 - 120
			Dissolved Uranium (U)	2015/12/16		102	%	80 - 120
			Dissolved Vanadium (V)	2015/12/16		102	%	80 - 120
			Dissolved Zinc (Zn)	2015/12/16		101	%	80 - 120
4315259	BAN	Method Blank	Dissolved Aluminum (Al)	2015/12/16	<5.0		ug/L	
			Dissolved Antimony (Sb)	2015/12/16	<1.0		ug/L	
			Dissolved Arsenic (As)	2015/12/16	<1.0		ug/L	
			Dissolved Barium (Ba)	2015/12/16	<1.0		ug/L	
			Dissolved Beryllium (Be)	2015/12/16	<1.0		ug/L	
			Dissolved Bismuth (Bi)	2015/12/16	<2.0		ug/L	
			Dissolved Boron (B)	2015/12/16	<50		ug/L	
			Dissolved Cadmium (Cd)	2015/12/16	<0.010		ug/L	
			Dissolved Calcium (Ca)	2015/12/16	<100		ug/L	
			Dissolved Chromium (Cr)	2015/12/16	<1.0		ug/L	
			Dissolved Cobalt (Co)	2015/12/16	<0.40		ug/L	
			Dissolved Copper (Cu)	2015/12/16	<2.0		ug/L	
			Dissolved Iron (Fe)	2015/12/16	<50		ug/L	
			Dissolved Lead (Pb)	2015/12/16	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2015/12/16	<100		ug/L	
			Dissolved Manganese (Mn)	2015/12/16	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2015/12/16	<2.0		ug/L	
			Dissolved Nickel (Ni)	2015/12/16	<2.0		ug/L	
			Dissolved Phosphorus (P)	2015/12/16	<100		ug/L	
			Dissolved Potassium (K)	2015/12/16	<100		ug/L	
			Dissolved Selenium (Se)	2015/12/16	<1.0		ug/L	
			Dissolved Silver (Ag)	2015/12/16	<0.10		ug/L	
			Dissolved Sodium (Na)	2015/12/16	<100		ug/L	
			Dissolved Strontium (Sr)	2015/12/16	<2.0		ug/L	
			Dissolved Thallium (Tl)	2015/12/16	<0.10		ug/L	
			Dissolved Tin (Sn)	2015/12/16	<2.0		ug/L	
			Dissolved Titanium (Ti)	2015/12/16	<2.0		ug/L	
			Dissolved Uranium (U)	2015/12/16	<0.10		ug/L	
			Dissolved Vanadium (V)	2015/12/16	<2.0		ug/L	
			Dissolved Zinc (Zn)	2015/12/16	<5.0		ug/L	
4315259	BAN	RPD	Dissolved Aluminum (Al)	2015/12/16	NC		%	20
			Dissolved Antimony (Sb)	2015/12/16	NC		%	20
			Dissolved Arsenic (As)	2015/12/16	NC		%	20
			Dissolved Barium (Ba)	2015/12/16	0.52		%	20
			Dissolved Beryllium (Be)	2015/12/16	NC		%	20
			Dissolved Bismuth (Bi)	2015/12/16	NC		%	20
			Dissolved Boron (B)	2015/12/16	NC		%	20
			Dissolved Cadmium (Cd)	2015/12/16	NC		%	20
			Dissolved Calcium (Ca)	2015/12/16	0.82		%	20
			Dissolved Chromium (Cr)	2015/12/16	NC		%	20
			Dissolved Cobalt (Co)	2015/12/16	NC		%	20
			Dissolved Copper (Cu)	2015/12/16	NC		%	20
			Dissolved Iron (Fe)	2015/12/16	NC		%	20
			Dissolved Lead (Pb)	2015/12/16	NC		%	20
			Dissolved Magnesium (Mg)	2015/12/16	1.3		%	20
			Dissolved Manganese (Mn)	2015/12/16	1.2		%	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 Molybdenum (Mo)	2015/12/16	NC		%	20
			Dissolved Nickel (Ni)	2015/12/16	NC		%	20
			Dissolved Phosphorus (P)	2015/12/16	NC		%	20
			Dissolved Potassium (K)	2015/12/16	0.19		%	20
			Dissolved Selenium (Se)	2015/12/16	NC		%	20
			Dissolved Silver (Ag)	2015/12/16	NC		%	20
			Dissolved Sodium (Na)	2015/12/16	1.5		%	20
			Dissolved Strontium (Sr)	2015/12/16	2.3		%	20
			Dissolved Thallium (Tl)	2015/12/16	NC		%	20
			Dissolved Tin (Sn)	2015/12/16	NC		%	20
			Dissolved Titanium (Ti)	2015/12/16	NC		%	20
			Dissolved Uranium (U)	2015/12/16	NC		%	20
			Dissolved Vanadium (V)	2015/12/16	NC		%	20
			Dissolved Zinc (Zn)	2015/12/16	NC		%	20
4315275	CMI	Matrix Spike	Isobutylbenzene - Extractable	2015/12/16		101	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/16		128	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/16		97	%	70 - 130
			>C16-C21 Hydrocarbons	2015/12/16		94	%	70 - 130
			>C21-<C32 Hydrocarbons	2015/12/16		102	%	70 - 130
4315275	CMI	Spiked Blank	Isobutylbenzene - Extractable	2015/12/16		98	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/16		122	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/16		97	%	70 - 130
			>C16-C21 Hydrocarbons	2015/12/16		93	%	70 - 130
			>C21-<C32 Hydrocarbons	2015/12/16		99	%	70 - 130
4315275	CMI	Method Blank	Isobutylbenzene - Extractable	2015/12/16		99	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/16		112	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/16	<0.050		mg/L	
			>C16-C21 Hydrocarbons	2015/12/16	<0.050		mg/L	
			>C21-<C32 Hydrocarbons	2015/12/16	<0.10		mg/L	
4315275	CMI	RPD	>C10-C16 Hydrocarbons	2015/12/16	NC		%	40
			>C16-C21 Hydrocarbons	2015/12/16	NC		%	40
			>C21-<C32 Hydrocarbons	2015/12/16	NC		%	40
4315893	ASL	Matrix Spike	Isobutylbenzene - Volatile	2015/12/17		102	%	70 - 130
			Benzene	2015/12/17		107	%	70 - 130
			Toluene	2015/12/17		107	%	70 - 130
			Ethylbenzene	2015/12/17		106	%	70 - 130
			Total Xylenes	2015/12/17		108	%	70 - 130
4315893	ASL	Spiked Blank	Isobutylbenzene - Volatile	2015/12/16		104	%	70 - 130
			Benzene	2015/12/16		100	%	70 - 130
			Toluene	2015/12/16		102	%	70 - 130
			Ethylbenzene	2015/12/16		103	%	70 - 130
			Total Xylenes	2015/12/16		102	%	70 - 130
4315893	ASL	Method Blank	Isobutylbenzene - Volatile	2015/12/16		102	%	70 - 130
			Benzene	2015/12/16	<0.0010		mg/L	
			Toluene	2015/12/16	<0.0010		mg/L	
			Ethylbenzene	2015/12/16	<0.0010		mg/L	
			Total Xylenes	2015/12/16	<0.0020		mg/L	
			C6 - C10 (less BTEX)	2015/12/16	<0.010		mg/L	
4315893	ASL	RPD [BNE116-03]	Benzene	2015/12/17	NC		%	40
			Toluene	2015/12/17	NC		%	40
			Ethylbenzene	2015/12/17	NC		%	40
			Total Xylenes	2015/12/17	NC		%	40
			C6 - C10 (less BTEX)	2015/12/17	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
4315980	VWA	Matrix Spike	Total Mercury (Hg)	2015/12/17		111	%	80 - 120
4315980	VWA	Spiked Blank	Total Mercury (Hg)	2015/12/17		111	%	80 - 120
4315980	VWA	Method Blank	Total Mercury (Hg)	2015/12/17	<0.013		ug/L	
4315980	VWA	RPD	Total Mercury (Hg)	2015/12/17	NC		%	20
4317426	GTH	Matrix Spike	D10-Anthracene	2015/12/19		75	%	30 - 130
			D14-Terphenyl	2015/12/19		75	%	30 - 130
			D8-Acenaphthylene	2015/12/19		83	%	30 - 130
			1-Methylnaphthalene	2015/12/19		67	%	30 - 130
			2-Methylnaphthalene	2015/12/19		51	%	30 - 130
			Acenaphthene	2015/12/19		73	%	30 - 130
			Acenaphthylene	2015/12/19		72	%	30 - 130
			Anthracene	2015/12/19		72	%	30 - 130
			Benzo(a)anthracene	2015/12/19		66	%	30 - 130
			Benzo(a)pyrene	2015/12/19		76	%	30 - 130
			Benzo(b)fluoranthene	2015/12/19		73	%	30 - 130
			Benzo(g,h,i)perylene	2015/12/19		79	%	30 - 130
			Benzo(j)fluoranthene	2015/12/19		72	%	30 - 130
			Benzo(k)fluoranthene	2015/12/19		76	%	30 - 130
			Chrysene	2015/12/19		64	%	30 - 130
			Dibenz(a,h)anthracene	2015/12/19		75	%	30 - 130
			Fluoranthene	2015/12/19		72	%	30 - 130
			Fluorene	2015/12/19		78	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2015/12/19		77	%	30 - 130
			Naphthalene	2015/12/19		46 (2)	%	30 - 130
			Perylene	2015/12/19		73	%	30 - 130
			Phenanthrene	2015/12/19		74	%	30 - 130
			Pyrene	2015/12/19		71	%	30 - 130
4317426	GTH	Spiked Blank	D10-Anthracene	2015/12/19		110	%	30 - 130
			D14-Terphenyl	2015/12/19		118	%	30 - 130
			D8-Acenaphthylene	2015/12/19		111	%	30 - 130
			1-Methylnaphthalene	2015/12/19		96	%	30 - 130
			2-Methylnaphthalene	2015/12/19		102	%	30 - 130
			Acenaphthene	2015/12/19		105	%	30 - 130
			Acenaphthylene	2015/12/19		94	%	30 - 130
			Anthracene	2015/12/19		102	%	30 - 130
			Benzo(a)anthracene	2015/12/19		106	%	30 - 130
			Benzo(a)pyrene	2015/12/19		107	%	30 - 130
			Benzo(b)fluoranthene	2015/12/19		106	%	30 - 130
			Benzo(g,h,i)perylene	2015/12/19		114	%	30 - 130
			Benzo(j)fluoranthene	2015/12/19		102	%	30 - 130
			Benzo(k)fluoranthene	2015/12/19		108	%	30 - 130
			Chrysene	2015/12/19		110	%	30 - 130
			Dibenz(a,h)anthracene	2015/12/19		105	%	30 - 130
			Fluoranthene	2015/12/19		104	%	30 - 130
			Fluorene	2015/12/19		110	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2015/12/19		110	%	30 - 130
			Naphthalene	2015/12/19		95	%	30 - 130
			Perylene	2015/12/19		107	%	30 - 130
			Phenanthrene	2015/12/19		107	%	30 - 130
			Pyrene	2015/12/19		102	%	30 - 130
4317426	GTH	Method Blank	D10-Anthracene	2015/12/21		86	%	30 - 130
			D14-Terphenyl	2015/12/21		89	%	30 - 130
			D8-Acenaphthylene	2015/12/21		92	%	30 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1-Methylnaphthalene	2015/12/21	<0.050		ug/L	
			2-Methylnaphthalene	2015/12/21	<0.050		ug/L	
			Acenaphthene	2015/12/21	<0.010		ug/L	
			Acenaphthylene	2015/12/21	<0.010		ug/L	
			Anthracene	2015/12/21	<0.010		ug/L	
			Benzo(a)anthracene	2015/12/21	<0.010		ug/L	
			Benzo(a)pyrene	2015/12/21	<0.010		ug/L	
			Benzo(b)fluoranthene	2015/12/21	<0.010		ug/L	
			Benzo(g,h,i)perylene	2015/12/21	<0.010		ug/L	
			Benzo(j)fluoranthene	2015/12/21	<0.010		ug/L	
			Benzo(k)fluoranthene	2015/12/21	<0.010		ug/L	
			Chrysene	2015/12/21	<0.010		ug/L	
			Dibenz(a,h)anthracene	2015/12/21	<0.010		ug/L	
			Fluoranthene	2015/12/21	<0.010		ug/L	
			Fluorene	2015/12/21	<0.010		ug/L	
			Indeno(1,2,3-cd)pyrene	2015/12/21	<0.010		ug/L	
			Naphthalene	2015/12/21	<0.20		ug/L	
			Perylene	2015/12/21	<0.010		ug/L	
			Phenanthrene	2015/12/21	<0.010		ug/L	
			Pyrene	2015/12/21	<0.010		ug/L	
4317426	GTH	RPD	1-Methylnaphthalene	2015/12/19	33 (3)		%	40
			2-Methylnaphthalene	2015/12/19	23		%	40
			Acenaphthene	2015/12/19	2.0		%	40
			Acenaphthylene	2015/12/19	23		%	40
			Anthracene	2015/12/19	21		%	40
			Benzo(a)anthracene	2015/12/19	NC		%	40
			Benzo(a)pyrene	2015/12/19	NC		%	40
			Benzo(b)fluoranthene	2015/12/19	NC		%	40
			Benzo(g,h,i)perylene	2015/12/19	NC		%	40
			Benzo(j)fluoranthene	2015/12/19	NC		%	40
			Benzo(k)fluoranthene	2015/12/19	NC		%	40
			Chrysene	2015/12/19	NC		%	40
			Dibenz(a,h)anthracene	2015/12/19	NC		%	40
			Fluoranthene	2015/12/19	10		%	40
			Fluorene	2015/12/19	20		%	40
			Indeno(1,2,3-cd)pyrene	2015/12/19	NC		%	40
			Naphthalene	2015/12/19	58 (4)		%	40
			Perylene	2015/12/19	NC		%	40
			Phenanthrene	2015/12/19	38		%	40

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Maxxam Job #: B5P6629
Report Date: 2015/12/22

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Pyrene	2015/12/19	13		%	40

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.

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 spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of 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 (one or both samples < 5x RDL).

(1) Low recovery due to sample matrix. Recovery confirmed with repeat analysis.

(2) Matrix Spike: < 10 % of compounds in multi-component analysis in violation.

(3) Elevated PAH RDL(s) due to sample dilution.

(4) Elevated PAH RDL(s) due to sample dilution. Duplicate: results are outside acceptance limit. Insufficient sample for repeat analysis.

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Maxxam Job #: B5P6629
Report Date: 2015/12/22

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

VALIDATION SIGNATURE PAGE

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

Eric Dearman, Scientific Specialist

Phil Deveau

Rosemarie MacDonald, Scientific Specialist (Organics)

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Maxxam
A Bureau Veritas Group Company

Your Project #: 4104251070
Site#: HARBOURSIDE COMMERCIAL PARK
Site Location: HARBOURSIDE COMMERCIAL PARK
Your C.O.C. #: 538679

Attention:Nadine Wambolt

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

Report Date: 2015/12/18
Report #: R3812472
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B5P6624
Received: 2015/12/11, 17:00

Sample Matrix: Organic Liquid
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Volatile Organic Compounds in Soil (1)	1	2015/12/16	2015/12/17	ATL SOP 00133	EPA 8260C R3 m

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Volatile Organic Compounds in Water (1)	4	N/A	2015/12/16	ATL SOP 00133	EPA 8260C R3 m

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 Maxxam Bedford

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Natalie MacAskill, Sr. Project Manager
Email: NMacAskill@maxxam.ca
Phone# (902)567-1255 Ext:17
==========
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VOLATILE ORGANICS BY GC/MS (ORGANIC LIQUID)

Maxxam ID		BNE103		
Sampling Date		2015/12/11		
COC Number		538679		
	UNITS	SCU10-004-MW	RDL	QC Batch
Volatile Organics				
1,1,1-Trichloroethane	ug/kg	<2500	2500	4315388
1,1,2,2-Tetrachloroethane	ug/kg	<2500	2500	4315388
1,1,2-Trichloroethane	ug/kg	<2500	2500	4315388
1,1-Dichloroethane	ug/kg	<2500	2500	4315388
1,1-Dichloroethylene	ug/kg	<2500	2500	4315388
1,2-Dichlorobenzene	ug/kg	<2500	2500	4315388
1,2-Dichloroethane	ug/kg	<2500	2500	4315388
1,2-Dichloropropane	ug/kg	<2500	2500	4315388
1,3-Dichlorobenzene	ug/kg	<2500	2500	4315388
1,4-Dichlorobenzene	ug/kg	<2500	2500	4315388
Benzene	ug/kg	250000	2500	4315388
Bromodichloromethane	ug/kg	<2500	2500	4315388
Bromoform	ug/kg	<2500	2500	4315388
Bromomethane	ug/kg	<5000	5000	4315388
Carbon Tetrachloride	ug/kg	<2500	2500	4315388
Chlorobenzene	ug/kg	<2500	2500	4315388
Chloroethane	ug/kg	<20000	20000	4315388
Chloroform	ug/kg	<2500	2500	4315388
cis-1,2-Dichloroethylene	ug/kg	<2500	2500	4315388
cis-1,3-Dichloropropene	ug/kg	<2500	2500	4315388
Dibromochloromethane	ug/kg	<2500	2500	4315388
Ethylbenzene	ug/kg	660000	2500	4315388
Ethylene Dibromide	ug/kg	<2500	2500	4315388
Methyl t-butyl ether (MTBE)	ug/kg	<2500	2500	4315388
Methylene Chloride(Dichloromethane)	ug/kg	<5000	5000	4315388
o-Xylene	ug/kg	820000	2500	4315388
p+m-Xylene	ug/kg	2100000	2500	4315388
Styrene	ug/kg	44000	2500	4315388
Tetrachloroethylene	ug/kg	19000	2500	4315388
Toluene	ug/kg	690000	2500	4315388
Total Xylenes	ug/kg	2900000	5000	4315388
trans-1,2-Dichloroethylene	ug/kg	<2500	2500	4315388
trans-1,3-Dichloropropene	ug/kg	<2500	2500	4315388
Trichloroethylene	ug/kg	3900	1000	4315388
Trichlorofluoromethane (FREON 11)	ug/kg	<2500	2500	4315388

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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VOLATILE ORGANICS BY GC/MS (ORGANIC LIQUID)

Maxxam ID		BNE103		
Sampling Date		2015/12/11		
COC Number		538679		
	UNITS	**SCU10-004-MW**	**RDL**	**QC Batch**
Vinyl Chloride	ug/kg	<2000	2000	4315388
Surrogate Recovery (%)				
4-Bromofluorobenzene	%	85 (1)		4315388
D10-o-Xylene	%	80		4315388
D4-1,2-Dichloroethane	%	98		4315388
D8-Toluene	%	100		4315388

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Elevated VOC RDL(s) due to sample dilution.

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Maxxam Job #: B5P6624
Report Date: 2015/12/18

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

VOLATILE ORGANICS BY GC/MS (WATER)

Maxxam ID		BNE101	BNE102	BNE319	BNE320		
Sampling Date		2015/12/11	2015/12/11	2015/12/11	2015/12/11		
COC Number		538679	538679	538679	538679		
	UNITS	SCU10-002-MW	SCU10-003-MW	SCU10-001-MW	SCU10-004-MW	RDL	QC Batch
Chlorobenzenes							
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	4315371
1,3-Dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	4315371
1,4-Dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	4315371
Chlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	4315371
Volatile Organics							
1,1,1-Trichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	4315371
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	4315371
1,1,2-Trichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	4315371
1,1-Dichloroethane	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	4315371
1,1-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	4315371
1,2-Dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	4315371
1,2-Dichloropropane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	4315371
Benzene	ug/L	26	<1.0	<1.0	210	1.0	4315371
Bromodichloromethane	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	4315371
Bromoform	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	4315371
Bromomethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	4315371
Carbon Tetrachloride	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	4315371
Chloroethane	ug/L	<8.0	<8.0	<8.0	<8.0	8.0	4315371
Chloroform	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	4315371
Chloromethane	ug/L	<8.0	<8.0	<8.0	<8.0	8.0	4315371
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	58	0.65	0.50	4315371
cis-1,3-Dichloropropene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	4315371
Dibromochloromethane	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	4315371
Ethylbenzene	ug/L	16	<1.0	<1.0	62	1.0	4315371
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	4315371
Methylene Chloride(Dichloromethane)	ug/L	<3.0	<3.0	<3.0	<3.0	3.0	4315371
o-Xylene	ug/L	19	<1.0	<1.0	85	1.0	4315371
p+m-Xylene	ug/L	35	<2.0	<2.0	200	2.0	4315371
Styrene	ug/L	<1.0	<1.0	<1.0	3.9	1.0	4315371
Tetrachloroethylene	ug/L	2.6	<1.0	1.4	3.0	1.0	4315371
Toluene	ug/L	12	<1.0	<1.0	120	1.0	4315371
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	1.2	<0.50	0.50	4315371
trans-1,3-Dichloropropene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	4315371
Trichloroethylene	ug/L	<1.0	<1.0	1.6	1.1	1.0	4315371
Trichlorofluoromethane (FREON 11)	ug/L	<8.0	<8.0	<8.0	<8.0	8.0	4315371

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B5P6624
Report Date: 2015/12/18

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

VOLATILE ORGANICS BY GC/MS (WATER)

Maxxam ID		BNE101	BNE102	BNE319	BNE320		
Sampling Date		2015/12/11	2015/12/11	2015/12/11	2015/12/11		
COC Number		538679	538679	538679	538679		
	UNITS	**SCU10-002-MW**	**SCU10-003-MW**	**SCU10-001-MW**	**SCU10-004-MW**	**RDL**	**QC Batch**
Vinyl Chloride	ug/L	<0.50	<0.50	5.8	<0.50	0.50	4315371
Surrogate Recovery (%)							
4-Bromofluorobenzene	%	92	99	98	89		4315371
D4-1,2-Dichloroethane	%	102	104	100	102		4315371
D8-Toluene	%	92	94	94	93		4315371

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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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
4315371	SHL	Matrix Spike [BNE102-01]	1,2-Dichlorobenzene	2015/12/16		102	%	70 - 130
			1,3-Dichlorobenzene	2015/12/16		103	%	70 - 130
			1,4-Dichlorobenzene	2015/12/16		101	%	70 - 130
			Chlorobenzene	2015/12/16		104	%	70 - 130
			1,1,1-Trichloroethane	2015/12/16		114	%	70 - 130
			1,1,2,2-Tetrachloroethane	2015/12/16		106	%	70 - 130
			1,1,2-Trichloroethane	2015/12/16		101	%	70 - 130
			1,1-Dichloroethane	2015/12/16		120	%	70 - 130
			1,1-Dichloroethylene	2015/12/16		129	%	70 - 130
			1,2-Dichloroethane	2015/12/16		104	%	70 - 130
			1,2-Dichloropropane	2015/12/16		111	%	70 - 130
			4-Bromofluorobenzene	2015/12/16		100	%	70 - 130
			Benzene	2015/12/16		108	%	70 - 130
			Bromodichloromethane	2015/12/16		109	%	70 - 130
			Bromoform	2015/12/16		99	%	70 - 130
			Bromomethane	2015/12/16		113	%	60 - 140
			Carbon Tetrachloride	2015/12/16		113	%	70 - 130
			Chloroethane	2015/12/16		121	%	60 - 140
			Chloroform	2015/12/16		112	%	70 - 130
			Chloromethane	2015/12/16		127	%	60 - 140
			cis-1,2-Dichloroethylene	2015/12/16		120	%	70 - 130
			cis-1,3-Dichloropropene	2015/12/16		94	%	70 - 130
			D4-1,2-Dichloroethane	2015/12/16		100	%	70 - 130
			D8-Toluene	2015/12/16		95	%	70 - 130
			Dibromochloromethane	2015/12/16		104	%	70 - 130
			Ethylbenzene	2015/12/16		105	%	70 - 130
			Ethylene Dibromide	2015/12/16		110	%	70 - 130
			Methylene Chloride(Dichloromethane)	2015/12/16		117	%	70 - 130
			o-Xylene	2015/12/16		101	%	70 - 130
			p+m-Xylene	2015/12/16		107	%	70 - 130
			Styrene	2015/12/16		104	%	70 - 130
			Tetrachloroethylene	2015/12/16		100	%	70 - 130
			Toluene	2015/12/16		107	%	70 - 130
			trans-1,2-Dichloroethylene	2015/12/16		120	%	70 - 130
			trans-1,3-Dichloropropene	2015/12/16		95	%	70 - 130
			Trichloroethylene	2015/12/16		106	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2015/12/16		113	%	60 - 140
			Vinyl Chloride	2015/12/16		116	%	60 - 140
4315371	SHL	Spiked Blank	1,2-Dichlorobenzene	2015/12/16		91	%	70 - 130
			1,3-Dichlorobenzene	2015/12/16		91	%	70 - 130
			1,4-Dichlorobenzene	2015/12/16		90	%	70 - 130
			Chlorobenzene	2015/12/16		92	%	70 - 130
			1,1,1-Trichloroethane	2015/12/16		105	%	70 - 130
			1,1,2,2-Tetrachloroethane	2015/12/16		99	%	70 - 130
			1,1,2-Trichloroethane	2015/12/16		95	%	70 - 130
			1,1-Dichloroethane	2015/12/16		112	%	70 - 130
			1,1-Dichloroethylene	2015/12/16		117	%	70 - 130
			1,2-Dichloroethane	2015/12/16		98	%	70 - 130
			1,2-Dichloropropane	2015/12/16		101	%	70 - 130
			4-Bromofluorobenzene	2015/12/16		98	%	70 - 130
			Benzene	2015/12/16		99	%	70 - 130
			Bromodichloromethane	2015/12/16		101	%	70 - 130
			Bromoform	2015/12/16		90	%	70 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Bromomethane	2015/12/16		109	%	60 - 140
			Carbon Tetrachloride	2015/12/16		104	%	70 - 130
			Chloroethane	2015/12/16		112	%	60 - 140
			Chloroform	2015/12/16		105	%	70 - 130
			Chloromethane	2015/12/16		119	%	60 - 140
			cis-1,2-Dichloroethylene	2015/12/16		112	%	70 - 130
			cis-1,3-Dichloropropene	2015/12/16		90	%	70 - 130
			D4-1,2-Dichloroethane	2015/12/16		107	%	70 - 130
			D8-Toluene	2015/12/16		93	%	70 - 130
			Dibromochloromethane	2015/12/16		96	%	70 - 130
			Ethylbenzene	2015/12/16		92	%	70 - 130
			Ethylene Dibromide	2015/12/16		102	%	70 - 130
			Methylene Chloride(Dichloromethane)	2015/12/16		110	%	70 - 130
			o-Xylene	2015/12/16		91	%	70 - 130
			p+m-Xylene	2015/12/16		94	%	70 - 130
			Styrene	2015/12/16		92	%	70 - 130
			Tetrachloroethylene	2015/12/16		90	%	70 - 130
			Toluene	2015/12/16		97	%	70 - 130
			trans-1,2-Dichloroethylene	2015/12/16		109	%	70 - 130
			trans-1,3-Dichloropropene	2015/12/16		90	%	70 - 130
			Trichloroethylene	2015/12/16		96	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2015/12/16		104	%	60 - 140
			Vinyl Chloride	2015/12/16		108	%	60 - 140
4315371	SHL	Method Blank	1,2-Dichlorobenzene	2015/12/16	<0.50		ug/L	
			1,3-Dichlorobenzene	2015/12/16	<1.0		ug/L	
			1,4-Dichlorobenzene	2015/12/16	<1.0		ug/L	
			Chlorobenzene	2015/12/16	<1.0		ug/L	
			1,1,1-Trichloroethane	2015/12/16	<1.0		ug/L	
			1,1,2,2-Tetrachloroethane	2015/12/16	<0.50		ug/L	
			1,1,2-Trichloroethane	2015/12/16	<1.0		ug/L	
			1,1-Dichloroethane	2015/12/16	<2.0		ug/L	
			1,1-Dichloroethylene	2015/12/16	<0.50		ug/L	
			1,2-Dichloroethane	2015/12/16	<1.0		ug/L	
			1,2-Dichloropropane	2015/12/16	<0.50		ug/L	
			4-Bromofluorobenzene	2015/12/16		96	%	70 - 130
			Benzene	2015/12/16	<1.0		ug/L	
			Bromodichloromethane	2015/12/16	<1.0		ug/L	
			Bromoform	2015/12/16	<1.0		ug/L	
			Bromomethane	2015/12/16	<0.50		ug/L	
			Carbon Tetrachloride	2015/12/16	<0.50		ug/L	
			Chloroethane	2015/12/16	<8.0		ug/L	
			Chloroform	2015/12/16	<1.0		ug/L	
			Chloromethane	2015/12/16	<8.0		ug/L	
			cis-1,2-Dichloroethylene	2015/12/16	<0.50		ug/L	
			cis-1,3-Dichloropropene	2015/12/16	<0.50		ug/L	
			D4-1,2-Dichloroethane	2015/12/16		108	%	70 - 130
			D8-Toluene	2015/12/16		92	%	70 - 130
			Dibromochloromethane	2015/12/16	<1.0		ug/L	
			Ethylbenzene	2015/12/16	<1.0		ug/L	
			Ethylene Dibromide	2015/12/16	<0.20		ug/L	
			Methylene Chloride(Dichloromethane)	2015/12/16	<3.0		ug/L	
			o-Xylene	2015/12/16	<1.0		ug/L	
			p+m-Xylene	2015/12/16	<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
			Styrene	2015/12/16	<1.0		ug/L	
			Tetrachloroethylene	2015/12/16	<1.0		ug/L	
			Toluene	2015/12/16	<1.0		ug/L	
			trans-1,2-Dichloroethylene	2015/12/16	<0.50		ug/L	
			trans-1,3-Dichloropropene	2015/12/16	<0.50		ug/L	
			Trichloroethylene	2015/12/16	<1.0		ug/L	
			Trichlorofluoromethane (FREON 11)	2015/12/16	<8.0		ug/L	
			Vinyl Chloride	2015/12/16	<0.50		ug/L	
4315371	SHL	RPD [BNE101-01]	1,2-Dichlorobenzene	2015/12/16	NC		%	40
			1,3-Dichlorobenzene	2015/12/16	NC		%	40
			1,4-Dichlorobenzene	2015/12/16	NC		%	40
			Chlorobenzene	2015/12/16	NC		%	40
			1,1,1-Trichloroethane	2015/12/16	NC		%	40
			1,1,2,2-Tetrachloroethane	2015/12/16	NC		%	40
			1,1,2-Trichloroethane	2015/12/16	NC		%	40
			1,1-Dichloroethane	2015/12/16	NC		%	40
			1,1-Dichloroethylene	2015/12/16	NC		%	40
			1,2-Dichloroethane	2015/12/16	NC		%	40
			1,2-Dichloropropane	2015/12/16	NC		%	40
			Benzene	2015/12/16	8.5		%	40
			Bromodichloromethane	2015/12/16	NC		%	40
			Bromoform	2015/12/16	NC		%	40
			Bromomethane	2015/12/16	NC		%	40
			Carbon Tetrachloride	2015/12/16	NC		%	40
			Chloroethane	2015/12/16	NC		%	40
			Chloroform	2015/12/16	NC		%	40
			Chloromethane	2015/12/16	NC		%	40
			cis-1,2-Dichloroethylene	2015/12/16	NC		%	40
			cis-1,3-Dichloropropene	2015/12/16	NC		%	40
			Dibromochloromethane	2015/12/16	NC		%	40
			Ethylbenzene	2015/12/16	2.8		%	40
			Ethylene Dibromide	2015/12/16	NC		%	40
			Methylene Chloride(Dichloromethane)	2015/12/16	NC		%	40
			o-Xylene	2015/12/16	0.48		%	40
			p+m-Xylene	2015/12/16	0.37		%	40
			Styrene	2015/12/16	NC		%	40
			Tetrachloroethylene	2015/12/16	NC		%	40
			Toluene	2015/12/16	2.6		%	40
			trans-1,2-Dichloroethylene	2015/12/16	NC		%	40
			trans-1,3-Dichloropropene	2015/12/16	NC		%	40
			Trichloroethylene	2015/12/16	NC		%	40
			Trichlorofluoromethane (FREON 11)	2015/12/16	NC		%	40
			Vinyl Chloride	2015/12/16	NC		%	40
4315388	SHL	Matrix Spike	4-Bromofluorobenzene	2015/12/16		106	%	60 - 140
			D10-o-Xylene	2015/12/16		103	%	60 - 130
			D4-1,2-Dichloroethane	2015/12/16		90	%	60 - 140
			D8-Toluene	2015/12/16		105	%	60 - 140
			1,1,1-Trichloroethane	2015/12/16		99	%	60 - 140
			1,1,2,2-Tetrachloroethane	2015/12/16		88	%	60 - 140
			1,1,2-Trichloroethane	2015/12/16		84	%	60 - 140
			1,1-Dichloroethane	2015/12/16		94	%	60 - 140
			1,1-Dichloroethylene	2015/12/16		104	%	60 - 140
			1,2-Dichlorobenzene	2015/12/16		94	%	60 - 140

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,2-Dichloroethane	2015/12/16		89	%	60 - 140
			1,2-Dichloropropane	2015/12/16		95	%	60 - 140
			1,3-Dichlorobenzene	2015/12/16		102	%	60 - 140
			1,4-Dichlorobenzene	2015/12/16		98	%	60 - 140
			Benzene	2015/12/16		96	%	60 - 140
			Bromodichloromethane	2015/12/16		96	%	60 - 140
			Bromoform	2015/12/16		87	%	60 - 140
			Bromomethane	2015/12/16		94	%	60 - 140
			Carbon Tetrachloride	2015/12/16		99	%	60 - 140
			Chlorobenzene	2015/12/16		108	%	60 - 140
			Chloroethane	2015/12/16		96	%	60 - 140
			Chloroform	2015/12/16		88	%	60 - 140
			cis-1,2-Dichloroethylene	2015/12/16		92	%	60 - 140
			cis-1,3-Dichloropropene	2015/12/16		86	%	60 - 140
			Dibromochloromethane	2015/12/16		88	%	60 - 140
			Ethylbenzene	2015/12/16		110	%	60 - 140
			Ethylene Dibromide	2015/12/16		97	%	60 - 140
			Methyl t-butyl ether (MTBE)	2015/12/16		86	%	60 - 140
			Methylene Chloride(Dichloromethane)	2015/12/16		85	%	60 - 140
			o-Xylene	2015/12/16		102	%	60 - 140
			p+m-Xylene	2015/12/16		108	%	60 - 140
			Styrene	2015/12/16		102	%	60 - 140
			Tetrachloroethylene	2015/12/16		97	%	60 - 140
			Toluene	2015/12/16		98	%	60 - 140
			trans-1,2-Dichloroethylene	2015/12/16		95	%	60 - 140
			trans-1,3-Dichloropropene	2015/12/16		85	%	60 - 140
			Trichloroethylene	2015/12/16		101	%	60 - 140
			Trichlorofluoromethane (FREON 11)	2015/12/16		95	%	60 - 140
			Vinyl Chloride	2015/12/16		95	%	60 - 140
4315388	SHL	Spiked Blank	4-Bromofluorobenzene	2015/12/16		104	%	60 - 140
			D10-o-Xylene	2015/12/16		119	%	60 - 130
			D4-1,2-Dichloroethane	2015/12/16		93	%	60 - 140
			D8-Toluene	2015/12/16		103	%	60 - 140
			1,1,1-Trichloroethane	2015/12/16		103	%	60 - 130
			1,1,2,2-Tetrachloroethane	2015/12/16		94	%	60 - 130
			1,1,2-Trichloroethane	2015/12/16		90	%	60 - 130
			1,1-Dichloroethane	2015/12/16		99	%	60 - 130
			1,1-Dichloroethylene	2015/12/16		109	%	60 - 130
			1,2-Dichlorobenzene	2015/12/16		100	%	60 - 130
			1,2-Dichloroethane	2015/12/16		95	%	60 - 130
			1,2-Dichloropropane	2015/12/16		101	%	60 - 130
			1,3-Dichlorobenzene	2015/12/16		108	%	60 - 130
			1,4-Dichlorobenzene	2015/12/16		103	%	60 - 130
			Benzene	2015/12/16		101	%	60 - 130
			Bromodichloromethane	2015/12/16		103	%	60 - 130
			Bromoform	2015/12/16		93	%	60 - 130
			Bromomethane	2015/12/16		98	%	60 - 140
			Carbon Tetrachloride	2015/12/16		102	%	60 - 130
			Chlorobenzene	2015/12/16		112	%	60 - 130
			Chloroethane	2015/12/16		101	%	60 - 140
			Chloroform	2015/12/16		94	%	60 - 130
			cis-1,2-Dichloroethylene	2015/12/16		98	%	60 - 130
			cis-1,3-Dichloropropene	2015/12/16		93	%	60 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dibromochloromethane	2015/12/16		95	%	60 - 130
			Ethylbenzene	2015/12/16		113	%	60 - 130
			Ethylene Dibromide	2015/12/16		106	%	60 - 130
			Methyl t-butyl ether (MTBE)	2015/12/16		93	%	60 - 130
			Methylene Chloride(Dichloromethane)	2015/12/16		94	%	60 - 130
			o-Xylene	2015/12/16		107	%	60 - 130
			p+m-Xylene	2015/12/16		112	%	60 - 130
			Styrene	2015/12/16		108	%	60 - 130
			Tetrachloroethylene	2015/12/16		102	%	60 - 130
			Toluene	2015/12/16		103	%	60 - 130
			trans-1,2-Dichloroethylene	2015/12/16		101	%	60 - 130
			trans-1,3-Dichloropropene	2015/12/16		92	%	60 - 130
			Trichloroethylene	2015/12/16		106	%	60 - 130
			Trichlorofluoromethane (FREON 11)	2015/12/16		101	%	60 - 140
			Vinyl Chloride	2015/12/16		101	%	60 - 140
4315388	SHL	Method Blank	4-Bromofluorobenzene	2015/12/16		104	%	60 - 140
			D10-o-Xylene	2015/12/16		107	%	60 - 130
			D4-1,2-Dichloroethane	2015/12/16		89	%	60 - 140
			D8-Toluene	2015/12/16		105	%	60 - 140
			1,1,1-Trichloroethane	2015/12/16	<25		ug/kg	
			1,1,2,2-Tetrachloroethane	2015/12/16	<25		ug/kg	
			1,1,2-Trichloroethane	2015/12/16	<25		ug/kg	
			1,1-Dichloroethane	2015/12/16	<25		ug/kg	
			1,1-Dichloroethylene	2015/12/16	<25		ug/kg	
			1,2-Dichlorobenzene	2015/12/16	<25		ug/kg	
			1,2-Dichloroethane	2015/12/16	<25		ug/kg	
			1,2-Dichloropropane	2015/12/16	<25		ug/kg	
			1,3-Dichlorobenzene	2015/12/16	<25		ug/kg	
			1,4-Dichlorobenzene	2015/12/16	<25		ug/kg	
			Benzene	2015/12/16	<25		ug/kg	
			Bromodichloromethane	2015/12/16	<25		ug/kg	
			Bromoform	2015/12/16	<25		ug/kg	
			Bromomethane	2015/12/16	<50		ug/kg	
			Carbon Tetrachloride	2015/12/16	<25		ug/kg	
			Chlorobenzene	2015/12/16	<25		ug/kg	
			Chloroethane	2015/12/16	<200		ug/kg	
			Chloroform	2015/12/16	<25		ug/kg	
			cis-1,2-Dichloroethylene	2015/12/16	<25		ug/kg	
			cis-1,3-Dichloropropene	2015/12/16	<25		ug/kg	
			Dibromochloromethane	2015/12/16	<25		ug/kg	
			Ethylbenzene	2015/12/16	<25		ug/kg	
			Ethylene Dibromide	2015/12/16	<25		ug/kg	
			Methyl t-butyl ether (MTBE)	2015/12/16	<25		ug/kg	
			Methylene Chloride(Dichloromethane)	2015/12/16	<50		ug/kg	
			o-Xylene	2015/12/16	<25		ug/kg	
			p+m-Xylene	2015/12/16	<25		ug/kg	
			Styrene	2015/12/16	<25		ug/kg	
			Tetrachloroethylene	2015/12/16	<25		ug/kg	
			Toluene	2015/12/16	<25		ug/kg	
			Total Xylenes	2015/12/16	<50		ug/kg	
			trans-1,2-Dichloroethylene	2015/12/16	<25		ug/kg	
			trans-1,3-Dichloropropene	2015/12/16	<25		ug/kg	
			Trichloroethylene	2015/12/16	<10		ug/kg	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Trichlorofluoromethane (FREON 11)	2015/12/16	<25		ug/kg	
			Vinyl Chloride	2015/12/16	<20		ug/kg	
4315388	SHL	RPD	1,1,1-Trichloroethane	2015/12/16	NC		%	50
			1,1,2,2-Tetrachloroethane	2015/12/16	NC		%	50
			1,1,2-Trichloroethane	2015/12/16	NC		%	50
			1,1-Dichloroethane	2015/12/16	NC		%	50
			1,1-Dichloroethylene	2015/12/16	NC		%	50
			1,2-Dichlorobenzene	2015/12/16	NC		%	50
			1,2-Dichloroethane	2015/12/16	NC		%	50
			1,2-Dichloropropane	2015/12/16	NC		%	50
			1,3-Dichlorobenzene	2015/12/16	NC		%	50
			1,4-Dichlorobenzene	2015/12/16	NC		%	50
			Benzene	2015/12/16	NC		%	50
			Bromodichloromethane	2015/12/16	NC		%	50
			Bromoform	2015/12/16	NC		%	50
			Bromomethane	2015/12/16	NC		%	50
			Carbon Tetrachloride	2015/12/16	NC		%	50
			Chlorobenzene	2015/12/16	NC		%	50
			Chloroethane	2015/12/16	NC		%	50
			Chloroform	2015/12/16	NC		%	50
			cis-1,2-Dichloroethylene	2015/12/16	NC		%	50
			cis-1,3-Dichloropropene	2015/12/16	NC		%	50
			Dibromochloromethane	2015/12/16	NC		%	50
			Ethylbenzene	2015/12/16	NC		%	50
			Ethylene Dibromide	2015/12/16	NC		%	50
			Methyl t-butyl ether (MTBE)	2015/12/16	NC		%	50
			Methylene Chloride(Dichloromethane)	2015/12/16	NC		%	50
			o-Xylene	2015/12/16	NC		%	50
			p+m-Xylene	2015/12/16	NC		%	50
			Styrene	2015/12/16	NC		%	50
			Tetrachloroethylene	2015/12/16	NC		%	50
			Toluene	2015/12/16	NC		%	50
			Total Xylenes	2015/12/16	NC		%	50
			trans-1,2-Dichloroethylene	2015/12/16	NC		%	50
			trans-1,3-Dichloropropene	2015/12/16	NC		%	50
			Trichloroethylene	2015/12/16	NC		%	50
			Trichlorofluoromethane (FREON 11)	2015/12/16	NC		%	50
			Vinyl Chloride	2015/12/16	NC		%	50

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.

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 (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 (one or both samples < 5x RDL).

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Maxxam Job #: B5P6624
Report Date: 2015/12/18

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

VALIDATION SIGNATURE PAGE

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

Rosemarie MacDonald, Scientific Specialist (Organics)

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Your Project #: 4104251070
Site#: HARBOURSIDE COMMERCIAL PARK
Site Location: HARBOURSIDE COMMERCIAL PARK
Your C.O.C. #: 538679

Attention:Nadine Wambolt

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

Report Date: 2015/12/14
Report #: R3805560
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B5O8246
Received: 2015/12/02, 17:00

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
TEH in Water (PIRI) (1)	4	2015/12/08	2015/12/08	ATL SOP 00113	Atl. RBCA v3 m
Mercury - Total (CVAA,LL) (1)	4	2015/12/08	2015/12/09	ATL SOP 00026	EPA 245.1 R3 m
Metals Water Diss. MS (as rec'd) (1)	2	N/A	2015/12/09	ATL SOP 00058	EPA 6020A R1 m
Metals Water Diss. MS (as rec'd) (1)	2	N/A	2015/12/10	ATL SOP 00058	EPA 6020A R1 m
PAH in Water by GC/MS (SIM) (1)	4	2015/12/09	2015/12/13	ATL SOP 00103	EPA 8270D 2007 m
VPH in Water (PIRI) (1)	4	N/A	2015/12/08	ATL SOP 00118	Atl. RBCA v3 m
ModTPH (T1) Calc. for Water (1)	4	N/A	2015/12/09	N/A	Atl. RBCA v3 m

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 Maxxam Bedford

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Natalie MacAskill, Sr. Project Manager
Email: NMacAskill@maxxam.ca
Phone# (902)567-1255 Ext:17
==========
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Maxxam Job #: B5O8246
Report Date: 2015/12/14

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

MERCURY BY COLD VAPOUR AA (WATER)

Maxxam ID		BLO051	BLO052	BLO053	BLO054		
Sampling Date		2015/12/02	2015/12/02	2015/12/02	2015/12/02		
COC Number		538679	538679	538679	538679		
	UNITS	SCU19-002-MWA	SCU19-015-MW	SCU31-002-MWB	FD-012	RDL	QC Batch
Metals							
Total Mercury (Hg)	ug/L	<0.013	<0.013	<0.013	<0.013	0.013	4303926

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B5O8246
Report Date: 2015/12/14

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

ELEMENTS BY ICP/MS (WATER)

Maxxam ID		BLO051		BLO052			BLO053	BLO054		
Sampling Date		2015/12/02		2015/12/02			2015/12/02	2015/12/02		
COC Number		538679		538679			538679	538679		
	UNITS	SCU19-002-MWA	RDL	SCU19-015-MW	RDL	QC Batch	SCU31-002-MWB	FD-012	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	ug/L	28	5.0	11	5.0	4304857	<50	<50	50	4304858
Dissolved Antimony (Sb)	ug/L	<1.0	1.0	<1.0	1.0	4304857	<10	<10	10	4304858
Dissolved Arsenic (As)	ug/L	1.1	1.0	1.2	1.0	4304857	<10	<10	10	4304858
Dissolved Barium (Ba)	ug/L	57	1.0	29	1.0	4304857	32	33	10	4304858
Dissolved Beryllium (Be)	ug/L	<1.0	1.0	<1.0	1.0	4304857	<10	<10	10	4304858
Dissolved Bismuth (Bi)	ug/L	<2.0	2.0	<2.0	2.0	4304857	<20	<20	20	4304858
Dissolved Boron (B)	ug/L	410	50	490	50	4304857	570	570	500	4304858
Dissolved Cadmium (Cd)	ug/L	<0.010	0.010	<0.010	0.010	4304857	<0.10	<0.10	0.10	4304858
Dissolved Calcium (Ca)	ug/L	430000	100	330000	100	4304857	440000	440000	1000	4304858
Dissolved Chromium (Cr)	ug/L	<1.0	1.0	<1.0	1.0	4304857	<10	<10	10	4304858
Dissolved Cobalt (Co)	ug/L	<0.40	0.40	<0.40	0.40	4304857	<4.0	<4.0	4.0	4304858
Dissolved Copper (Cu)	ug/L	<2.0	2.0	<2.0	2.0	4304857	<20	<20	20	4304858
Dissolved Iron (Fe)	ug/L	480	50	<50	50	4304857	<500	<500	500	4304858
Dissolved Lead (Pb)	ug/L	<0.50	0.50	<0.50	0.50	4304857	<5.0	<5.0	5.0	4304858
Dissolved Magnesium (Mg)	ug/L	84000	100	8100	100	4304857	99000	100000	1000	4304858
Dissolved Manganese (Mn)	ug/L	79	2.0	3.5	2.0	4304857	520	540	20	4304858
Dissolved Molybdenum (Mo)	ug/L	6.0	2.0	2.1	2.0	4304857	<20	<20	20	4304858
Dissolved Nickel (Ni)	ug/L	<2.0	2.0	<2.0	2.0	4304857	<20	<20	20	4304858
Dissolved Phosphorus (P)	ug/L	<100	100	<100	100	4304857	<1000	<1000	1000	4304858
Dissolved Potassium (K)	ug/L	20000	100	21000	100	4304857	20000	20000	1000	4304858
Dissolved Selenium (Se)	ug/L	<1.0	1.0	20	1.0	4304857	<10	<10	10	4304858
Dissolved Silver (Ag)	ug/L	<0.10	0.10	<0.10	0.10	4304857	<1.0	<1.0	1.0	4304858
Dissolved Sodium (Na)	ug/L	500000	100	22000	100	4304857	1500000	1500000	1000	4304858
Dissolved Strontium (Sr)	ug/L	23000	20	1500	2.0	4304857	17000	17000	20	4304858
Dissolved Thallium (Tl)	ug/L	<0.10	0.10	<0.10	0.10	4304857	<1.0	<1.0	1.0	4304858
Dissolved Tin (Sn)	ug/L	<2.0	2.0	<2.0	2.0	4304857	<20	<20	20	4304858
Dissolved Titanium (Ti)	ug/L	<2.0	2.0	<2.0	2.0	4304857	<20	<20	20	4304858
Dissolved Uranium (U)	ug/L	0.76	0.10	6.2	0.10	4304857	6.8	6.5	1.0	4304858
Dissolved Vanadium (V)	ug/L	<2.0	2.0	7.5	2.0	4304857	<20	<20	20	4304858
Dissolved Zinc (Zn)	ug/L	<5.0	5.0	<5.0	5.0	4304857	<50	<50	50	4304858

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B5O8246
Report Date: 2015/12/14

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Maxxam ID		BLO051	BLO052	BLO053	BLO054		
Sampling Date		2015/12/02	2015/12/02	2015/12/02	2015/12/02		
COC Number		538679	538679	538679	538679		
	UNITS	SCU19-002-MWA	SCU19-015-MW	SCU31-002-MWB	FD-012	RDL	QC Batch
Polyaromatic Hydrocarbons							
1-Methylnaphthalene	ug/L	0.73	<0.050	<0.050	<0.050	0.050	4304994
2-Methylnaphthalene	ug/L	0.19	<0.050	<0.050	<0.050	0.050	4304994
Acenaphthene	ug/L	0.40	<0.010	<0.010	<0.010	0.010	4304994
Acenaphthylene	ug/L	0.11	<0.010	<0.010	<0.010	0.010	4304994
Anthracene	ug/L	0.055	<0.010	<0.010	<0.010	0.010	4304994
Benzo(a)anthracene	ug/L	0.029	<0.010	<0.010	<0.010	0.010	4304994
Benzo(a)pyrene	ug/L	0.017	<0.010	<0.010	<0.010	0.010	4304994
Benzo(b)fluoranthene	ug/L	0.016	<0.010	<0.010	<0.010	0.010	4304994
Benzo(g,h,i)perylene	ug/L	0.016	<0.010	<0.010	<0.010	0.010	4304994
Benzo(j)fluoranthene	ug/L	0.015	<0.010	<0.010	<0.010	0.010	4304994
Benzo(k)fluoranthene	ug/L	0.024	<0.010	<0.010	<0.010	0.010	4304994
Chrysene	ug/L	0.029	<0.010	<0.010	<0.010	0.010	4304994
Dibenz(a,h)anthracene	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	4304994
Fluoranthene	ug/L	0.097	0.018	<0.010	<0.010	0.010	4304994
Fluorene	ug/L	0.34	<0.010	<0.010	<0.010	0.010	4304994
Indeno(1,2,3-cd)pyrene	ug/L	0.015	<0.010	<0.010	<0.010	0.010	4304994
Naphthalene	ug/L	1.8	<0.20	<0.20	<0.20	0.20	4304994
Perylene	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	4304994
Phenanthrene	ug/L	0.28	0.020	0.015	0.017	0.010	4304994
Pyrene	ug/L	0.070	0.016	<0.010	0.010	0.010	4304994
Surrogate Recovery (%)							
D10-Anthracene	%	101	92	90	97		4304994
D14-Terphenyl	%	104	99	98	109		4304994
D8-Acenaphthylene	%	103	98	95	106		4304994

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Maxxam Job #: B5O8246
Report Date: 2015/12/14

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

ATLANTIC RBCA HYDROCARBONS (WATER)

Maxxam ID		BLO051	BLO052	BLO053	BLO054		
Sampling Date		2015/12/02	2015/12/02	2015/12/02	2015/12/02		
COC Number		538679	538679	538679	538679		
	UNITS	SCU19-002-MWA	SCU19-015-MW	SCU31-002-MWB	FD-012	RDL	QC Batch
Petroleum Hydrocarbons							
Benzene	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	4302032
Toluene	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	4302032
Ethylbenzene	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	4302032
Total Xylenes	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	4302032
C6 - C10 (less BTEX)	mg/L	<0.010	<0.010	<0.010	<0.010	0.010	4302032
>C10-C16 Hydrocarbons	mg/L	<0.050	<0.050	<0.050	<0.050	0.050	4303085
>C16-C21 Hydrocarbons	mg/L	<0.050	<0.050	<0.050	<0.050	0.050	4303085
>C21-<C32 Hydrocarbons	mg/L	<0.10	<0.10	<0.10	<0.10	0.10	4303085
Modified TPH (Tier1)	mg/L	<0.10	<0.10	<0.10	<0.10	0.10	4297327
Reached Baseline at C32	mg/L	NA	NA	NA	NA	N/A	4303085
Hydrocarbon Resemblance	mg/L	NA	NA	NA	NA	N/A	4303085
Surrogate Recovery (%)							
Isobutylbenzene - Extractable	%	95	102	104	105		4303085
n-Dotriacontane - Extractable	%	108	112	110	111		4303085
Isobutylbenzene - Volatile	%	97	97	96	96		4302032

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

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Report Date: 2015/12/14

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Site Location: HARBOURSIDE COMMERCIAL PARK

GENERAL COMMENTS

Sample BLO053-01 : Elevated reporting limits for trace metals due to sample matrix.

Sample BLO054-01 : Elevated reporting limits for trace metals due to sample matrix.

Results relate only to the items tested.

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Maxxam Job #: B5O8246
Report Date: 2015/12/14

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
4302032	MS3	Matrix Spike [BLO053-03]	Isobutylbenzene - Volatile	2015/12/08		97	%	70 - 130
			Benzene	2015/12/08		108	%	70 - 130
			Toluene	2015/12/08		108	%	70 - 130
			Ethylbenzene	2015/12/08		107	%	70 - 130
			Total Xylenes	2015/12/08		107	%	70 - 130
4302032	MS3	Spiked Blank	Isobutylbenzene - Volatile	2015/12/08		99	%	70 - 130
			Benzene	2015/12/08		108	%	70 - 130
			Toluene	2015/12/08		108	%	70 - 130
			Ethylbenzene	2015/12/08		108	%	70 - 130
			Total Xylenes	2015/12/08		107	%	70 - 130
4302032	MS3	Method Blank	Isobutylbenzene - Volatile	2015/12/08		98	%	70 - 130
			Benzene	2015/12/08	<0.0010		mg/L	
			Toluene	2015/12/08	<0.0010		mg/L	
			Ethylbenzene	2015/12/08	<0.0010		mg/L	
			Total Xylenes	2015/12/08	<0.0020		mg/L	
			C6 - C10 (less BTEX)	2015/12/08	<0.010		mg/L	
4302032	MS3	RPD [BLO051-03]	Benzene	2015/12/08	NC		%	40
			Toluene	2015/12/08	NC		%	40
			Ethylbenzene	2015/12/08	NC		%	40
			Total Xylenes	2015/12/08	NC		%	40
			C6 - C10 (less BTEX)	2015/12/08	NC		%	40
4303085	AJS	Matrix Spike	Isobutylbenzene - Extractable	2015/12/08		103	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/08		121	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/08		91	%	70 - 130
			>C16-C21 Hydrocarbons	2015/12/08		87	%	70 - 130
			>C21-<C32 Hydrocarbons	2015/12/08		91	%	70 - 130
4303085	AJS	Spiked Blank	Isobutylbenzene - Extractable	2015/12/08		98	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/08		112	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/08		92	%	70 - 130
			>C16-C21 Hydrocarbons	2015/12/08		88	%	70 - 130
			>C21-<C32 Hydrocarbons	2015/12/08		92	%	70 - 130
4303085	AJS	Method Blank	Isobutylbenzene - Extractable	2015/12/08		95	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/08		107	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/08	<0.050		mg/L	
			>C16-C21 Hydrocarbons	2015/12/08	<0.050		mg/L	
			>C21-<C32 Hydrocarbons	2015/12/08	<0.10		mg/L	
4303085	AJS	RPD	>C10-C16 Hydrocarbons	2015/12/08	3.9		%	40
			>C16-C21 Hydrocarbons	2015/12/08	NC		%	40
			>C21-<C32 Hydrocarbons	2015/12/08	NC		%	40
4303926	VWA	Matrix Spike [BLO052-05]	Total Mercury (Hg)	2015/12/09		106	%	80 - 120
4303926	VWA	Spiked Blank	Total Mercury (Hg)	2015/12/09		103	%	80 - 120
4303926	VWA	Method Blank	Total Mercury (Hg)	2015/12/09	<0.013		ug/L	
4303926	VWA	RPD [BLO051-05]	Total Mercury (Hg)	2015/12/09	NC		%	20
4304857	BAN	Matrix Spike	Dissolved Aluminum (Al)	2015/12/09		102	%	80 - 120
			Dissolved Antimony (Sb)	2015/12/09		102	%	80 - 120
			Dissolved Arsenic (As)	2015/12/09		97	%	80 - 120
			Dissolved Barium (Ba)	2015/12/09		97	%	80 - 120
			Dissolved Beryllium (Be)	2015/12/09		100	%	80 - 120
			Dissolved Bismuth (Bi)	2015/12/09		100	%	80 - 120
			Dissolved Boron (B)	2015/12/09		98	%	80 - 120
			Dissolved Cadmium (Cd)	2015/12/09		100	%	80 - 120
			Dissolved Calcium (Ca)	2015/12/09		99	%	80 - 120
			Dissolved Chromium (Cr)	2015/12/09		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 Cobalt (Co)	2015/12/09		98	%	80 - 120
			Dissolved Copper (Cu)	2015/12/09		97	%	80 - 120
			Dissolved Iron (Fe)	2015/12/09		NC	%	80 - 120
			Dissolved Lead (Pb)	2015/12/09		100	%	80 - 120
			Dissolved Magnesium (Mg)	2015/12/09		101	%	80 - 120
			Dissolved Manganese (Mn)	2015/12/09		NC	%	80 - 120
			Dissolved Molybdenum (Mo)	2015/12/09		102	%	80 - 120
			Dissolved Nickel (Ni)	2015/12/09		98	%	80 - 120
			Dissolved Phosphorus (P)	2015/12/09		106	%	80 - 120
			Dissolved Potassium (K)	2015/12/09		99	%	80 - 120
			Dissolved Selenium (Se)	2015/12/09		98	%	80 - 120
			Dissolved Silver (Ag)	2015/12/09		96	%	80 - 120
			Dissolved Sodium (Na)	2015/12/09		101	%	80 - 120
			Dissolved Strontium (Sr)	2015/12/09		96	%	80 - 120
			Dissolved Thallium (Tl)	2015/12/09		101	%	80 - 120
			Dissolved Tin (Sn)	2015/12/09		104	%	80 - 120
			Dissolved Titanium (Ti)	2015/12/09		103	%	80 - 120
			Dissolved Uranium (U)	2015/12/09		104	%	80 - 120
			Dissolved Vanadium (V)	2015/12/09		99	%	80 - 120
			Dissolved Zinc (Zn)	2015/12/09		99	%	80 - 120
4304857	BAN	Spiked Blank	Dissolved Aluminum (Al)	2015/12/09		104	%	80 - 120
			Dissolved Antimony (Sb)	2015/12/09		99	%	80 - 120
			Dissolved Arsenic (As)	2015/12/09		97	%	80 - 120
			Dissolved Barium (Ba)	2015/12/09		97	%	80 - 120
			Dissolved Beryllium (Be)	2015/12/09		100	%	80 - 120
			Dissolved Bismuth (Bi)	2015/12/09		99	%	80 - 120
			Dissolved Boron (B)	2015/12/09		101	%	80 - 120
			Dissolved Cadmium (Cd)	2015/12/09		102	%	80 - 120
			Dissolved Calcium (Ca)	2015/12/09		99	%	80 - 120
			Dissolved Chromium (Cr)	2015/12/09		97	%	80 - 120
			Dissolved Cobalt (Co)	2015/12/09		99	%	80 - 120
			Dissolved Copper (Cu)	2015/12/09		98	%	80 - 120
			Dissolved Iron (Fe)	2015/12/09		104	%	80 - 120
			Dissolved Lead (Pb)	2015/12/09		100	%	80 - 120
			Dissolved Magnesium (Mg)	2015/12/09		104	%	80 - 120
			Dissolved Manganese (Mn)	2015/12/09		100	%	80 - 120
			Dissolved Molybdenum (Mo)	2015/12/09		102	%	80 - 120
			Dissolved Nickel (Ni)	2015/12/09		100	%	80 - 120
			Dissolved Phosphorus (P)	2015/12/09		107	%	80 - 120
			Dissolved Potassium (K)	2015/12/09		100	%	80 - 120
			Dissolved Selenium (Se)	2015/12/09		99	%	80 - 120
			Dissolved Silver (Ag)	2015/12/09		98	%	80 - 120
			Dissolved Sodium (Na)	2015/12/09		104	%	80 - 120
			Dissolved Strontium (Sr)	2015/12/09		101	%	80 - 120
			Dissolved Thallium (Tl)	2015/12/09		99	%	80 - 120
			Dissolved Tin (Sn)	2015/12/09		98	%	80 - 120
			Dissolved Titanium (Ti)	2015/12/09		102	%	80 - 120
			Dissolved Uranium (U)	2015/12/09		103	%	80 - 120
			Dissolved Vanadium (V)	2015/12/09		98	%	80 - 120
			Dissolved Zinc (Zn)	2015/12/09		100	%	80 - 120
4304857	BAN	Method Blank	Dissolved Aluminum (Al)	2015/12/09	<5.0		ug/L	
			Dissolved Antimony (Sb)	2015/12/09	<1.0		ug/L	
			Dissolved Arsenic (As)	2015/12/09	<1.0		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 Barium (Ba)	2015/12/09	<1.0		ug/L	
			Dissolved Beryllium (Be)	2015/12/09	<1.0		ug/L	
			Dissolved Bismuth (Bi)	2015/12/09	<2.0		ug/L	
			Dissolved Boron (B)	2015/12/09	<50		ug/L	
			Dissolved Cadmium (Cd)	2015/12/09	<0.010		ug/L	
			Dissolved Calcium (Ca)	2015/12/09	<100		ug/L	
			Dissolved Chromium (Cr)	2015/12/09	<1.0		ug/L	
			Dissolved Cobalt (Co)	2015/12/09	<0.40		ug/L	
			Dissolved Copper (Cu)	2015/12/09	<2.0		ug/L	
			Dissolved Iron (Fe)	2015/12/09	<50		ug/L	
			Dissolved Lead (Pb)	2015/12/09	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2015/12/09	<100		ug/L	
			Dissolved Manganese (Mn)	2015/12/09	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2015/12/09	<2.0		ug/L	
			Dissolved Nickel (Ni)	2015/12/09	<2.0		ug/L	
			Dissolved Phosphorus (P)	2015/12/09	<100		ug/L	
			Dissolved Potassium (K)	2015/12/09	<100		ug/L	
			Dissolved Selenium (Se)	2015/12/09	<1.0		ug/L	
			Dissolved Silver (Ag)	2015/12/09	<0.10		ug/L	
			Dissolved Sodium (Na)	2015/12/09	<100		ug/L	
			Dissolved Strontium (Sr)	2015/12/09	<2.0		ug/L	
			Dissolved Thallium (Tl)	2015/12/09	<0.10		ug/L	
			Dissolved Tin (Sn)	2015/12/09	<2.0		ug/L	
			Dissolved Titanium (Ti)	2015/12/09	<2.0		ug/L	
			Dissolved Uranium (U)	2015/12/09	<0.10		ug/L	
			Dissolved Vanadium (V)	2015/12/09	<2.0		ug/L	
			Dissolved Zinc (Zn)	2015/12/09	<5.0		ug/L	
4304857	BAN	RPD	Dissolved Aluminum (Al)	2015/12/09	NC		%	20
			Dissolved Antimony (Sb)	2015/12/09	NC		%	20
			Dissolved Arsenic (As)	2015/12/09	NC		%	20
			Dissolved Barium (Ba)	2015/12/09	1.1		%	20
			Dissolved Beryllium (Be)	2015/12/09	NC		%	20
			Dissolved Bismuth (Bi)	2015/12/09	NC		%	20
			Dissolved Boron (B)	2015/12/09	NC		%	20
			Dissolved Cadmium (Cd)	2015/12/09	NC		%	20
			Dissolved Calcium (Ca)	2015/12/09	0.29		%	20
			Dissolved Chromium (Cr)	2015/12/09	NC		%	20
			Dissolved Cobalt (Co)	2015/12/09	NC		%	20
			Dissolved Copper (Cu)	2015/12/09	NC		%	20
			Dissolved Iron (Fe)	2015/12/09	0.57		%	20
			Dissolved Lead (Pb)	2015/12/09	NC		%	20
			Dissolved Magnesium (Mg)	2015/12/09	0.43		%	20
			Dissolved Manganese (Mn)	2015/12/09	0.11		%	20
			Dissolved Molybdenum (Mo)	2015/12/09	NC		%	20
			Dissolved Nickel (Ni)	2015/12/09	NC		%	20
			Dissolved Phosphorus (P)	2015/12/09	NC		%	20
			Dissolved Potassium (K)	2015/12/09	3.0		%	20
			Dissolved Selenium (Se)	2015/12/09	NC		%	20
			Dissolved Silver (Ag)	2015/12/09	NC		%	20
			Dissolved Sodium (Na)	2015/12/09	0.68		%	20
			Dissolved Strontium (Sr)	2015/12/09	2.6		%	20
			Dissolved Thallium (Tl)	2015/12/09	NC		%	20
			Dissolved Tin (Sn)	2015/12/09	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)	2015/12/09	NC		%	20
			Dissolved Uranium (U)	2015/12/09	NC		%	20
			Dissolved Vanadium (V)	2015/12/09	NC		%	20
			Dissolved Zinc (Zn)	2015/12/09	NC		%	20
4304858	BAN	Matrix Spike	Dissolved Aluminum (Al)	2015/12/09		102	%	80 - 120
			Dissolved Antimony (Sb)	2015/12/09		102	%	80 - 120
			Dissolved Arsenic (As)	2015/12/09		98	%	80 - 120
			Dissolved Barium (Ba)	2015/12/09		98	%	80 - 120
			Dissolved Beryllium (Be)	2015/12/09		102	%	80 - 120
			Dissolved Bismuth (Bi)	2015/12/09		100	%	80 - 120
			Dissolved Boron (B)	2015/12/09		100	%	80 - 120
			Dissolved Cadmium (Cd)	2015/12/09		101	%	80 - 120
			Dissolved Calcium (Ca)	2015/12/09		NC	%	80 - 120
			Dissolved Chromium (Cr)	2015/12/09		97	%	80 - 120
			Dissolved Cobalt (Co)	2015/12/09		99	%	80 - 120
			Dissolved Copper (Cu)	2015/12/09		97	%	80 - 120
			Dissolved Iron (Fe)	2015/12/09		NC	%	80 - 120
			Dissolved Lead (Pb)	2015/12/09		100	%	80 - 120
			Dissolved Magnesium (Mg)	2015/12/09		NC	%	80 - 120
			Dissolved Manganese (Mn)	2015/12/09		NC	%	80 - 120
			Dissolved Molybdenum (Mo)	2015/12/09		103	%	80 - 120
			Dissolved Nickel (Ni)	2015/12/09		99	%	80 - 120
			Dissolved Phosphorus (P)	2015/12/09		107	%	80 - 120
			Dissolved Potassium (K)	2015/12/09		99	%	80 - 120
			Dissolved Selenium (Se)	2015/12/09		99	%	80 - 120
			Dissolved Silver (Ag)	2015/12/09		70 (1)	%	80 - 120
			Dissolved Sodium (Na)	2015/12/09		102	%	80 - 120
			Dissolved Strontium (Sr)	2015/12/09		NC	%	80 - 120
			Dissolved Thallium (Tl)	2015/12/09		100	%	80 - 120
			Dissolved Tin (Sn)	2015/12/09		103	%	80 - 120
			Dissolved Titanium (Ti)	2015/12/09		100	%	80 - 120
			Dissolved Uranium (U)	2015/12/09		104	%	80 - 120
			Dissolved Vanadium (V)	2015/12/09		100	%	80 - 120
			Dissolved Zinc (Zn)	2015/12/09		99	%	80 - 120
4304858	BAN	Spiked Blank	Dissolved Aluminum (Al)	2015/12/09		103	%	80 - 120
			Dissolved Antimony (Sb)	2015/12/09		99	%	80 - 120
			Dissolved Arsenic (As)	2015/12/09		96	%	80 - 120
			Dissolved Barium (Ba)	2015/12/09		97	%	80 - 120
			Dissolved Beryllium (Be)	2015/12/09		99	%	80 - 120
			Dissolved Bismuth (Bi)	2015/12/09		99	%	80 - 120
			Dissolved Boron (B)	2015/12/09		100	%	80 - 120
			Dissolved Cadmium (Cd)	2015/12/09		100	%	80 - 120
			Dissolved Calcium (Ca)	2015/12/09		101	%	80 - 120
			Dissolved Chromium (Cr)	2015/12/09		97	%	80 - 120
			Dissolved Cobalt (Co)	2015/12/09		99	%	80 - 120
			Dissolved Copper (Cu)	2015/12/09		98	%	80 - 120
			Dissolved Iron (Fe)	2015/12/09		102	%	80 - 120
			Dissolved Lead (Pb)	2015/12/09		100	%	80 - 120
			Dissolved Magnesium (Mg)	2015/12/09		104	%	80 - 120
			Dissolved Manganese (Mn)	2015/12/09		100	%	80 - 120
			Dissolved Molybdenum (Mo)	2015/12/09		99	%	80 - 120
			Dissolved Nickel (Ni)	2015/12/09		100	%	80 - 120
			Dissolved Phosphorus (P)	2015/12/09		106	%	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 Potassium (K)	2015/12/09		100	%	80 - 120
			Dissolved Selenium (Se)	2015/12/09		100	%	80 - 120
			Dissolved Silver (Ag)	2015/12/09		98	%	80 - 120
			Dissolved Sodium (Na)	2015/12/09		103	%	80 - 120
			Dissolved Strontium (Sr)	2015/12/09		99	%	80 - 120
			Dissolved Thallium (Tl)	2015/12/09		99	%	80 - 120
			Dissolved Tin (Sn)	2015/12/09		99	%	80 - 120
			Dissolved Titanium (Ti)	2015/12/09		99	%	80 - 120
			Dissolved Uranium (U)	2015/12/09		103	%	80 - 120
			Dissolved Vanadium (V)	2015/12/09		98	%	80 - 120
			Dissolved Zinc (Zn)	2015/12/09		99	%	80 - 120
4304858	BAN	Method Blank	Dissolved Aluminum (Al)	2015/12/09	<5.0		ug/L	
			Dissolved Antimony (Sb)	2015/12/09	<1.0		ug/L	
			Dissolved Arsenic (As)	2015/12/09	<1.0		ug/L	
			Dissolved Barium (Ba)	2015/12/09	<1.0		ug/L	
			Dissolved Beryllium (Be)	2015/12/09	<1.0		ug/L	
			Dissolved Bismuth (Bi)	2015/12/09	<2.0		ug/L	
			Dissolved Boron (B)	2015/12/09	<50		ug/L	
			Dissolved Cadmium (Cd)	2015/12/09	<0.010		ug/L	
			Dissolved Calcium (Ca)	2015/12/09	<100		ug/L	
			Dissolved Chromium (Cr)	2015/12/09	<1.0		ug/L	
			Dissolved Cobalt (Co)	2015/12/09	<0.40		ug/L	
			Dissolved Copper (Cu)	2015/12/09	<2.0		ug/L	
			Dissolved Iron (Fe)	2015/12/09	<50		ug/L	
			Dissolved Lead (Pb)	2015/12/09	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2015/12/09	<100		ug/L	
			Dissolved Manganese (Mn)	2015/12/09	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2015/12/09	<2.0		ug/L	
			Dissolved Nickel (Ni)	2015/12/09	<2.0		ug/L	
			Dissolved Phosphorus (P)	2015/12/09	<100		ug/L	
			Dissolved Potassium (K)	2015/12/09	<100		ug/L	
			Dissolved Selenium (Se)	2015/12/09	<1.0		ug/L	
			Dissolved Silver (Ag)	2015/12/09	<0.10		ug/L	
			Dissolved Sodium (Na)	2015/12/09	<100		ug/L	
			Dissolved Strontium (Sr)	2015/12/09	<2.0		ug/L	
			Dissolved Thallium (Tl)	2015/12/09	<0.10		ug/L	
			Dissolved Tin (Sn)	2015/12/09	<2.0		ug/L	
			Dissolved Titanium (Ti)	2015/12/09	<2.0		ug/L	
			Dissolved Uranium (U)	2015/12/09	<0.10		ug/L	
			Dissolved Vanadium (V)	2015/12/09	<2.0		ug/L	
			Dissolved Zinc (Zn)	2015/12/09	<5.0		ug/L	
4304858	BAN	RPD	Dissolved Aluminum (Al)	2015/12/09	NC		%	20
			Dissolved Antimony (Sb)	2015/12/09	NC		%	20
			Dissolved Arsenic (As)	2015/12/09	NC		%	20
			Dissolved Barium (Ba)	2015/12/09	0.50		%	20
			Dissolved Beryllium (Be)	2015/12/09	NC		%	20
			Dissolved Bismuth (Bi)	2015/12/09	NC		%	20
			Dissolved Boron (B)	2015/12/09	NC		%	20
			Dissolved Cadmium (Cd)	2015/12/09	NC		%	20
			Dissolved Calcium (Ca)	2015/12/09	0.63		%	20
			Dissolved Chromium (Cr)	2015/12/09	NC		%	20
			Dissolved Cobalt (Co)	2015/12/09	5.9		%	20
			Dissolved Copper (Cu)	2015/12/09	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 Iron (Fe)	2015/12/09	0.072		%	20
			Dissolved Lead (Pb)	2015/12/09	NC		%	20
			Dissolved Magnesium (Mg)	2015/12/09	0.51		%	20
			Dissolved Manganese (Mn)	2015/12/09	1.1		%	20
			Dissolved Molybdenum (Mo)	2015/12/09	NC		%	20
			Dissolved Nickel (Ni)	2015/12/09	NC		%	20
			Dissolved Phosphorus (P)	2015/12/09	NC		%	20
			Dissolved Potassium (K)	2015/12/09	2.3		%	20
			Dissolved Selenium (Se)	2015/12/09	NC		%	20
			Dissolved Silver (Ag)	2015/12/09	NC		%	20
			Dissolved Sodium (Na)	2015/12/09	0.88		%	20
			Dissolved Strontium (Sr)	2015/12/09	0.44		%	20
			Dissolved Thallium (Tl)	2015/12/09	NC		%	20
			Dissolved Tin (Sn)	2015/12/09	NC		%	20
			Dissolved Titanium (Ti)	2015/12/09	NC		%	20
			Dissolved Uranium (U)	2015/12/09	NC		%	20
			Dissolved Vanadium (V)	2015/12/09	NC		%	20
			Dissolved Zinc (Zn)	2015/12/09	NC		%	20
4304994	GTH	Matrix Spike [BLO052-01]	D10-Anthracene	2015/12/13		93	%	30 - 130
			D14-Terphenyl	2015/12/13		96	%	30 - 130
			D8-Acenaphthylene	2015/12/13		94	%	30 - 130
			1-Methylnaphthalene	2015/12/13		102	%	30 - 130
			2-Methylnaphthalene	2015/12/13		104	%	30 - 130
			Acenaphthene	2015/12/13		112	%	30 - 130
			Acenaphthylene	2015/12/13		118	%	30 - 130
			Anthracene	2015/12/13		111	%	30 - 130
			Benzo(a)anthracene	2015/12/13		112	%	30 - 130
			Benzo(a)pyrene	2015/12/13		106	%	30 - 130
			Benzo(b)fluoranthene	2015/12/13		107	%	30 - 130
			Benzo(g,h,i)perylene	2015/12/13		111	%	30 - 130
			Benzo(j)fluoranthene	2015/12/13		105	%	30 - 130
			Benzo(k)fluoranthene	2015/12/13		116	%	30 - 130
			Chrysene	2015/12/13		114	%	30 - 130
			Dibenz(a,h)anthracene	2015/12/13		108	%	30 - 130
			Fluoranthene	2015/12/13		111	%	30 - 130
			Fluorene	2015/12/13		118	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2015/12/13		115	%	30 - 130
			Naphthalene	2015/12/13		102	%	30 - 130
			Perylene	2015/12/13		105	%	30 - 130
			Phenanthrene	2015/12/13		115	%	30 - 130
			Pyrene	2015/12/13		108	%	30 - 130
4304994	GTH	Spiked Blank	D10-Anthracene	2015/12/13		92	%	30 - 130
			D14-Terphenyl	2015/12/13		102	%	30 - 130
			D8-Acenaphthylene	2015/12/13		97	%	30 - 130
			1-Methylnaphthalene	2015/12/13		103	%	30 - 130
			2-Methylnaphthalene	2015/12/13		106	%	30 - 130
			Acenaphthene	2015/12/13		110	%	30 - 130
			Acenaphthylene	2015/12/13		119	%	30 - 130
			Anthracene	2015/12/13		102	%	30 - 130
			Benzo(a)anthracene	2015/12/13		113	%	30 - 130
			Benzo(a)pyrene	2015/12/13		105	%	30 - 130
			Benzo(b)fluoranthene	2015/12/13		105	%	30 - 130
			Benzo(g,h,i)perylene	2015/12/13		110	%	30 - 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(j)fluoranthene	2015/12/13		108	%	30 - 130
			Benzo(k)fluoranthene	2015/12/13		118	%	30 - 130
			Chrysene	2015/12/13		109	%	30 - 130
			Dibenz(a,h)anthracene	2015/12/13		107	%	30 - 130
			Fluoranthene	2015/12/13		115	%	30 - 130
			Fluorene	2015/12/13		117	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2015/12/13		116	%	30 - 130
			Naphthalene	2015/12/13		104	%	30 - 130
			Perylene	2015/12/13		107	%	30 - 130
			Phenanthrene	2015/12/13		110	%	30 - 130
			Pyrene	2015/12/13		113	%	30 - 130
4304994	GTH	Method Blank	D10-Anthracene	2015/12/13		91	%	30 - 130
			D14-Terphenyl	2015/12/13		100	%	30 - 130
			D8-Acenaphthylene	2015/12/13		96	%	30 - 130
			1-Methylnaphthalene	2015/12/13	<0.050		ug/L	
			2-Methylnaphthalene	2015/12/13	<0.050		ug/L	
			Acenaphthene	2015/12/13	<0.010		ug/L	
			Acenaphthylene	2015/12/13	<0.010		ug/L	
			Anthracene	2015/12/13	<0.010		ug/L	
			Benzo(a)anthracene	2015/12/13	<0.010		ug/L	
			Benzo(a)pyrene	2015/12/13	<0.010		ug/L	
			Benzo(b)fluoranthene	2015/12/13	<0.010		ug/L	
			Benzo(g,h,i)perylene	2015/12/13	<0.010		ug/L	
			Benzo(j)fluoranthene	2015/12/13	<0.010		ug/L	
			Benzo(k)fluoranthene	2015/12/13	<0.010		ug/L	
			Chrysene	2015/12/13	<0.010		ug/L	
			Dibenz(a,h)anthracene	2015/12/13	<0.010		ug/L	
			Fluoranthene	2015/12/13	<0.010		ug/L	
			Fluorene	2015/12/13	<0.010		ug/L	
			Indeno(1,2,3-cd)pyrene	2015/12/13	<0.010		ug/L	
			Naphthalene	2015/12/13	<0.20		ug/L	
			Perylene	2015/12/13	<0.010		ug/L	
			Phenanthrene	2015/12/13	<0.010		ug/L	
			Pyrene	2015/12/13	<0.010		ug/L	
4304994	GTH	RPD [BLO051-01]	1-Methylnaphthalene	2015/12/13	8.8		%	40
			2-Methylnaphthalene	2015/12/13	NC		%	40
			Acenaphthene	2015/12/13	5.8		%	40
			Acenaphthylene	2015/12/13	9.8		%	40
			Anthracene	2015/12/13	6.6		%	40
			Benzo(a)anthracene	2015/12/13	NC		%	40
			Benzo(a)pyrene	2015/12/13	NC		%	40
			Benzo(b)fluoranthene	2015/12/13	NC		%	40
			Benzo(g,h,i)perylene	2015/12/13	NC		%	40
			Benzo(j)fluoranthene	2015/12/13	NC		%	40
			Benzo(k)fluoranthene	2015/12/13	NC		%	40
			Chrysene	2015/12/13	NC		%	40
			Dibenz(a,h)anthracene	2015/12/13	NC		%	40
			Fluoranthene	2015/12/13	3.5		%	40
			Fluorene	2015/12/13	7.7		%	40
			Indeno(1,2,3-cd)pyrene	2015/12/13	NC		%	40
			Naphthalene	2015/12/13	11		%	40
			Perylene	2015/12/13	NC		%	40
			Phenanthrene	2015/12/13	4.0		%	40

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Pyrene	2015/12/13	0.99		%	40

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.

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 spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of 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 (one or both samples < 5x RDL).

(1) Recovery within QC acceptance limits. < 10 % of compounds in multi-component analysis in violation.

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Maxxam Job #: B5O8246
Report Date: 2015/12/14

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

VALIDATION SIGNATURE PAGE

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

Mike MacGillivray, Scientific Specialist (Inorganics)

Rosemarie MacDonald, Scientific Specialist (Organics)

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Your P.O. #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

Attention:Nadine Wambolt

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

Report Date: 2015/12/07
Report #: R3795811
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B5O6299
Received: 2015/11/30, 17:29

Sample Matrix: Organic Liquid
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Free Product ID (1)	1	2015/12/04	2015/12/05		

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 Maxxam Bedford

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Natalie MacAskill, Sr. Project Manager
Email: NMacAskill@maxxam.ca
Phone# (902)567-1255 Ext:17
==========
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Maxxam Job #: B5O6299
Report Date: 2015/12/07

Dillon Consulting Limited
Site Location: HARBOURSIDE COMMERCIAL PARK
Your P.O. #: 4104251070

RESULTS OF ANALYSES OF ORGANIC LIQUID

Maxxam ID		BLF155	
Sampling Date		2015/11/27	
	UNITS	**SCU32-001-MWA**	**QC Batch**
Petroleum Hydrocarbons			
Open Characterization by FID	N/A	COMMENT (1)	4299250

QC Batch = Quality Control Batch
(1) Fuel oil fraction.

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Maxxam Job #: B5O6299
Report Date: 2015/12/07

Dillon Consulting Limited
Site Location: HARBOURSIDE COMMERCIAL PARK
Your P.O. #: 4104251070

GENERAL COMMENTS

Results relate only to the items tested.

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Maxxam Job #: B5O6299
Report Date: 2015/12/07

Dillon Consulting Limited
Site Location: HARBOURSIDE COMMERCIAL PARK
Your P.O. #: 4104251070

VALIDATION SIGNATURE PAGE

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

Phil Deveau

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Maxxam Job #: B5O6016
Report Date: 2015/12/14

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

VALIDATION SIGNATURE PAGE

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

Mike MacGillivray, Scientific Specialist (Inorganics)

Rosemarie MacDonald, Scientific Specialist (Organics)

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Your Project #: 4104251070
Site#: HARBOURSIDE COMMERCIAL PARK
Site Location: HARBOURSIDE COMMERCIAL PARK
Your C.O.C. #: 538679

Attention:Nadine Wambolt

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

Report Date: 2015/12/14
Report #: R3805636
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B5O6016
Received: 2015/11/30, 16:50

Sample Matrix: Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
TEH in Water (PIRI) (1)	7	2015/12/04	2015/12/05	ATL SOP 00113	Atl. RBCA v3 m
Mercury - Total (CVAA,LL) (1)	6	2015/12/04	2015/12/07	ATL SOP 00026	EPA 245.1 R3 m
Metals Water Diss. MS (as rec'd) (1)	3	N/A	2015/12/04	ATL SOP 00058	EPA 6020A R1 m
Metals Water Diss. MS (as rec'd) (1)	3	N/A	2015/12/05	ATL SOP 00058	EPA 6020A R1 m
PAH in Water by GC/MS (SIM) (1)	1	2015/12/04	2015/12/12	ATL SOP 00103	EPA 8270D 2007 m
PAH in Water by GC/MS (SIM) (1)	5	2015/12/07	2015/12/07	ATL SOP 00103	EPA 8270D 2007 m
VPH in Water (PIRI) (1)	7	N/A	2015/12/05	ATL SOP 00118	Atl. RBCA v3 m
ModTPH (T1) Calc. for Water (1)	7	N/A	2015/12/07	N/A	Atl. RBCA v3 m

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 Maxxam Bedford

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Natalie MacAskill, Sr. Project Manager
Email: NMacAskill@maxxam.ca
Phone# (902)567-1255 Ext:17
==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Job #: B5O6016
Report Date: 2015/12/14

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

MERCURY BY COLD VAPOUR AA (WATER)

Maxxam ID		BLD581	BLD582	BLD583	BLD584	BLD585	BLD587		
Sampling Date		2015/11/30	2015/11/30	2015/11/30	2015/11/30	2015/11/30	2015/11/30		
COC Number		538679	538679	538679	538679	538679	538679		
	UNITS	SCU32-003-MW	SCU32-002-MW	SCU19-010-MW	SCU19-002-MWB	FB-001	EB-002	RDL	QC Batch
Metals									
Total Mercury (Hg)	ug/L	<0.013	<0.013	0.022	0.013	<0.013	<0.013	0.013	4299764

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B5O6016
Report Date: 2015/12/14

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

ELEMENTS BY ICP/MS (WATER)

Maxxam ID		BLD581		BLD582	BLD583		BLD584		
Sampling Date		2015/11/30		2015/11/30	2015/11/30		2015/11/30		
COC Number		538679		538679	538679		538679		
	UNITS	SCU32-003-MW	RDL	SCU32-002-MW	SCU19-010-MW	RDL	SCU19-002-MWB	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	ug/L	<50	50	510	38	5.0	<50	50	4298932
Dissolved Antimony (Sb)	ug/L	<10	10	<1.0	<1.0	1.0	<10	10	4298932
Dissolved Arsenic (As)	ug/L	<10	10	4.6	5.0	1.0	<10	10	4298932
Dissolved Barium (Ba)	ug/L	130	10	42	32	1.0	61	10	4298932
Dissolved Beryllium (Be)	ug/L	<10	10	<1.0	<1.0	1.0	<10	10	4298932
Dissolved Bismuth (Bi)	ug/L	<20	20	<2.0	<2.0	2.0	<20	20	4298932
Dissolved Boron (B)	ug/L	<500	500	<50	260	50	<500	500	4298932
Dissolved Cadmium (Cd)	ug/L	<0.10	0.10	<0.010	<0.010	0.010	<0.10	0.10	4298932
Dissolved Calcium (Ca)	ug/L	240000	1000	200000	80000	100	1600000	1000	4298932
Dissolved Chromium (Cr)	ug/L	<10	10	<1.0	<1.0	1.0	<10	10	4298932
Dissolved Cobalt (Co)	ug/L	<4.0	4.0	<0.40	<0.40	0.40	<4.0	4.0	4298932
Dissolved Copper (Cu)	ug/L	31	20	<2.0	<2.0	2.0	<20	20	4298932
Dissolved Iron (Fe)	ug/L	<500	500	<50	150	50	1900	500	4298932
Dissolved Lead (Pb)	ug/L	<5.0	5.0	<0.50	<0.50	0.50	<5.0	5.0	4298932
Dissolved Magnesium (Mg)	ug/L	<1000	1000	<100	3900	100	180000	1000	4298932
Dissolved Manganese (Mn)	ug/L	<20	20	<2.0	42	2.0	570	20	4298932
Dissolved Molybdenum (Mo)	ug/L	580	20	41	9.9	2.0	<20	20	4298932
Dissolved Nickel (Ni)	ug/L	<20	20	<2.0	<2.0	2.0	<20	20	4298932
Dissolved Phosphorus (P)	ug/L	<1000	1000	<100	150	100	<1000	1000	4298932
Dissolved Potassium (K)	ug/L	530000	1000	27000	27000	100	22000	1000	4298932
Dissolved Selenium (Se)	ug/L	77	10	2.6	1.5	1.0	<10	10	4298932
Dissolved Silver (Ag)	ug/L	<1.0	1.0	<0.10	<0.10	0.10	<1.0	1.0	4298932
Dissolved Sodium (Na)	ug/L	680000	1000	59000	49000	100	330000	1000	4298932
Dissolved Strontium (Sr)	ug/L	1900	20	890	310	2.0	150000	200	4298932
Dissolved Thallium (Tl)	ug/L	<1.0	1.0	<0.10	<0.10	0.10	<1.0	1.0	4298932
Dissolved Tin (Sn)	ug/L	<20	20	<2.0	<2.0	2.0	<20	20	4298932
Dissolved Titanium (Ti)	ug/L	<20	20	<2.0	<2.0	2.0	<20	20	4298932
Dissolved Uranium (U)	ug/L	<1.0	1.0	<0.10	0.26	0.10	1.6	1.0	4298932
Dissolved Vanadium (V)	ug/L	<20	20	<2.0	6.5	2.0	<20	20	4298932
Dissolved Zinc (Zn)	ug/L	<50	50	<5.0	<5.0	5.0	<50	50	4298932

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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ELEMENTS BY ICP/MS (WATER)

Maxxam ID		BLD585	BLD587		
Sampling Date		2015/11/30	2015/11/30		
COC Number		538679	538679		
	UNITS	FB-001	EB-002	RDL	QC Batch
Metals					
Dissolved Aluminum (Al)	ug/L	5.4	<5.0	5.0	4298932
Dissolved Antimony (Sb)	ug/L	<1.0	<1.0	1.0	4298932
Dissolved Arsenic (As)	ug/L	<1.0	<1.0	1.0	4298932
Dissolved Barium (Ba)	ug/L	<1.0	<1.0	1.0	4298932
Dissolved Beryllium (Be)	ug/L	<1.0	<1.0	1.0	4298932
Dissolved Bismuth (Bi)	ug/L	<2.0	<2.0	2.0	4298932
Dissolved Boron (B)	ug/L	<50	<50	50	4298932
Dissolved Cadmium (Cd)	ug/L	<0.010	<0.010	0.010	4298932
Dissolved Calcium (Ca)	ug/L	110	110	100	4298932
Dissolved Chromium (Cr)	ug/L	<1.0	<1.0	1.0	4298932
Dissolved Cobalt (Co)	ug/L	<0.40	<0.40	0.40	4298932
Dissolved Copper (Cu)	ug/L	<2.0	3.3	2.0	4298932
Dissolved Iron (Fe)	ug/L	<50	<50	50	4298932
Dissolved Lead (Pb)	ug/L	<0.50	<0.50	0.50	4298932
Dissolved Magnesium (Mg)	ug/L	<100	<100	100	4298932
Dissolved Manganese (Mn)	ug/L	<2.0	<2.0	2.0	4298932
Dissolved Molybdenum (Mo)	ug/L	<2.0	<2.0	2.0	4298932
Dissolved Nickel (Ni)	ug/L	<2.0	<2.0	2.0	4298932
Dissolved Phosphorus (P)	ug/L	<100	<100	100	4298932
Dissolved Potassium (K)	ug/L	<100	<100	100	4298932
Dissolved Selenium (Se)	ug/L	<1.0	<1.0	1.0	4298932
Dissolved Silver (Ag)	ug/L	<0.10	<0.10	0.10	4298932
Dissolved Sodium (Na)	ug/L	<100	<100	100	4298932
Dissolved Strontium (Sr)	ug/L	4.5	<2.0	2.0	4298932
Dissolved Thallium (Tl)	ug/L	<0.10	<0.10	0.10	4298932
Dissolved Tin (Sn)	ug/L	<2.0	<2.0	2.0	4298932
Dissolved Titanium (Ti)	ug/L	<2.0	<2.0	2.0	4298932
Dissolved Uranium (U)	ug/L	<0.10	<0.10	0.10	4298932
Dissolved Vanadium (V)	ug/L	<2.0	<2.0	2.0	4298932
Dissolved Zinc (Zn)	ug/L	<5.0	27	5.0	4298932

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B5O6016
Report Date: 2015/12/14

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Maxxam ID		BLD581		BLD582		BLD583	BLD584		
Sampling Date		2015/11/30		2015/11/30		2015/11/30	2015/11/30		
COC Number		538679		538679		538679	538679		
	UNITS	SCU32-003-MW	QC Batch	SCU32-002-MW	QC Batch	SCU19-010-MW	SCU19-002-MWB	RDL	QC Batch
Polyaromatic Hydrocarbons									
1-Methylnaphthalene	ug/L	2.4	4301468	0.71	4299150	2.1	<0.050	0.050	4301468
2-Methylnaphthalene	ug/L	2.2	4301468	0.69	4299150	3.0	<0.050	0.050	4301468
Acenaphthene	ug/L	1.5	4301468	0.23	4299150	2.4	0.018	0.010	4301468
Acenaphthylene	ug/L	1.8	4301468	0.38	4299150	0.027	<0.010	0.010	4301468
Anthracene	ug/L	1.2	4301468	0.21	4299150	0.074	0.040	0.010	4301468
Benzo(a)anthracene	ug/L	0.12	4301468	0.023	4299150	<0.010	0.073	0.010	4301468
Benzo(a)pyrene	ug/L	0.11	4301468	<0.010	4299150	<0.010	0.072	0.010	4301468
Benzo(b)fluoranthene	ug/L	0.076	4301468	<0.010	4299150	<0.010	0.056	0.010	4301468
Benzo(g,h,i)perylene	ug/L	0.057	4301468	<0.010	4299150	<0.010	0.041	0.010	4301468
Benzo(j)fluoranthene	ug/L	0.050	4301468	<0.010	4299150	<0.010	0.034	0.010	4301468
Benzo(k)fluoranthene	ug/L	0.045	4301468	<0.010	4299150	<0.010	0.036	0.010	4301468
Chrysene	ug/L	0.13	4301468	0.022	4299150	<0.010	0.084	0.010	4301468
Dibenz(a,h)anthracene	ug/L	0.020	4301468	<0.010	4299150	<0.010	0.020	0.010	4301468
Fluoranthene	ug/L	1.4	4301468	0.33	4299150	0.019	0.20	0.010	4301468
Fluorene	ug/L	3.2	4301468	0.48	4299150	1.1	0.025	0.010	4301468
Indeno(1,2,3-cd)pyrene	ug/L	0.046	4301468	<0.010	4299150	<0.010	0.044	0.010	4301468
Naphthalene	ug/L	7.6	4301468	7.6	4299150	15	<0.20	0.20	4301468
Perylene	ug/L	0.028	4301468	<0.010	4299150	<0.010	0.015	0.010	4301468
Phenanthrene	ug/L	5.9	4301468	1.1	4299150	0.58	0.18	0.010	4301468
Pyrene	ug/L	0.86	4301468	0.21	4299150	0.037	0.15	0.010	4301468
Surrogate Recovery (%)									
D10-Anthracene	%	101	4301468	101	4299150	115	116		4301468
D14-Terphenyl	%	101	4301468	102	4299150	121	115		4301468
D8-Acenaphthylene	%	99	4301468	103	4299150	111	113		4301468

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QC Batch = Quality Control Batch

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SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Maxxam ID		BLD585	BLD587		
Sampling Date		2015/11/30	2015/11/30		
COC Number		538679	538679		
	UNITS	FB-001	EB-002	RDL	QC Batch
Polyaromatic Hydrocarbons					
1-Methylnaphthalene	ug/L	<0.050	<0.050	0.050	4301468
2-Methylnaphthalene	ug/L	<0.050	<0.050	0.050	4301468
Acenaphthene	ug/L	<0.010	<0.010	0.010	4301468
Acenaphthylene	ug/L	<0.010	<0.010	0.010	4301468
Anthracene	ug/L	<0.010	<0.010	0.010	4301468
Benzo(a)anthracene	ug/L	<0.010	<0.010	0.010	4301468
Benzo(a)pyrene	ug/L	<0.010	<0.010	0.010	4301468
Benzo(b)fluoranthene	ug/L	<0.010	<0.010	0.010	4301468
Benzo(g,h,i)perylene	ug/L	<0.010	<0.010	0.010	4301468
Benzo(j)fluoranthene	ug/L	<0.010	<0.010	0.010	4301468
Benzo(k)fluoranthene	ug/L	<0.010	<0.010	0.010	4301468
Chrysene	ug/L	<0.010	<0.010	0.010	4301468
Dibenz(a,h)anthracene	ug/L	<0.010	<0.010	0.010	4301468
Fluoranthene	ug/L	<0.010	0.021	0.010	4301468
Fluorene	ug/L	<0.010	0.013	0.010	4301468
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	<0.010	0.010	4301468
Naphthalene	ug/L	<0.20	<0.20	0.20	4301468
Perylene	ug/L	<0.010	<0.010	0.010	4301468
Phenanthrene	ug/L	<0.010	0.029	0.010	4301468
Pyrene	ug/L	<0.010	0.018	0.010	4301468
Surrogate Recovery (%)					
D10-Anthracene	%	117	93		4301468
D14-Terphenyl	%	124	94		4301468
D8-Acenaphthylene	%	120	92		4301468

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B5O6016
Report Date: 2015/12/14

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

ATLANTIC RBCA HYDROCARBONS (WATER)

Maxxam ID		BLD581	BLD582	BLD583	BLD584	BLD585		
Sampling Date		2015/11/30	2015/11/30	2015/11/30	2015/11/30	2015/11/30		
COC Number		538679	538679	538679	538679	538679		
	UNITS	SCU32-003-MW	SCU32-002-MW	SCU19-010-MW	SCU19-002-MWB	FB-001	RDL	QC Batch
Petroleum Hydrocarbons								
Benzene	mg/L	0.0023	0.0011	<0.0010	<0.0010	<0.0010	0.0010	4299770
Toluene	mg/L	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	4299770
Ethylbenzene	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	4299770
Total Xylenes	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	4299770
C6 - C10 (less BTEX)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	4299770
>C10-C16 Hydrocarbons	mg/L	0.61	0.056	0.073	<0.050	<0.050	0.050	4299073
>C16-C21 Hydrocarbons	mg/L	0.46	0.059	0.12	<0.050	<0.050	0.050	4299073
>C21-<C32 Hydrocarbons	mg/L	0.38	<0.10	0.16	<0.10	<0.10	0.10	4299073
Modified TPH (Tier1)	mg/L	1.5	0.11	0.35	<0.10	<0.10	0.10	4293580
Reached Baseline at C32	mg/L	Yes	Yes	Yes	NA	NA	N/A	4299073
Hydrocarbon Resemblance	mg/L	COMMENT (1)	COMMENT (1)	COMMENT (2)	NA	NA	N/A	4299073
Surrogate Recovery (%)								
Isobutylbenzene - Extractable	%	103	99	101	100	103		4299073
n-Dotriacontane - Extractable	%	95	93	94	89	93		4299073
Isobutylbenzene - Volatile	%	97	97	97	95	96		4299770

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Weathered fuel oil fraction.
(2) One product in fuel / lube range.

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Maxxam Job #: B5O6016
Report Date: 2015/12/14

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

ATLANTIC RBCA HYDROCARBONS (WATER)

Maxxam ID		BLD587	BLD611		
Sampling Date		2015/11/30	2015/11/30		
COC Number		538679	538679		
	UNITS	EB-002	TB-014	RDL	QC Batch
Petroleum Hydrocarbons					
Benzene	mg/L	<0.0010	<0.0010	0.0010	4299770
Toluene	mg/L	<0.0010	<0.0010	0.0010	4299770
Ethylbenzene	mg/L	<0.0010	<0.0010	0.0010	4299770
Total Xylenes	mg/L	<0.0020	<0.0020	0.0020	4299770
C6 - C10 (less BTEX)	mg/L	<0.010	<0.010	0.010	4299770
>C10-C16 Hydrocarbons	mg/L	<0.050	<0.050	0.050	4299073
>C16-C21 Hydrocarbons	mg/L	<0.050	<0.050	0.050	4299073
>C21-<C32 Hydrocarbons	mg/L	<0.10	<0.10	0.10	4299073
Modified TPH (Tier1)	mg/L	<0.10	<0.10	0.10	4293580
Reached Baseline at C32	mg/L	NA	NA	N/A	4299073
Hydrocarbon Resemblance	mg/L	NA	NA	N/A	4299073
Surrogate Recovery (%)					
Isobutylbenzene - Extractable	%	98	95		4299073
n-Dotriacontane - Extractable	%	90	90		4299073
Isobutylbenzene - Volatile	%	96	94		4299770

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

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Maxxam Job #: B5O6016
Report Date: 2015/12/14

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

GENERAL COMMENTS

Sample BLD581-01 : Elevated reporting limits for trace metals due to sample matrix.

Sample BLD584-01 : Elevated reporting limits for trace metals due to sample matrix.

Results relate only to the items tested.

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Maxxam Job #: B5O6016
Report Date: 2015/12/14

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
4298932	MLB	Matrix Spike	Dissolved Aluminum (Al)	2015/12/04		106	%	80 - 120
			Dissolved Antimony (Sb)	2015/12/04		105	%	80 - 120
			Dissolved Arsenic (As)	2015/12/04		98	%	80 - 120
			Dissolved Barium (Ba)	2015/12/04		97	%	80 - 120
			Dissolved Beryllium (Be)	2015/12/04		99	%	80 - 120
			Dissolved Bismuth (Bi)	2015/12/04		101	%	80 - 120
			Dissolved Boron (B)	2015/12/04		101	%	80 - 120
			Dissolved Cadmium (Cd)	2015/12/04		99	%	80 - 120
			Dissolved Calcium (Ca)	2015/12/04		NC	%	80 - 120
			Dissolved Chromium (Cr)	2015/12/04		98	%	80 - 120
			Dissolved Cobalt (Co)	2015/12/04		98	%	80 - 120
			Dissolved Copper (Cu)	2015/12/04		98	%	80 - 120
			Dissolved Iron (Fe)	2015/12/04		104	%	80 - 120
			Dissolved Lead (Pb)	2015/12/04		97	%	80 - 120
			Dissolved Magnesium (Mg)	2015/12/04		106	%	80 - 120
			Dissolved Manganese (Mn)	2015/12/04		NC	%	80 - 120
			Dissolved Molybdenum (Mo)	2015/12/04		106	%	80 - 120
			Dissolved Nickel (Ni)	2015/12/04		99	%	80 - 120
			Dissolved Phosphorus (P)	2015/12/04		109	%	80 - 120
			Dissolved Potassium (K)	2015/12/04		107	%	80 - 120
			Dissolved Selenium (Se)	2015/12/04		100	%	80 - 120
			Dissolved Silver (Ag)	2015/12/04		78 (1)	%	80 - 120
			Dissolved Sodium (Na)	2015/12/04		105	%	80 - 120
			Dissolved Strontium (Sr)	2015/12/04		NC	%	80 - 120
			Dissolved Thallium (Tl)	2015/12/04		101	%	80 - 120
			Dissolved Tin (Sn)	2015/12/04		106	%	80 - 120
			Dissolved Titanium (Ti)	2015/12/04		105	%	80 - 120
			Dissolved Uranium (U)	2015/12/04		106	%	80 - 120
			Dissolved Vanadium (V)	2015/12/04		98	%	80 - 120
			Dissolved Zinc (Zn)	2015/12/04		100	%	80 - 120
4298932	MLB	Spiked Blank	Dissolved Aluminum (Al)	2015/12/04		108	%	80 - 120
			Dissolved Antimony (Sb)	2015/12/04		100	%	80 - 120
			Dissolved Arsenic (As)	2015/12/04		98	%	80 - 120
			Dissolved Barium (Ba)	2015/12/04		98	%	80 - 120
			Dissolved Beryllium (Be)	2015/12/04		98	%	80 - 120
			Dissolved Bismuth (Bi)	2015/12/04		98	%	80 - 120
			Dissolved Boron (B)	2015/12/04		102	%	80 - 120
			Dissolved Cadmium (Cd)	2015/12/04		98	%	80 - 120
			Dissolved Calcium (Ca)	2015/12/04		106	%	80 - 120
			Dissolved Chromium (Cr)	2015/12/04		100	%	80 - 120
			Dissolved Cobalt (Co)	2015/12/04		100	%	80 - 120
			Dissolved Copper (Cu)	2015/12/04		99	%	80 - 120
			Dissolved Iron (Fe)	2015/12/04		107	%	80 - 120
			Dissolved Lead (Pb)	2015/12/04		96	%	80 - 120
			Dissolved Magnesium (Mg)	2015/12/04		110	%	80 - 120
			Dissolved Manganese (Mn)	2015/12/04		102	%	80 - 120
			Dissolved Molybdenum (Mo)	2015/12/04		102	%	80 - 120
			Dissolved Nickel (Ni)	2015/12/04		100	%	80 - 120
			Dissolved Phosphorus (P)	2015/12/04		109	%	80 - 120
			Dissolved Potassium (K)	2015/12/04		107	%	80 - 120
			Dissolved Selenium (Se)	2015/12/04		100	%	80 - 120
			Dissolved Silver (Ag)	2015/12/04		98	%	80 - 120
			Dissolved Sodium (Na)	2015/12/04		110	%	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 Strontium (Sr)	2015/12/04		99	%	80 - 120
			Dissolved Thallium (Tl)	2015/12/04		99	%	80 - 120
			Dissolved Tin (Sn)	2015/12/04		100	%	80 - 120
			Dissolved Titanium (Ti)	2015/12/04		105	%	80 - 120
			Dissolved Uranium (U)	2015/12/04		102	%	80 - 120
			Dissolved Vanadium (V)	2015/12/04		100	%	80 - 120
			Dissolved Zinc (Zn)	2015/12/04		101	%	80 - 120
4298932	MLB	Method Blank	Dissolved Aluminum (Al)	2015/12/04	<5.0		ug/L	
			Dissolved Antimony (Sb)	2015/12/04	<1.0		ug/L	
			Dissolved Arsenic (As)	2015/12/04	<1.0		ug/L	
			Dissolved Barium (Ba)	2015/12/04	<1.0		ug/L	
			Dissolved Beryllium (Be)	2015/12/04	<1.0		ug/L	
			Dissolved Bismuth (Bi)	2015/12/04	<2.0		ug/L	
			Dissolved Boron (B)	2015/12/04	<50		ug/L	
			Dissolved Cadmium (Cd)	2015/12/04	<0.010		ug/L	
			Dissolved Calcium (Ca)	2015/12/04	<100		ug/L	
			Dissolved Chromium (Cr)	2015/12/04	<1.0		ug/L	
			Dissolved Cobalt (Co)	2015/12/04	<0.40		ug/L	
			Dissolved Copper (Cu)	2015/12/04	<2.0		ug/L	
			Dissolved Iron (Fe)	2015/12/04	<50		ug/L	
			Dissolved Lead (Pb)	2015/12/04	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2015/12/04	<100		ug/L	
			Dissolved Manganese (Mn)	2015/12/04	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2015/12/04	<2.0		ug/L	
			Dissolved Nickel (Ni)	2015/12/04	<2.0		ug/L	
			Dissolved Phosphorus (P)	2015/12/04	<100		ug/L	
			Dissolved Potassium (K)	2015/12/04	<100		ug/L	
			Dissolved Selenium (Se)	2015/12/04	<1.0		ug/L	
			Dissolved Silver (Ag)	2015/12/04	<0.10		ug/L	
			Dissolved Sodium (Na)	2015/12/04	<100		ug/L	
			Dissolved Strontium (Sr)	2015/12/04	<2.0		ug/L	
			Dissolved Thallium (Tl)	2015/12/04	<0.10		ug/L	
			Dissolved Tin (Sn)	2015/12/04	<2.0		ug/L	
			Dissolved Titanium (Ti)	2015/12/04	<2.0		ug/L	
			Dissolved Uranium (U)	2015/12/04	<0.10		ug/L	
			Dissolved Vanadium (V)	2015/12/04	<2.0		ug/L	
			Dissolved Zinc (Zn)	2015/12/04	<5.0		ug/L	
4298932	MLB	RPD	Dissolved Aluminum (Al)	2015/12/04	NC		%	20
			Dissolved Antimony (Sb)	2015/12/04	NC		%	20
			Dissolved Arsenic (As)	2015/12/04	NC		%	20
			Dissolved Barium (Ba)	2015/12/04	1.4		%	20
			Dissolved Beryllium (Be)	2015/12/04	NC		%	20
			Dissolved Bismuth (Bi)	2015/12/04	NC		%	20
			Dissolved Boron (B)	2015/12/04	NC		%	20
			Dissolved Cadmium (Cd)	2015/12/04	NC		%	20
			Dissolved Calcium (Ca)	2015/12/04	0.012		%	20
			Dissolved Chromium (Cr)	2015/12/04	NC		%	20
			Dissolved Cobalt (Co)	2015/12/04	NC		%	20
			Dissolved Copper (Cu)	2015/12/04	NC		%	20
			Dissolved Iron (Fe)	2015/12/04	NC		%	20
			Dissolved Lead (Pb)	2015/12/04	NC		%	20
			Dissolved Magnesium (Mg)	2015/12/04	0.51		%	20
			Dissolved Manganese (Mn)	2015/12/04	0.58		%	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 Molybdenum (Mo)	2015/12/04	NC		%	20
			Dissolved Nickel (Ni)	2015/12/04	NC		%	20
			Dissolved Phosphorus (P)	2015/12/04	NC		%	20
			Dissolved Potassium (K)	2015/12/04	0.85		%	20
			Dissolved Selenium (Se)	2015/12/04	NC		%	20
			Dissolved Silver (Ag)	2015/12/04	NC		%	20
			Dissolved Sodium (Na)	2015/12/04	0.25		%	20
			Dissolved Strontium (Sr)	2015/12/04	0.87		%	20
			Dissolved Thallium (Tl)	2015/12/04	NC		%	20
			Dissolved Tin (Sn)	2015/12/04	NC		%	20
			Dissolved Titanium (Ti)	2015/12/04	NC		%	20
			Dissolved Uranium (U)	2015/12/04	NC		%	20
			Dissolved Vanadium (V)	2015/12/04	NC		%	20
			Dissolved Zinc (Zn)	2015/12/04	NC		%	20
4299073	AJS	Matrix Spike [BLD583-02]	Isobutylbenzene - Extractable	2015/12/05		102	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/05		100	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/05		104	%	70 - 130
			>C16-C21 Hydrocarbons	2015/12/05		96	%	70 - 130
			>C21-<C32 Hydrocarbons	2015/12/05		105	%	70 - 130
4299073	AJS	Spiked Blank	Isobutylbenzene - Extractable	2015/12/05		86	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/05		88	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/05		99	%	70 - 130
			>C16-C21 Hydrocarbons	2015/12/05		96	%	70 - 130
			>C21-<C32 Hydrocarbons	2015/12/05		105	%	70 - 130
4299073	AJS	Method Blank	Isobutylbenzene - Extractable	2015/12/05		100	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/05		92	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/05	<0.050		mg/L	
			>C16-C21 Hydrocarbons	2015/12/05	<0.050		mg/L	
			>C21-<C32 Hydrocarbons	2015/12/05	<0.10		mg/L	
4299073	AJS	RPD [BLD582-02]	>C10-C16 Hydrocarbons	2015/12/05	NC		%	40
			>C16-C21 Hydrocarbons	2015/12/05	NC		%	40
			>C21-<C32 Hydrocarbons	2015/12/05	NC		%	40
4299150	GTH	Matrix Spike [BLD582-01]	D10-Anthracene	2015/12/12		109	%	30 - 130
			D14-Terphenyl	2015/12/12		110	%	30 - 130
			D8-Acenaphthylene	2015/12/12		104	%	30 - 130
			1-Methylnaphthalene	2015/12/12		NC	%	30 - 130
			2-Methylnaphthalene	2015/12/12		NC	%	30 - 130
			Acenaphthene	2015/12/12		116	%	30 - 130
			Acenaphthylene	2015/12/12		122	%	30 - 130
			Anthracene	2015/12/12		126	%	30 - 130
			Benzo(a)anthracene	2015/12/12		117	%	30 - 130
			Benzo(a)pyrene	2015/12/12		115	%	30 - 130
			Benzo(b)fluoranthene	2015/12/12		122	%	30 - 130
			Benzo(g,h,i)perylene	2015/12/12		120	%	30 - 130
			Benzo(j)fluoranthene	2015/12/12		106	%	30 - 130
			Benzo(k)fluoranthene	2015/12/12		114	%	30 - 130
			Chrysene	2015/12/12		119	%	30 - 130
			Dibenz(a,h)anthracene	2015/12/12		116	%	30 - 130
			Fluoranthene	2015/12/12		121	%	30 - 130
			Fluorene	2015/12/12		116	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2015/12/12		120	%	30 - 130
			Naphthalene	2015/12/12		NC	%	30 - 130
			Perylene	2015/12/12		113	%	30 - 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	2015/12/12		NC	%	30 - 130
			Pyrene	2015/12/12		117	%	30 - 130
4299150	GTH	Spiked Blank	D10-Anthracene	2015/12/12		96	%	30 - 130
			D14-Terphenyl	2015/12/12		101	%	30 - 130
			D8-Acenaphthylene	2015/12/12		99	%	30 - 130
			1-Methylnaphthalene	2015/12/12		102	%	30 - 130
			2-Methylnaphthalene	2015/12/12		108	%	30 - 130
			Acenaphthene	2015/12/12		113	%	30 - 130
			Acenaphthylene	2015/12/12		111	%	30 - 130
			Anthracene	2015/12/12		106	%	30 - 130
			Benzo(a)anthracene	2015/12/12		103	%	30 - 130
			Benzo(a)pyrene	2015/12/12		106	%	30 - 130
			Benzo(b)fluoranthene	2015/12/12		95	%	30 - 130
			Benzo(g,h,i)perylene	2015/12/12		111	%	30 - 130
			Benzo(j)fluoranthene	2015/12/12		108	%	30 - 130
			Benzo(k)fluoranthene	2015/12/12		103	%	30 - 130
			Chrysene	2015/12/12		101	%	30 - 130
			Dibenz(a,h)anthracene	2015/12/12		107	%	30 - 130
			Fluoranthene	2015/12/12		113	%	30 - 130
			Fluorene	2015/12/12		112	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2015/12/12		112	%	30 - 130
			Naphthalene	2015/12/12		102	%	30 - 130
			Perylene	2015/12/12		107	%	30 - 130
			Phenanthrene	2015/12/12		120	%	30 - 130
			Pyrene	2015/12/12		112	%	30 - 130
4299150	GTH	Method Blank	D10-Anthracene	2015/12/12		100	%	30 - 130
			D14-Terphenyl	2015/12/12		102	%	30 - 130
			D8-Acenaphthylene	2015/12/12		103	%	30 - 130
			1-Methylnaphthalene	2015/12/12	<0.050		ug/L	
			2-Methylnaphthalene	2015/12/12	<0.050		ug/L	
			Acenaphthene	2015/12/12	<0.010		ug/L	
			Acenaphthylene	2015/12/12	<0.010		ug/L	
			Anthracene	2015/12/12	<0.010		ug/L	
			Benzo(a)anthracene	2015/12/12	<0.010		ug/L	
			Benzo(a)pyrene	2015/12/12	<0.010		ug/L	
			Benzo(b)fluoranthene	2015/12/12	<0.010		ug/L	
			Benzo(g,h,i)perylene	2015/12/12	<0.010		ug/L	
			Benzo(j)fluoranthene	2015/12/12	<0.010		ug/L	
			Benzo(k)fluoranthene	2015/12/12	<0.010		ug/L	
			Chrysene	2015/12/12	<0.010		ug/L	
			Dibenz(a,h)anthracene	2015/12/12	<0.010		ug/L	
			Fluoranthene	2015/12/12	<0.010		ug/L	
			Fluorene	2015/12/12	<0.010		ug/L	
			Indeno(1,2,3-cd)pyrene	2015/12/12	<0.010		ug/L	
			Naphthalene	2015/12/12	<0.20		ug/L	
			Perylene	2015/12/12	<0.010		ug/L	
			Phenanthrene	2015/12/12	<0.010		ug/L	
			Pyrene	2015/12/12	<0.010		ug/L	
4299150	GTH	RPD	1-Methylnaphthalene	2015/12/12	12		%	40
			2-Methylnaphthalene	2015/12/12	3.2		%	40
			Acenaphthene	2015/12/12	13		%	40
			Acenaphthylene	2015/12/12	8.0		%	40
			Anthracene	2015/12/12	14		%	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	2015/12/12	23		%	40
			Benzo(a)pyrene	2015/12/12	33		%	40
			Benzo(b)fluoranthene	2015/12/12	41 (2)		%	40
			Benzo(g,h,i)perylene	2015/12/12	36		%	40
			Benzo(j)fluoranthene	2015/12/12	NC		%	40
			Benzo(k)fluoranthene	2015/12/12	NC		%	40
			Chrysene	2015/12/12	34		%	40
			Dibenz(a,h)anthracene	2015/12/12	NC		%	40
			Fluoranthene	2015/12/12	22		%	40
			Fluorene	2015/12/12	14		%	40
			Indeno(1,2,3-cd)pyrene	2015/12/12	39		%	40
			Naphthalene	2015/12/12	45 (2)		%	40
			Perylene	2015/12/12	NC		%	40
			Phenanthrene	2015/12/12	14		%	40
			Pyrene	2015/12/12	21		%	40
4299764	VWA	Matrix Spike	Total Mercury (Hg)	2015/12/07		101	%	80 - 120
4299764	VWA	Spiked Blank	Total Mercury (Hg)	2015/12/07		105	%	80 - 120
4299764	VWA	Method Blank	Total Mercury (Hg)	2015/12/07	<0.013		ug/L	
4299764	VWA	RPD	Total Mercury (Hg)	2015/12/07	NC		%	20
4299770	MS3	Matrix Spike [BLD582-03]	Isobutylbenzene - Volatile	2015/12/05		97	%	70 - 130
			Benzene	2015/12/05		104	%	70 - 130
			Toluene	2015/12/05		105	%	70 - 130
			Ethylbenzene	2015/12/05		106	%	70 - 130
			Total Xylenes	2015/12/05		108	%	70 - 130
4299770	MS3	Spiked Blank	Isobutylbenzene - Volatile	2015/12/05		94	%	70 - 130
			Benzene	2015/12/05		108	%	N/A
			Toluene	2015/12/05		107	%	N/A
			Ethylbenzene	2015/12/05		107	%	N/A
			Total Xylenes	2015/12/05		106	%	N/A
4299770	MS3	Method Blank	Isobutylbenzene - Volatile	2015/12/05		95	%	70 - 130
			Benzene	2015/12/05	<0.0010		mg/L	
			Toluene	2015/12/05	<0.0010		mg/L	
			Ethylbenzene	2015/12/05	<0.0010		mg/L	
			Total Xylenes	2015/12/05	<0.0020		mg/L	
			C6 - C10 (less BTEX)	2015/12/05	<0.010		mg/L	
4299770	MS3	RPD [BLD581-03]	Benzene	2015/12/05	NC		%	40
			Toluene	2015/12/05	NC		%	40
			Ethylbenzene	2015/12/05	NC		%	40
			Total Xylenes	2015/12/05	NC		%	40
			C6 - C10 (less BTEX)	2015/12/05	NC		%	40
4301468	KBT	Matrix Spike [BLD583-01]	D10-Anthracene	2015/12/07		106	%	30 - 130
			D14-Terphenyl	2015/12/07		109	%	30 - 130
			D8-Acenaphthylene	2015/12/07		102	%	30 - 130
			1-Methylnaphthalene	2015/12/07		NC	%	30 - 130
			2-Methylnaphthalene	2015/12/07		NC	%	30 - 130
			Acenaphthene	2015/12/07		NC	%	30 - 130
			Acenaphthylene	2015/12/07		119	%	30 - 130
			Anthracene	2015/12/07		121	%	30 - 130
			Benzo(a)anthracene	2015/12/07		99	%	30 - 130
			Benzo(a)pyrene	2015/12/07		128	%	30 - 130
			Benzo(b)fluoranthene	2015/12/07		121	%	30 - 130
			Benzo(g,h,i)perylene	2015/12/07		128	%	30 - 130
			Benzo(j)fluoranthene	2015/12/07		123	%	30 - 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(k)fluoranthene	2015/12/07		119	%	30 - 130
			Chrysene	2015/12/07		101	%	30 - 130
			Dibenz(a,h)anthracene	2015/12/07		124	%	30 - 130
			Fluoranthene	2015/12/07		123	%	30 - 130
			Fluorene	2015/12/07		NC	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2015/12/07		130	%	30 - 130
			Naphthalene	2015/12/07		NC	%	30 - 130
			Perylene	2015/12/07		121	%	30 - 130
			Phenanthrene	2015/12/07		NC	%	30 - 130
			Pyrene	2015/12/07		122	%	30 - 130
4301468	KBT	Spiked Blank	D10-Anthracene	2015/12/07		108	%	30 - 130
			D14-Terphenyl	2015/12/07		111	%	30 - 130
			D8-Acenaphthylene	2015/12/07		113	%	30 - 130
			1-Methylnaphthalene	2015/12/07		109	%	30 - 130
			2-Methylnaphthalene	2015/12/07		111	%	30 - 130
			Acenaphthene	2015/12/07		114	%	30 - 130
			Acenaphthylene	2015/12/07		119	%	30 - 130
			Anthracene	2015/12/07		113	%	30 - 130
			Benzo(a)anthracene	2015/12/07		98	%	30 - 130
			Benzo(a)pyrene	2015/12/07		118	%	30 - 130
			Benzo(b)fluoranthene	2015/12/07		115	%	30 - 130
			Benzo(g,h,i)perylene	2015/12/07		126	%	30 - 130
			Benzo(j)fluoranthene	2015/12/07		113	%	30 - 130
			Benzo(k)fluoranthene	2015/12/07		109	%	30 - 130
			Chrysene	2015/12/07		97	%	30 - 130
			Dibenz(a,h)anthracene	2015/12/07		115	%	30 - 130
			Fluoranthene	2015/12/07		117	%	30 - 130
			Fluorene	2015/12/07		116	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2015/12/07		127	%	30 - 130
			Naphthalene	2015/12/07		92	%	30 - 130
			Perylene	2015/12/07		116	%	30 - 130
			Phenanthrene	2015/12/07		117	%	30 - 130
			Pyrene	2015/12/07		113	%	30 - 130
4301468	KBT	Method Blank	D10-Anthracene	2015/12/07		115	%	30 - 130
			D14-Terphenyl	2015/12/07		116	%	30 - 130
			D8-Acenaphthylene	2015/12/07		121	%	30 - 130
			1-Methylnaphthalene	2015/12/07	<0.050		ug/L	
			2-Methylnaphthalene	2015/12/07	<0.050		ug/L	
			Acenaphthene	2015/12/07	<0.010		ug/L	
			Acenaphthylene	2015/12/07	<0.010		ug/L	
			Anthracene	2015/12/07	<0.010		ug/L	
			Benzo(a)anthracene	2015/12/07	<0.010		ug/L	
			Benzo(a)pyrene	2015/12/07	<0.010		ug/L	
			Benzo(b)fluoranthene	2015/12/07	<0.010		ug/L	
			Benzo(g,h,i)perylene	2015/12/07	<0.010		ug/L	
			Benzo(j)fluoranthene	2015/12/07	<0.010		ug/L	
			Benzo(k)fluoranthene	2015/12/07	<0.010		ug/L	
			Chrysene	2015/12/07	<0.010		ug/L	
			Dibenz(a,h)anthracene	2015/12/07	<0.010		ug/L	
			Fluoranthene	2015/12/07	<0.010		ug/L	
			Fluorene	2015/12/07	<0.010		ug/L	
			Indeno(1,2,3-cd)pyrene	2015/12/07	<0.010		ug/L	
			Naphthalene	2015/12/07	<0.20		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
			Perylene	2015/12/07	<0.010		ug/L	
			Phenanthrene	2015/12/07	<0.010		ug/L	
			Pyrene	2015/12/07	<0.010		ug/L	
4301468	KBT	RPD [BLD581-01]	1-Methylnaphthalene	2015/12/07	2.9		%	40
			2-Methylnaphthalene	2015/12/07	2.4		%	40
			Acenaphthene	2015/12/07	6.6		%	40
			Acenaphthylene	2015/12/07	6.1		%	40
			Anthracene	2015/12/07	0.10		%	40
			Benzo(a)anthracene	2015/12/07	63 (2)		%	40
			Benzo(a)pyrene	2015/12/07	67 (2)		%	40
			Benzo(b)fluoranthene	2015/12/07	70 (2)		%	40
			Benzo(g,h,i)perylene	2015/12/07	51 (2)		%	40
			Benzo(j)fluoranthene	2015/12/07	NC		%	40
			Benzo(k)fluoranthene	2015/12/07	NC		%	40
			Chrysene	2015/12/07	61 (2)		%	40
			Dibenz(a,h)anthracene	2015/12/07	NC		%	40
			Fluoranthene	2015/12/07	23		%	40
			Fluorene	2015/12/07	5.8		%	40
			Indeno(1,2,3-cd)pyrene	2015/12/07	NC		%	40
			Naphthalene	2015/12/07	3.6		%	40
			Perylene	2015/12/07	NC		%	40
			Phenanthrene	2015/12/07	9.2		%	40
			Pyrene	2015/12/07	28		%	40

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.

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 spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of 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 (one or both samples < 5x RDL).

(1) Recovery is within QC acceptance limits. < 10 % of compounds in multi-component analysis in violation.

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

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Your Project #: 4104251070
Site#: HARBOURSIDE COMMERCIAL PARK
Site Location: HARBOURSIDE COMMERCIAL PARK
Your C.O.C. #: 538679

Attention:Nadine Wambolt

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

Report Date: 2015/12/07
Report #: R3796121
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B5O5448
Received: 2015/11/30, 13:15

Sample Matrix: Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
TEH in Water (PIRI) (1)	7	2015/12/02	2015/12/03	ATL SOP 00113	Atl. RBCA v3 m
Mercury - Total (CVAA,LL) (1)	6	2015/12/02	2015/12/03	ATL SOP 00026	EPA 245.1 R3 m
Metals Water Diss. MS (as rec'd) (1)	1	N/A	2015/12/02	ATL SOP 00058	EPA 6020A R1 m
Metals Water Diss. MS (as rec'd) (1)	5	N/A	2015/12/03	ATL SOP 00058	EPA 6020A R1 m
PAH in Water by GC/MS (SIM) (1)	6	2015/12/03	2015/12/05	ATL SOP 00103	EPA 8270D 2007 m
VPH in Water (PIRI) (1)	7	N/A	2015/12/02	ATL SOP 00118	Atl. RBCA v3 m
ModTPH (T1) Calc. for Water (1)	2	N/A	2015/12/03	N/A	Atl. RBCA v3 m
ModTPH (T1) Calc. for Water (1)	5	N/A	2015/12/04	N/A	Atl. RBCA v3 m

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 Maxxam Bedford

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Natalie MacAskill, Sr. Project Manager
Email: NMacAskill@maxxam.ca
Phone# (902)567-1255 Ext:17
==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Maxxam Job #: B5O5448
Report Date: 2015/12/07

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

MERCURY BY COLD VAPOUR AA (WATER)

Maxxam ID		BLB062	BLB065	BLB069	BLB071	BLB075		
Sampling Date		2015/11/27	2015/11/27	2015/11/27	2015/11/27	2015/11/27		
COC Number		538679	538679	538679	538679	538679		
	UNITS	SCU26-001-MW	SCU26-002-MW	SCU27-002-MW	MCES-007-MW	SCU32-001-MWA	RDL	QC Batch
Metals								
Total Mercury (Hg)	ug/L	<0.013	<0.013	<0.013	0.020	<0.013	0.013	4295636

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		BLB094		
Sampling Date		2015/11/27		
COC Number		538679		
	UNITS	FD-011	RDL	QC Batch
Metals				
Total Mercury (Hg)	ug/L	<0.013	0.013	4299799

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B5O5448
Report Date: 2015/12/07

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

ELEMENTS BY ICP/MS (WATER)

Maxxam ID		BLB062	BLB065		BLB069		BLB071		
Sampling Date		2015/11/27	2015/11/27		2015/11/27		2015/11/27		
COC Number		538679	538679		538679		538679		
	UNITS	SCU26-001-MW	SCU26-002-MW	RDL	SCU27-002-MW	RDL	MCES-007-MW	RDL	QC Batch
Metals									
Dissolved Aluminum (Al)	ug/L	14	20	5.0	<50	50	57	5.0	4295223
Dissolved Antimony (Sb)	ug/L	<1.0	<1.0	1.0	<10	10	<1.0	1.0	4295223
Dissolved Arsenic (As)	ug/L	<1.0	<1.0	1.0	<10	10	<1.0	1.0	4295223
Dissolved Barium (Ba)	ug/L	460	460	1.0	30000	100	580	1.0	4295223
Dissolved Beryllium (Be)	ug/L	<1.0	<1.0	1.0	<10	10	<1.0	1.0	4295223
Dissolved Bismuth (Bi)	ug/L	<2.0	<2.0	2.0	<20	20	<2.0	2.0	4295223
Dissolved Boron (B)	ug/L	<50	<50	50	2600	500	<50	50	4295223
Dissolved Cadmium (Cd)	ug/L	<0.010	<0.010	0.010	<0.10	0.10	<0.010	0.010	4295223
Dissolved Calcium (Ca)	ug/L	390000	430000	100	1300000	1000	430000	100	4295223
Dissolved Chromium (Cr)	ug/L	<1.0	<1.0	1.0	<10	10	<1.0	1.0	4295223
Dissolved Cobalt (Co)	ug/L	<0.40	<0.40	0.40	<4.0	4.0	<0.40	0.40	4295223
Dissolved Copper (Cu)	ug/L	<2.0	<2.0	2.0	<20	20	<2.0	2.0	4295223
Dissolved Iron (Fe)	ug/L	<50	<50	50	53000	500	<50	50	4295223
Dissolved Lead (Pb)	ug/L	<0.50	<0.50	0.50	<5.0	5.0	<0.50	0.50	4295223
Dissolved Magnesium (Mg)	ug/L	<100	<100	100	680000	1000	<100	100	4295223
Dissolved Manganese (Mn)	ug/L	<2.0	<2.0	2.0	5000	20	5.5	2.0	4295223
Dissolved Molybdenum (Mo)	ug/L	4.4	4.4	2.0	<20	20	2.3	2.0	4295223
Dissolved Nickel (Ni)	ug/L	<2.0	<2.0	2.0	<20	20	<2.0	2.0	4295223
Dissolved Phosphorus (P)	ug/L	<100	<100	100	<1000	1000	<100	100	4295223
Dissolved Potassium (K)	ug/L	26000	36000	100	87000	1000	34000	100	4295223
Dissolved Selenium (Se)	ug/L	4.1	4.3	1.0	<10	10	5.5	1.0	4295223
Dissolved Silver (Ag)	ug/L	<0.10	<0.10	0.10	<1.0	1.0	<0.10	0.10	4295223
Dissolved Sodium (Na)	ug/L	26000	28000	100	4900000	1000	30000	100	4295223
Dissolved Strontium (Sr)	ug/L	2800	3300	2.0	96000	200	3200	2.0	4295223
Dissolved Thallium (Tl)	ug/L	<0.10	<0.10	0.10	<1.0	1.0	<0.10	0.10	4295223
Dissolved Tin (Sn)	ug/L	<2.0	<2.0	2.0	<20	20	<2.0	2.0	4295223
Dissolved Titanium (Ti)	ug/L	<2.0	<2.0	2.0	<20	20	<2.0	2.0	4295223
Dissolved Uranium (U)	ug/L	<0.10	<0.10	0.10	4.1	1.0	<0.10	0.10	4295223
Dissolved Vanadium (V)	ug/L	<2.0	<2.0	2.0	<20	20	<2.0	2.0	4295223
Dissolved Zinc (Zn)	ug/L	<5.0	<5.0	5.0	<50	50	<5.0	5.0	4295223

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B5O5448
Report Date: 2015/12/07

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

ELEMENTS BY ICP/MS (WATER)

Maxxam ID		BLB075		BLB094		
Sampling Date		2015/11/27		2015/11/27		
COC Number		538679		538679		
	UNITS	SCU32-001-MWA	RDL	FD-011	RDL	QC Batch
Metals						
Dissolved Aluminum (Al)	ug/L	16	5.0	52	5.0	4295226
Dissolved Antimony (Sb)	ug/L	<1.0	1.0	<1.0	1.0	4295226
Dissolved Arsenic (As)	ug/L	<1.0	1.0	<1.0	1.0	4295226
Dissolved Barium (Ba)	ug/L	99	1.0	580	1.0	4295226
Dissolved Beryllium (Be)	ug/L	<1.0	1.0	<1.0	1.0	4295226
Dissolved Bismuth (Bi)	ug/L	<2.0	2.0	<2.0	2.0	4295226
Dissolved Boron (B)	ug/L	<50	50	<50	50	4295226
Dissolved Cadmium (Cd)	ug/L	<0.10 (1)	0.10	<0.010	0.010	4295226
Dissolved Calcium (Ca)	ug/L	280000	100	430000	100	4295226
Dissolved Chromium (Cr)	ug/L	<1.0	1.0	<1.0	1.0	4295226
Dissolved Cobalt (Co)	ug/L	<0.40	0.40	<0.40	0.40	4295226
Dissolved Copper (Cu)	ug/L	<2.0	2.0	<2.0	2.0	4295226
Dissolved Iron (Fe)	ug/L	<50	50	<50	50	4295226
Dissolved Lead (Pb)	ug/L	<0.50	0.50	<0.50	0.50	4295226
Dissolved Magnesium (Mg)	ug/L	<100	100	<100	100	4295226
Dissolved Manganese (Mn)	ug/L	<2.0	2.0	2.8	2.0	4295226
Dissolved Molybdenum (Mo)	ug/L	190	2.0	2.7	2.0	4295226
Dissolved Nickel (Ni)	ug/L	<2.0	2.0	<2.0	2.0	4295226
Dissolved Phosphorus (P)	ug/L	<100	100	<100	100	4295226
Dissolved Potassium (K)	ug/L	150000	1000	34000	100	4295226
Dissolved Selenium (Se)	ug/L	8.5	1.0	4.5	1.0	4295226
Dissolved Silver (Ag)	ug/L	<0.10	0.10	<0.10	0.10	4295226
Dissolved Sodium (Na)	ug/L	190000	100	30000	100	4295226
Dissolved Strontium (Sr)	ug/L	2000	2.0	3200	2.0	4295226
Dissolved Thallium (Tl)	ug/L	<0.10	0.10	<0.10	0.10	4295226
Dissolved Tin (Sn)	ug/L	<2.0	2.0	<2.0	2.0	4295226
Dissolved Titanium (Ti)	ug/L	<2.0	2.0	<2.0	2.0	4295226
Dissolved Uranium (U)	ug/L	<0.10	0.10	<0.10	0.10	4295226
Dissolved Vanadium (V)	ug/L	<2.0	2.0	<2.0	2.0	4295226
Dissolved Zinc (Zn)	ug/L	<5.0	5.0	<5.0	5.0	4295226

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Elevated reporting limit due to sample matrix.

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Maxxam Job #: B5O5448
Report Date: 2015/12/07

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Maxxam ID		BLB062	BLB065	BLB069	BLB071	BLB075		
Sampling Date		2015/11/27	2015/11/27	2015/11/27	2015/11/27	2015/11/27		
COC Number		538679	538679	538679	538679	538679		
	UNITS	SCU26-001-MW	SCU26-002-MW	SCU27-002-MW	MCES-007-MW	SCU32-001-MWA	RDL	QC Batch
Polyaromatic Hydrocarbons								
1-Methylnaphthalene	ug/L	1.1	7.4	<0.050	0.75	3.6	0.050	4297072
2-Methylnaphthalene	ug/L	0.78	11	<0.050	0.81	2.4	0.050	4297072
Acenaphthene	ug/L	0.24	0.33	<0.010	0.20	1.4	0.010	4297072
Acenaphthylene	ug/L	0.36	0.75	<0.010	0.45	0.70	0.010	4297072
Anthracene	ug/L	0.29	0.43	<0.010	0.33	1.8	0.010	4297072
Benzo(a)anthracene	ug/L	0.016	0.047	<0.010	0.030	0.83	0.010	4297072
Benzo(a)pyrene	ug/L	<0.010	<0.010	<0.010	0.010	0.39	0.010	4297072
Benzo(b)fluoranthene	ug/L	<0.010	<0.010	<0.010	<0.010	0.28	0.010	4297072
Benzo(g,h,i)perylene	ug/L	<0.010	<0.010	<0.010	<0.010	0.17	0.010	4297072
Benzo(j)fluoranthene	ug/L	<0.010	<0.010	<0.010	<0.010	0.18	0.010	4297072
Benzo(k)fluoranthene	ug/L	<0.010	<0.010	<0.010	<0.010	0.18	0.010	4297072
Chrysene	ug/L	0.011	0.038	<0.010	0.021	0.88	0.010	4297072
Dibenz(a,h)anthracene	ug/L	<0.010	<0.010	<0.010	<0.010	0.060	0.010	4297072
Fluoranthene	ug/L	0.73	0.69	<0.010	0.58	4.2	0.010	4297072
Fluorene	ug/L	0.73	1.2	<0.010	0.76	2.7	0.010	4297072
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	<0.010	<0.010	<0.010	0.15	0.010	4297072
Naphthalene	ug/L	1.7	7.7	<0.20	2.1	8.4	0.20	4297072
Perylene	ug/L	<0.010	<0.010	<0.010	<0.010	0.10	0.010	4297072
Phenanthrene	ug/L	1.5	2.2	<0.010	1.7	8.7	0.010	4297072
Pyrene	ug/L	0.40	0.41	<0.010	0.33	2.9	0.010	4297072
Surrogate Recovery (%)								
D10-Anthracene	%	84	83	84	90	94		4297072
D14-Terphenyl	%	83	88	94 (1)	89	71		4297072
D8-Acenaphthylene	%	86	94	90	92	90		4297072

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)

Maxxam ID		BLB094		
Sampling Date		2015/11/27		
COC Number		538679		
	UNITS	FD-011	RDL	QC Batch
Polyaromatic Hydrocarbons				
1-Methylnaphthalene	ug/L	0.76	0.050	4297072
2-Methylnaphthalene	ug/L	0.85	0.050	4297072
Acenaphthene	ug/L	0.22	0.010	4297072
Acenaphthylene	ug/L	0.51	0.010	4297072
Anthracene	ug/L	0.37	0.010	4297072
Benzo(a)anthracene	ug/L	0.027	0.010	4297072
Benzo(a)pyrene	ug/L	<0.010	0.010	4297072
Benzo(b)fluoranthene	ug/L	<0.010	0.010	4297072
Benzo(g,h,i)perylene	ug/L	<0.010	0.010	4297072
Benzo(j)fluoranthene	ug/L	<0.010	0.010	4297072
Benzo(k)fluoranthene	ug/L	<0.010	0.010	4297072
Chrysene	ug/L	0.021	0.010	4297072
Dibenz(a,h)anthracene	ug/L	<0.010	0.010	4297072
Fluoranthene	ug/L	0.61	0.010	4297072
Fluorene	ug/L	0.70	0.010	4297072
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	0.010	4297072
Naphthalene	ug/L	2.5	0.20	4297072
Perylene	ug/L	<0.010	0.010	4297072
Phenanthrene	ug/L	1.8	0.010	4297072
Pyrene	ug/L	0.36	0.010	4297072
Surrogate Recovery (%)				
D10-Anthracene	%	83		4297072
D14-Terphenyl	%	86		4297072
D8-Acenaphthylene	%	91		4297072

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B5O5448
Report Date: 2015/12/07

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

ATLANTIC RBCA HYDROCARBONS (WATER)

Maxxam ID		BLB062	BLB065	BLB069	BLB071	BLB075		
Sampling Date		2015/11/27	2015/11/27	2015/11/27	2015/11/27	2015/11/27		
COC Number		538679	538679	538679	538679	538679		
	UNITS	SCU26-001-MW	SCU26-002-MW	SCU27-002-MW	MCES-007-MW	SCU32-001-MWA	RDL	QC Batch
Petroleum Hydrocarbons								
Benzene	mg/L	<0.0010	0.016	<0.0010	<0.0010	<0.0010	0.0010	4295394
Toluene	mg/L	<0.0010	0.011	<0.0010	<0.0010	<0.0010	0.0010	4295394
Ethylbenzene	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	4295394
Total Xylenes	mg/L	<0.0020	0.0089	<0.0020	<0.0020	<0.0020	0.0020	4295394
C6 - C10 (less BTEX)	mg/L	<0.010	0.014	<0.010	<0.010	<0.010	0.010	4295394
>C10-C16 Hydrocarbons	mg/L	0.054	0.17	<0.050	<0.050	0.51	0.050	4295248
>C16-C21 Hydrocarbons	mg/L	<0.050	0.055	<0.050	<0.050	0.53	0.050	4295248
>C21-<C32 Hydrocarbons	mg/L	<0.10	<0.10	<0.10	<0.10	0.43	0.10	4295248
Modified TPH (Tier1)	mg/L	<0.10	0.24	<0.10	<0.10	1.5	0.10	4293555
Reached Baseline at C32	mg/L	NA	Yes	NA	NA	Yes	N/A	4295248
Hydrocarbon Resemblance	mg/L	NA	COMMENT (1)	NA	NA	COMMENT (2)	N/A	4295248
Surrogate Recovery (%)								
Isobutylbenzene - Extractable	%	95	104	97	100	104		4295248
n-Dotriacontane - Extractable	%	92	102	108	100	113		4295248
Isobutylbenzene - Volatile	%	101	100	95	100	98		4295394

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) One product in fuel oil range.
(2) Weathered fuel oil fraction. Lube oil fraction.

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Maxxam Job #: B5O5448
Report Date: 2015/12/07

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

ATLANTIC RBCA HYDROCARBONS (WATER)

Maxxam ID		BLB087	BLB094		
Sampling Date		2015/11/27	2015/11/27		
COC Number		538679	538679		
	UNITS	TB-013	FD-011	RDL	QC Batch
Petroleum Hydrocarbons					
Benzene	mg/L	<0.0010	<0.0010	0.0010	4295394
Toluene	mg/L	<0.0010	<0.0010	0.0010	4295394
Ethylbenzene	mg/L	<0.0010	<0.0010	0.0010	4295394
Total Xylenes	mg/L	<0.0020	<0.0020	0.0020	4295394
C6 - C10 (less BTEX)	mg/L	<0.010	<0.010	0.010	4295394
>C10-C16 Hydrocarbons	mg/L	<0.050	<0.050	0.050	4295248
>C16-C21 Hydrocarbons	mg/L	<0.050	<0.050	0.050	4295248
>C21-<C32 Hydrocarbons	mg/L	<0.10	<0.10	0.10	4295248
Modified TPH (Tier1)	mg/L	<0.10	<0.10	0.10	4293555
Reached Baseline at C32	mg/L	NA	NA	N/A	4295248
Hydrocarbon Resemblance	mg/L	NA	NA	N/A	4295248
Surrogate Recovery (%)					
Isobutylbenzene - Extractable	%	94	104		4295248
n-Dotriacontane - Extractable	%	101	97		4295248
Isobutylbenzene - Volatile	%	99	99		4295394

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

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GENERAL COMMENTS

Sample BLB069-01 : Elevated reporting limits for trace metals 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
4295223	BAN	Matrix Spike	Dissolved Aluminum (Al)	2015/12/02		104	%	80 - 120
			Dissolved Antimony (Sb)	2015/12/02		102	%	80 - 120
			Dissolved Arsenic (As)	2015/12/02		97	%	80 - 120
			Dissolved Barium (Ba)	2015/12/02		101	%	80 - 120
			Dissolved Beryllium (Be)	2015/12/02		99	%	80 - 120
			Dissolved Bismuth (Bi)	2015/12/02		100	%	80 - 120
			Dissolved Boron (B)	2015/12/02		99	%	80 - 120
			Dissolved Cadmium (Cd)	2015/12/02		100	%	80 - 120
			Dissolved Calcium (Ca)	2015/12/02		104	%	80 - 120
			Dissolved Chromium (Cr)	2015/12/02		95	%	80 - 120
			Dissolved Cobalt (Co)	2015/12/02		97	%	80 - 120
			Dissolved Copper (Cu)	2015/12/02		95	%	80 - 120
			Dissolved Iron (Fe)	2015/12/02		102	%	80 - 120
			Dissolved Lead (Pb)	2015/12/02		101	%	80 - 120
			Dissolved Magnesium (Mg)	2015/12/02		103	%	80 - 120
			Dissolved Manganese (Mn)	2015/12/02		NC	%	80 - 120
			Dissolved Molybdenum (Mo)	2015/12/02		103	%	80 - 120
			Dissolved Nickel (Ni)	2015/12/02		96	%	80 - 120
			Dissolved Phosphorus (P)	2015/12/02		110	%	80 - 120
			Dissolved Potassium (K)	2015/12/02		106	%	80 - 120
			Dissolved Selenium (Se)	2015/12/02		100	%	80 - 120
			Dissolved Silver (Ag)	2015/12/02		93	%	80 - 120
			Dissolved Sodium (Na)	2015/12/02		NC	%	80 - 120
			Dissolved Strontium (Sr)	2015/12/02		98	%	80 - 120
			Dissolved Thallium (Tl)	2015/12/02		99	%	80 - 120
			Dissolved Tin (Sn)	2015/12/02		105	%	80 - 120
			Dissolved Titanium (Ti)	2015/12/02		97	%	80 - 120
			Dissolved Uranium (U)	2015/12/02		103	%	80 - 120
			Dissolved Vanadium (V)	2015/12/02		99	%	80 - 120
			Dissolved Zinc (Zn)	2015/12/02		98	%	80 - 120
4295223	BAN	Spiked Blank	Dissolved Aluminum (Al)	2015/12/02		106	%	80 - 120
			Dissolved Antimony (Sb)	2015/12/02		101	%	80 - 120
			Dissolved Arsenic (As)	2015/12/02		97	%	80 - 120
			Dissolved Barium (Ba)	2015/12/02		102	%	80 - 120
			Dissolved Beryllium (Be)	2015/12/02		101	%	80 - 120
			Dissolved Bismuth (Bi)	2015/12/02		100	%	80 - 120
			Dissolved Boron (B)	2015/12/02		100	%	80 - 120
			Dissolved Cadmium (Cd)	2015/12/02		101	%	80 - 120
			Dissolved Calcium (Ca)	2015/12/02		105	%	80 - 120
			Dissolved Chromium (Cr)	2015/12/02		96	%	80 - 120
			Dissolved Cobalt (Co)	2015/12/02		99	%	80 - 120
			Dissolved Copper (Cu)	2015/12/02		97	%	80 - 120
			Dissolved Iron (Fe)	2015/12/02		106	%	80 - 120
			Dissolved Lead (Pb)	2015/12/02		102	%	80 - 120
			Dissolved Magnesium (Mg)	2015/12/02		105	%	80 - 120
			Dissolved Manganese (Mn)	2015/12/02		99	%	80 - 120
			Dissolved Molybdenum (Mo)	2015/12/02		100	%	80 - 120
			Dissolved Nickel (Ni)	2015/12/02		100	%	80 - 120
			Dissolved Phosphorus (P)	2015/12/02		109	%	80 - 120
			Dissolved Potassium (K)	2015/12/02		103	%	80 - 120
			Dissolved Selenium (Se)	2015/12/02		99	%	80 - 120
			Dissolved Silver (Ag)	2015/12/02		99	%	80 - 120
			Dissolved Sodium (Na)	2015/12/02		103	%	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 Strontium (Sr)	2015/12/02		100	%	80 - 120
			Dissolved Thallium (Tl)	2015/12/02		100	%	80 - 120
			Dissolved Tin (Sn)	2015/12/02		101	%	80 - 120
			Dissolved Titanium (Ti)	2015/12/02		102	%	80 - 120
			Dissolved Uranium (U)	2015/12/02		103	%	80 - 120
			Dissolved Vanadium (V)	2015/12/02		102	%	80 - 120
			Dissolved Zinc (Zn)	2015/12/02		98	%	80 - 120
4295223	BAN	Method Blank	Dissolved Aluminum (Al)	2015/12/02	<5.0		ug/L	
			Dissolved Antimony (Sb)	2015/12/02	<1.0		ug/L	
			Dissolved Arsenic (As)	2015/12/02	<1.0		ug/L	
			Dissolved Barium (Ba)	2015/12/02	<1.0		ug/L	
			Dissolved Beryllium (Be)	2015/12/02	<1.0		ug/L	
			Dissolved Bismuth (Bi)	2015/12/02	<2.0		ug/L	
			Dissolved Boron (B)	2015/12/02	<50		ug/L	
			Dissolved Cadmium (Cd)	2015/12/02	<0.010		ug/L	
			Dissolved Calcium (Ca)	2015/12/02	<100		ug/L	
			Dissolved Chromium (Cr)	2015/12/02	<1.0		ug/L	
			Dissolved Cobalt (Co)	2015/12/02	<0.40		ug/L	
			Dissolved Copper (Cu)	2015/12/02	<2.0		ug/L	
			Dissolved Iron (Fe)	2015/12/02	<50		ug/L	
			Dissolved Lead (Pb)	2015/12/02	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2015/12/02	<100		ug/L	
			Dissolved Manganese (Mn)	2015/12/02	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2015/12/02	<2.0		ug/L	
			Dissolved Nickel (Ni)	2015/12/02	<2.0		ug/L	
			Dissolved Phosphorus (P)	2015/12/02	<100		ug/L	
			Dissolved Potassium (K)	2015/12/02	<100		ug/L	
			Dissolved Selenium (Se)	2015/12/02	<1.0		ug/L	
			Dissolved Silver (Ag)	2015/12/02	<0.10		ug/L	
			Dissolved Sodium (Na)	2015/12/02	<100		ug/L	
			Dissolved Strontium (Sr)	2015/12/02	<2.0		ug/L	
			Dissolved Thallium (Tl)	2015/12/02	<0.10		ug/L	
			Dissolved Tin (Sn)	2015/12/02	<2.0		ug/L	
			Dissolved Titanium (Ti)	2015/12/02	<2.0		ug/L	
			Dissolved Uranium (U)	2015/12/02	<0.10		ug/L	
			Dissolved Vanadium (V)	2015/12/02	<2.0		ug/L	
			Dissolved Zinc (Zn)	2015/12/02	<5.0		ug/L	
4295223	BAN	RPD	Dissolved Aluminum (Al)	2015/12/02	NC		%	20
			Dissolved Antimony (Sb)	2015/12/02	NC		%	20
			Dissolved Arsenic (As)	2015/12/02	NC		%	20
			Dissolved Barium (Ba)	2015/12/02	2.1		%	20
			Dissolved Beryllium (Be)	2015/12/02	NC		%	20
			Dissolved Bismuth (Bi)	2015/12/02	NC		%	20
			Dissolved Boron (B)	2015/12/02	NC		%	20
			Dissolved Cadmium (Cd)	2015/12/02	1.3		%	20
			Dissolved Calcium (Ca)	2015/12/02	1.2		%	20
			Dissolved Chromium (Cr)	2015/12/02	NC		%	20
			Dissolved Cobalt (Co)	2015/12/02	4.4		%	20
			Dissolved Copper (Cu)	2015/12/02	NC		%	20
			Dissolved Iron (Fe)	2015/12/02	NC		%	20
			Dissolved Lead (Pb)	2015/12/02	NC		%	20
			Dissolved Magnesium (Mg)	2015/12/02	1.6		%	20
			Dissolved Manganese (Mn)	2015/12/02	1.1		%	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 Molybdenum (Mo)	2015/12/02	NC		%	20
			Dissolved Nickel (Ni)	2015/12/02	NC		%	20
			Dissolved Phosphorus (P)	2015/12/02	NC		%	20
			Dissolved Potassium (K)	2015/12/02	0.96		%	20
			Dissolved Selenium (Se)	2015/12/02	NC		%	20
			Dissolved Silver (Ag)	2015/12/02	NC		%	20
			Dissolved Sodium (Na)	2015/12/02	0.76		%	20
			Dissolved Strontium (Sr)	2015/12/02	0.42		%	20
			Dissolved Thallium (Tl)	2015/12/02	NC		%	20
			Dissolved Tin (Sn)	2015/12/02	NC		%	20
			Dissolved Titanium (Ti)	2015/12/02	NC		%	20
			Dissolved Uranium (U)	2015/12/02	NC		%	20
			Dissolved Vanadium (V)	2015/12/02	NC		%	20
			Dissolved Zinc (Zn)	2015/12/02	NC		%	20
4295226	BAN	Matrix Spike	Dissolved Aluminum (Al)	2015/12/02		111	%	80 - 120
			Dissolved Antimony (Sb)	2015/12/02		102	%	80 - 120
			Dissolved Arsenic (As)	2015/12/02		100	%	80 - 120
			Dissolved Barium (Ba)	2015/12/02		98	%	80 - 120
			Dissolved Beryllium (Be)	2015/12/02		96	%	80 - 120
			Dissolved Bismuth (Bi)	2015/12/02		105	%	80 - 120
			Dissolved Boron (B)	2015/12/02		98	%	80 - 120
			Dissolved Cadmium (Cd)	2015/12/02		101	%	80 - 120
			Dissolved Calcium (Ca)	2015/12/02		105	%	80 - 120
			Dissolved Chromium (Cr)	2015/12/02		101	%	80 - 120
			Dissolved Cobalt (Co)	2015/12/02		101	%	80 - 120
			Dissolved Copper (Cu)	2015/12/02		101	%	80 - 120
			Dissolved Iron (Fe)	2015/12/02		109	%	80 - 120
			Dissolved Lead (Pb)	2015/12/02		101	%	80 - 120
			Dissolved Magnesium (Mg)	2015/12/02		110	%	80 - 120
			Dissolved Manganese (Mn)	2015/12/02		104	%	80 - 120
			Dissolved Molybdenum (Mo)	2015/12/02		103	%	80 - 120
			Dissolved Nickel (Ni)	2015/12/02		101	%	80 - 120
			Dissolved Phosphorus (P)	2015/12/02		113	%	80 - 120
			Dissolved Potassium (K)	2015/12/02		110	%	80 - 120
			Dissolved Selenium (Se)	2015/12/02		101	%	80 - 120
			Dissolved Silver (Ag)	2015/12/02		101	%	80 - 120
			Dissolved Sodium (Na)	2015/12/02		111	%	80 - 120
			Dissolved Strontium (Sr)	2015/12/02		101	%	80 - 120
			Dissolved Thallium (Tl)	2015/12/02		103	%	80 - 120
			Dissolved Tin (Sn)	2015/12/02		105	%	80 - 120
			Dissolved Titanium (Ti)	2015/12/02		106	%	80 - 120
			Dissolved Uranium (U)	2015/12/02		111	%	80 - 120
			Dissolved Vanadium (V)	2015/12/02		101	%	80 - 120
			Dissolved Zinc (Zn)	2015/12/02		102	%	80 - 120
4295226	BAN	Spiked Blank	Dissolved Aluminum (Al)	2015/12/02		111	%	80 - 120
			Dissolved Antimony (Sb)	2015/12/02		100	%	80 - 120
			Dissolved Arsenic (As)	2015/12/02		100	%	80 - 120
			Dissolved Barium (Ba)	2015/12/02		100	%	80 - 120
			Dissolved Beryllium (Be)	2015/12/02		96	%	80 - 120
			Dissolved Bismuth (Bi)	2015/12/02		105	%	80 - 120
			Dissolved Boron (B)	2015/12/02		97	%	80 - 120
			Dissolved Cadmium (Cd)	2015/12/02		100	%	80 - 120
			Dissolved Calcium (Ca)	2015/12/02		106	%	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)	2015/12/02		102	%	80 - 120
			Dissolved Cobalt (Co)	2015/12/02		101	%	80 - 120
			Dissolved Copper (Cu)	2015/12/02		100	%	80 - 120
			Dissolved Iron (Fe)	2015/12/02		109	%	80 - 120
			Dissolved Lead (Pb)	2015/12/02		100	%	80 - 120
			Dissolved Magnesium (Mg)	2015/12/02		111	%	80 - 120
			Dissolved Manganese (Mn)	2015/12/02		104	%	80 - 120
			Dissolved Molybdenum (Mo)	2015/12/02		103	%	80 - 120
			Dissolved Nickel (Ni)	2015/12/02		101	%	80 - 120
			Dissolved Phosphorus (P)	2015/12/02		112	%	80 - 120
			Dissolved Potassium (K)	2015/12/02		109	%	80 - 120
			Dissolved Selenium (Se)	2015/12/02		100	%	80 - 120
			Dissolved Silver (Ag)	2015/12/02		101	%	80 - 120
			Dissolved Sodium (Na)	2015/12/02		112	%	80 - 120
			Dissolved Strontium (Sr)	2015/12/02		101	%	80 - 120
			Dissolved Thallium (Tl)	2015/12/02		103	%	80 - 120
			Dissolved Tin (Sn)	2015/12/02		103	%	80 - 120
			Dissolved Titanium (Ti)	2015/12/02		106	%	80 - 120
			Dissolved Uranium (U)	2015/12/02		110	%	80 - 120
			Dissolved Vanadium (V)	2015/12/02		101	%	80 - 120
			Dissolved Zinc (Zn)	2015/12/02		102	%	80 - 120
4295226	BAN	Method Blank	Dissolved Aluminum (Al)	2015/12/02	<5.0		ug/L	
			Dissolved Antimony (Sb)	2015/12/02	<1.0		ug/L	
			Dissolved Arsenic (As)	2015/12/02	<1.0		ug/L	
			Dissolved Barium (Ba)	2015/12/02	<1.0		ug/L	
			Dissolved Beryllium (Be)	2015/12/02	<1.0		ug/L	
			Dissolved Bismuth (Bi)	2015/12/02	<2.0		ug/L	
			Dissolved Boron (B)	2015/12/02	<50		ug/L	
			Dissolved Cadmium (Cd)	2015/12/02	<0.010		ug/L	
			Dissolved Calcium (Ca)	2015/12/02	<100		ug/L	
			Dissolved Chromium (Cr)	2015/12/02	<1.0		ug/L	
			Dissolved Cobalt (Co)	2015/12/02	<0.40		ug/L	
			Dissolved Copper (Cu)	2015/12/02	<2.0		ug/L	
			Dissolved Iron (Fe)	2015/12/02	<50		ug/L	
			Dissolved Lead (Pb)	2015/12/02	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2015/12/02	<100		ug/L	
			Dissolved Manganese (Mn)	2015/12/02	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2015/12/02	<2.0		ug/L	
			Dissolved Nickel (Ni)	2015/12/02	<2.0		ug/L	
			Dissolved Phosphorus (P)	2015/12/02	<100		ug/L	
			Dissolved Potassium (K)	2015/12/02	<100		ug/L	
			Dissolved Selenium (Se)	2015/12/02	<1.0		ug/L	
			Dissolved Silver (Ag)	2015/12/02	<0.10		ug/L	
			Dissolved Sodium (Na)	2015/12/02	<100		ug/L	
			Dissolved Strontium (Sr)	2015/12/02	<2.0		ug/L	
			Dissolved Thallium (Tl)	2015/12/02	<0.10		ug/L	
			Dissolved Tin (Sn)	2015/12/02	<2.0		ug/L	
			Dissolved Titanium (Ti)	2015/12/02	<2.0		ug/L	
			Dissolved Uranium (U)	2015/12/02	<0.10		ug/L	
			Dissolved Vanadium (V)	2015/12/02	<2.0		ug/L	
			Dissolved Zinc (Zn)	2015/12/02	<5.0		ug/L	
4295226	BAN	RPD	Dissolved Aluminum (Al)	2015/12/02	NC		%	20
			Dissolved Antimony (Sb)	2015/12/02	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 Arsenic (As)	2015/12/02	NC		%	20
			Dissolved Barium (Ba)	2015/12/02	2.1		%	20
			Dissolved Beryllium (Be)	2015/12/02	NC		%	20
			Dissolved Bismuth (Bi)	2015/12/02	NC		%	20
			Dissolved Boron (B)	2015/12/02	NC		%	20
			Dissolved Cadmium (Cd)	2015/12/02	NC		%	20
			Dissolved Calcium (Ca)	2015/12/02	1.2		%	20
			Dissolved Chromium (Cr)	2015/12/02	NC		%	20
			Dissolved Cobalt (Co)	2015/12/02	NC		%	20
			Dissolved Copper (Cu)	2015/12/02	NC		%	20
			Dissolved Iron (Fe)	2015/12/02	NC		%	20
			Dissolved Lead (Pb)	2015/12/02	NC		%	20
			Dissolved Magnesium (Mg)	2015/12/02	0.90		%	20
			Dissolved Manganese (Mn)	2015/12/02	NC		%	20
			Dissolved Molybdenum (Mo)	2015/12/02	NC		%	20
			Dissolved Nickel (Ni)	2015/12/02	NC		%	20
			Dissolved Phosphorus (P)	2015/12/02	NC		%	20
			Dissolved Potassium (K)	2015/12/02	NC		%	20
			Dissolved Selenium (Se)	2015/12/02	NC		%	20
			Dissolved Silver (Ag)	2015/12/02	NC		%	20
			Dissolved Sodium (Na)	2015/12/02	0.44		%	20
			Dissolved Strontium (Sr)	2015/12/02	0.75		%	20
			Dissolved Thallium (Tl)	2015/12/02	NC		%	20
			Dissolved Tin (Sn)	2015/12/02	NC		%	20
			Dissolved Titanium (Ti)	2015/12/02	NC		%	20
			Dissolved Uranium (U)	2015/12/02	NC		%	20
			Dissolved Vanadium (V)	2015/12/02	NC		%	20
			Dissolved Zinc (Zn)	2015/12/02	NC		%	20
4295248	AJS	Matrix Spike [BLB065-02]	Isobutylbenzene - Extractable	2015/12/03		101	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/03		99	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/03		87	%	70 - 130
			>C16-C21 Hydrocarbons	2015/12/03		80	%	70 - 130
			>C21-<C32 Hydrocarbons	2015/12/03		88	%	70 - 130
4295248	AJS	Spiked Blank	Isobutylbenzene - Extractable	2015/12/03		89	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/03		105	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/03		86	%	70 - 130
			>C16-C21 Hydrocarbons	2015/12/03		82	%	70 - 130
			>C21-<C32 Hydrocarbons	2015/12/03		94	%	70 - 130
4295248	AJS	Method Blank	Isobutylbenzene - Extractable	2015/12/03		87	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/03		103	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/03	<0.050		mg/L	
			>C16-C21 Hydrocarbons	2015/12/03	<0.050		mg/L	
			>C21-<C32 Hydrocarbons	2015/12/03	<0.10		mg/L	
4295248	AJS	RPD [BLB062-02]	>C10-C16 Hydrocarbons	2015/12/03	NC		%	40
			>C16-C21 Hydrocarbons	2015/12/03	NC		%	40
			>C21-<C32 Hydrocarbons	2015/12/03	NC		%	40
4295394	MS3	Matrix Spike	Isobutylbenzene - Volatile	2015/12/02		100	%	70 - 130
			Benzene	2015/12/02		105	%	70 - 130
			Toluene	2015/12/02		107	%	70 - 130
			Ethylbenzene	2015/12/02		106	%	70 - 130
			Total Xylenes	2015/12/02		108	%	70 - 130
4295394	MS3	Spiked Blank	Isobutylbenzene - Volatile	2015/12/02		99	%	70 - 130
			Benzene	2015/12/02		101	%	70 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Toluene	2015/12/02		104	%	70 - 130
			Ethylbenzene	2015/12/02		105	%	70 - 130
			Total Xylenes	2015/12/02		105	%	70 - 130
4295394	MS3	Method Blank	Isobutylbenzene - Volatile	2015/12/02		101	%	70 - 130
			Benzene	2015/12/02	<0.0010		mg/L	
			Toluene	2015/12/02	<0.0010		mg/L	
			Ethylbenzene	2015/12/02	<0.0010		mg/L	
			Total Xylenes	2015/12/02	<0.0020		mg/L	
			C6 - C10 (less BTEX)	2015/12/02	<0.010		mg/L	
4295394	MS3	RPD	Benzene	2015/12/02	NC		%	40
			Toluene	2015/12/02	NC		%	40
			Ethylbenzene	2015/12/02	NC		%	40
			Total Xylenes	2015/12/02	NC		%	40
			C6 - C10 (less BTEX)	2015/12/02	NC		%	40
4295636	VWA	Matrix Spike	Total Mercury (Hg)	2015/12/03		107	%	80 - 120
4295636	VWA	Spiked Blank	Total Mercury (Hg)	2015/12/03		103	%	80 - 120
4295636	VWA	Method Blank	Total Mercury (Hg)	2015/12/03	<0.013		ug/L	
4295636	VWA	RPD	Total Mercury (Hg)	2015/12/03	NC		%	20
4297072	HIN	Matrix Spike	D10-Anthracene	2015/12/05		60	%	30 - 130
			D14-Terphenyl	2015/12/05		60	%	30 - 130
			D8-Acenaphthylene	2015/12/05		66	%	30 - 130
			1-Methylnaphthalene	2015/12/05		77	%	30 - 130
			2-Methylnaphthalene	2015/12/05		89	%	30 - 130
			Acenaphthene	2015/12/05		86	%	30 - 130
			Acenaphthylene	2015/12/05		85	%	30 - 130
			Anthracene	2015/12/05		89	%	30 - 130
			Benzo(a)anthracene	2015/12/05		87	%	30 - 130
			Benzo(a)pyrene	2015/12/05		82	%	30 - 130
			Benzo(b)fluoranthene	2015/12/05		80	%	30 - 130
			Benzo(g,h,i)perylene	2015/12/05		84	%	30 - 130
			Benzo(j)fluoranthene	2015/12/05		82	%	30 - 130
			Benzo(k)fluoranthene	2015/12/05		77	%	30 - 130
			Chrysene	2015/12/05		87	%	30 - 130
			Dibenz(a,h)anthracene	2015/12/05		84	%	30 - 130
			Fluoranthene	2015/12/05		92	%	30 - 130
			Fluorene	2015/12/05		87	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2015/12/05		80	%	30 - 130
			Naphthalene	2015/12/05		83	%	30 - 130
			Perylene	2015/12/05		79	%	30 - 130
			Phenanthrene	2015/12/05		90	%	30 - 130
			Pyrene	2015/12/05		91	%	30 - 130
4297072	HIN	Spiked Blank	D10-Anthracene	2015/12/05		77	%	30 - 130
			D14-Terphenyl	2015/12/05		80	%	30 - 130
			D8-Acenaphthylene	2015/12/05		84	%	30 - 130
			1-Methylnaphthalene	2015/12/05		95	%	30 - 130
			2-Methylnaphthalene	2015/12/05		97	%	30 - 130
			Acenaphthene	2015/12/05		103	%	30 - 130
			Acenaphthylene	2015/12/05		104	%	30 - 130
			Anthracene	2015/12/05		109	%	30 - 130
			Benzo(a)anthracene	2015/12/05		113	%	30 - 130
			Benzo(a)pyrene	2015/12/05		98	%	30 - 130
			Benzo(b)fluoranthene	2015/12/05		92	%	30 - 130
			Benzo(g,h,i)perylene	2015/12/05		101	%	30 - 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(j)fluoranthene	2015/12/05		95	%	30 - 130
			Benzo(k)fluoranthene	2015/12/05		95	%	30 - 130
			Chrysene	2015/12/05		112	%	30 - 130
			Dibenz(a,h)anthracene	2015/12/05		99	%	30 - 130
			Fluoranthene	2015/12/05		116	%	30 - 130
			Fluorene	2015/12/05		110	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2015/12/05		100	%	30 - 130
			Naphthalene	2015/12/05		88	%	30 - 130
			Perylene	2015/12/05		96	%	30 - 130
			Phenanthrene	2015/12/05		110	%	30 - 130
			Pyrene	2015/12/05		117	%	30 - 130
4297072	HIN	Method Blank	D10-Anthracene	2015/12/05		85	%	30 - 130
			D14-Terphenyl	2015/12/05		85	%	30 - 130
			D8-Acenaphthylene	2015/12/05		91	%	30 - 130
			1-Methylnaphthalene	2015/12/05	<0.050		ug/L	
			2-Methylnaphthalene	2015/12/05	<0.050		ug/L	
			Acenaphthene	2015/12/05	<0.010		ug/L	
			Acenaphthylene	2015/12/05	<0.010		ug/L	
			Anthracene	2015/12/05	<0.010		ug/L	
			Benzo(a)anthracene	2015/12/05	<0.010		ug/L	
			Benzo(a)pyrene	2015/12/05	<0.010		ug/L	
			Benzo(b)fluoranthene	2015/12/05	<0.010		ug/L	
			Benzo(g,h,i)perylene	2015/12/05	<0.010		ug/L	
			Benzo(j)fluoranthene	2015/12/05	<0.010		ug/L	
			Benzo(k)fluoranthene	2015/12/05	<0.010		ug/L	
			Chrysene	2015/12/05	<0.010		ug/L	
			Dibenz(a,h)anthracene	2015/12/05	<0.010		ug/L	
			Fluoranthene	2015/12/05	<0.010		ug/L	
			Fluorene	2015/12/05	<0.010		ug/L	
			Indeno(1,2,3-cd)pyrene	2015/12/05	<0.010		ug/L	
			Naphthalene	2015/12/05	<0.20		ug/L	
			Perylene	2015/12/05	<0.010		ug/L	
			Phenanthrene	2015/12/05	<0.010		ug/L	
			Pyrene	2015/12/05	<0.010		ug/L	
4297072	HIN	RPD	1-Methylnaphthalene	2015/12/05	NC		%	40
			2-Methylnaphthalene	2015/12/05	NC		%	40
			Acenaphthene	2015/12/05	NC		%	40
			Acenaphthylene	2015/12/05	NC		%	40
			Anthracene	2015/12/05	NC		%	40
			Benzo(a)anthracene	2015/12/05	NC		%	40
			Benzo(a)pyrene	2015/12/05	NC		%	40
			Benzo(b)fluoranthene	2015/12/05	NC		%	40
			Benzo(g,h,i)perylene	2015/12/05	NC		%	40
			Benzo(j)fluoranthene	2015/12/05	NC		%	40
			Benzo(k)fluoranthene	2015/12/05	NC		%	40
			Chrysene	2015/12/05	NC		%	40
			Dibenz(a,h)anthracene	2015/12/05	NC		%	40
			Fluoranthene	2015/12/05	NC		%	40
			Fluorene	2015/12/05	NC		%	40
			Indeno(1,2,3-cd)pyrene	2015/12/05	NC		%	40
			Naphthalene	2015/12/05	NC		%	40
			Perylene	2015/12/05	NC		%	40
			Phenanthrene	2015/12/05	NC		%	40

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Maxxam Job #: B5O5448
Report Date: 2015/12/07

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Pyrene	2015/12/05	NC		%	40
4299799	VWA	Matrix Spike	Total Mercury (Hg)	2015/12/07		102	%	80 - 120
4299799	VWA	Spiked Blank	Total Mercury (Hg)	2015/12/07		100	%	80 - 120
4299799	VWA	Method Blank	Total Mercury (Hg)	2015/12/07	<0.013		ug/L	
4299799	VWA	RPD	Total Mercury (Hg)	2015/12/07	NC		%	20

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.

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 spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of 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 (one or both samples < 5x RDL).

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Maxxam Job #: B5O5448
Report Date: 2015/12/07

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

VALIDATION SIGNATURE PAGE

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

Mike MacGillivray, Scientific Specialist (Inorganics)

Phil Deveau

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Maxxam
A Bureau Veritas Group Company

Your Project #: 4104251070
Site#: HARBOURSIDE COMMERCIAL PARK
Site Location: HARBOURSIDE COMMERCIAL PARK
Your C.O.C. #: 538679

Attention:Nadine Wambolt

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

Report Date: 2015/12/03
Report #: R3791957
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B5O2857
Received: 2015/11/25, 16:35

Sample Matrix: Water
Samples Received: 12

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
TEH in Water (PIRI) (1)	12	2015/11/30	2015/12/01	ATL SOP 00113	Atl. RBCA v3 m
Mercury - Total (CVAA,LL) (1)	4	2015/11/30	2015/11/30	ATL SOP 00026	EPA 245.1 R3 m
Mercury - Total (CVAA,LL) (1)	7	2015/12/01	2015/12/01	ATL SOP 00026	EPA 245.1 R3 m
Metals Water Diss. MS (as rec'd) (1)	10	N/A	2015/11/30	ATL SOP 00058	EPA 6020A R1 m
Metals Water Diss. MS (as rec'd) (1)	1	N/A	2015/12/01	ATL SOP 00058	EPA 6020A R1 m
PAH in Water by GC/MS (SIM) (1)	5	2015/11/30	2015/12/01	ATL SOP 00103	EPA 8270D 2007 m
PAH in Water by GC/MS (SIM) (1)	6	2015/12/01	2015/12/02	ATL SOP 00103	EPA 8270D 2007 m
VPH in Water (PIRI) (1)	12	N/A	2015/11/30	ATL SOP 00118	Atl. RBCA v3 m
ModTPH (T1) Calc. for Water (1)	12	N/A	2015/12/02	N/A	Atl. RBCA v3 m

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 Maxxam Bedford

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Natalie MacAskill, Sr. Project Manager
Email: NMacAskill@maxxam.ca
Phone# (902)567-1255 Ext:17
==========
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Maxxam Job #: B5O2857
Report Date: 2015/12/03

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

MERCURY BY COLD VAPOUR AA (WATER)

Maxxam ID		BKN794	BKN810	BKN811	BKN812		
Sampling Date		2015/11/25	2015/11/25	2015/11/25	2015/11/25		
COC Number		538679	538679	538679	538679		
	UNITS	SCU20-017-MW	SCU20-018-MW	SCU20-013-MW	SCU20-014-MW	RDL	QC Batch
Metals							
Total Mercury (Hg)	ug/L	<0.013	<0.013	<0.013	0.052	0.013	4291926

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		BKN813	BKN814	BKN815	BKN816	BKN817		
Sampling Date		2015/11/25	2015/11/25	2015/11/25	2015/11/25	2015/11/25		
COC Number		538679	538679	538679	538679	538679		
	UNITS	SCU20-015-MW	SCU20-016-MW	SCU19-031-MW	SCU19-029-MW	SCU19-030-MW	RDL	QC Batch
Metals								
Total Mercury (Hg)	ug/L	<0.013	<0.013	<0.013	<0.013	<0.013	0.013	4293495

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		BKN818	BKN819		
Sampling Date		2015/11/25	2015/11/25		
COC Number		538679	538679		
	UNITS	SCU18-010-MW	SCU18-011-MW	RDL	QC Batch
Metals					
Total Mercury (Hg)	ug/L	<0.013	<0.013	0.013	4293495

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B5O2857
Report Date: 2015/12/03

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

ELEMENTS BY ICP/MS (WATER)

Maxxam ID		BKN794			BKN810		BKN811	BKN812		
Sampling Date		2015/11/25			2015/11/25		2015/11/25	2015/11/25		
COC Number		538679			538679		538679	538679		
	UNITS	SCU20-017-MW	RDL	QC Batch	SCU20-018-MW	RDL	SCU20-013-MW	SCU20-014-MW	RDL	QC Batch
Metals										
Dissolved Aluminum (Al)	ug/L	180	5.0	4291925	<5.0	5.0	140	280	5.0	4291928
Dissolved Antimony (Sb)	ug/L	<1.0	1.0	4291925	<1.0	1.0	<1.0	<1.0	1.0	4291928
Dissolved Arsenic (As)	ug/L	6.9	1.0	4291925	1.8	1.0	13	11	1.0	4291928
Dissolved Barium (Ba)	ug/L	58	1.0	4291925	25	1.0	91	35	1.0	4291928
Dissolved Beryllium (Be)	ug/L	<1.0	1.0	4291925	<1.0	1.0	<1.0	<1.0	1.0	4291928
Dissolved Bismuth (Bi)	ug/L	<2.0	2.0	4291925	<2.0	2.0	<2.0	<2.0	2.0	4291928
Dissolved Boron (B)	ug/L	94	50	4291925	78	50	<50	83	50	4291928
Dissolved Cadmium (Cd)	ug/L	<0.010	0.010	4291925	<0.010	0.010	<0.010	<0.010	0.010	4291928
Dissolved Calcium (Ca)	ug/L	160000	100	4291925	330000	100	120000	130000	100	4291928
Dissolved Chromium (Cr)	ug/L	<1.0	1.0	4291925	<1.0	1.0	<1.0	<1.0	1.0	4291928
Dissolved Cobalt (Co)	ug/L	<0.40	0.40	4291925	<0.40	0.40	<0.40	<0.40	0.40	4291928
Dissolved Copper (Cu)	ug/L	<2.0	2.0	4291925	<2.0	2.0	<2.0	<2.0	2.0	4291928
Dissolved Iron (Fe)	ug/L	<50	50	4291925	75	50	<50	<50	50	4291928
Dissolved Lead (Pb)	ug/L	<0.50	0.50	4291925	<0.50	0.50	<0.50	<0.50	0.50	4291928
Dissolved Magnesium (Mg)	ug/L	<100	100	4291925	21000	100	<100	<100	100	4291928
Dissolved Manganese (Mn)	ug/L	<2.0	2.0	4291925	250	2.0	<2.0	<2.0	2.0	4291928
Dissolved Molybdenum (Mo)	ug/L	7.0	2.0	4291925	3.0	2.0	60	35	2.0	4291928
Dissolved Nickel (Ni)	ug/L	12	2.0	4291925	<2.0	2.0	34	47	2.0	4291928
Dissolved Phosphorus (P)	ug/L	<100	100	4291925	<100	100	<100	310	100	4291928
Dissolved Potassium (K)	ug/L	13000	100	4291925	4200	100	46000	28000	100	4291928
Dissolved Selenium (Se)	ug/L	3.4	1.0	4291925	1.1	1.0	<1.0	2.0	1.0	4291928
Dissolved Silver (Ag)	ug/L	<0.10	0.10	4291925	<0.10	0.10	<0.10	<0.10	0.10	4291928
Dissolved Sodium (Na)	ug/L	27000	100	4291925	13000	100	120000	52000	100	4291928
Dissolved Strontium (Sr)	ug/L	910	2.0	4291925	4900	20	1500	680	2.0	4291928
Dissolved Thallium (Tl)	ug/L	<0.10	0.10	4291925	<0.10	0.10	<0.10	<0.10	0.10	4291928
Dissolved Tin (Sn)	ug/L	<2.0	2.0	4291925	<2.0	2.0	<2.0	<2.0	2.0	4291928
Dissolved Titanium (Ti)	ug/L	<2.0	2.0	4291925	<2.0	2.0	<2.0	<2.0	2.0	4291928
Dissolved Uranium (U)	ug/L	<0.10	0.10	4291925	1.8	0.10	<0.10	<0.10	0.10	4291928
Dissolved Vanadium (V)	ug/L	3.7	2.0	4291925	6.5	2.0	17	2.3	2.0	4291928
Dissolved Zinc (Zn)	ug/L	<5.0	5.0	4291925	<5.0	5.0	<5.0	<5.0	5.0	4291928

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B5O2857
Report Date: 2015/12/03

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

ELEMENTS BY ICP/MS (WATER)

Maxxam ID		BKN813	BKN814	BKN815	BKN816	BKN817		
Sampling Date		2015/11/25	2015/11/25	2015/11/25	2015/11/25	2015/11/25		
COC Number		538679	538679	538679	538679	538679		
	UNITS	SCU20-015-MW	SCU20-016-MW	SCU19-031-MW	SCU19-029-MW	SCU19-030-MW	RDL	QC Batch
Metals								
Dissolved Aluminum (Al)	ug/L	30	86	5.0	76	<5.0	5.0	4291928
Dissolved Antimony (Sb)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	4291928
Dissolved Arsenic (As)	ug/L	18	8.1	2.4	11	<1.0	1.0	4291928
Dissolved Barium (Ba)	ug/L	17	36	36	45	50	1.0	4291928
Dissolved Beryllium (Be)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	4291928
Dissolved Bismuth (Bi)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	4291928
Dissolved Boron (B)	ug/L	91	130	440	680	230	50	4291928
Dissolved Cadmium (Cd)	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	4291928
Dissolved Calcium (Ca)	ug/L	160000	130000	120000	16000	170000	100	4291928
Dissolved Chromium (Cr)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	4291928
Dissolved Cobalt (Co)	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	4291928
Dissolved Copper (Cu)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	4291928
Dissolved Iron (Fe)	ug/L	<50	<50	170	410	<50	50	4291928
Dissolved Lead (Pb)	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4291928
Dissolved Magnesium (Mg)	ug/L	<100	100	37000	3800	26000	100	4291928
Dissolved Manganese (Mn)	ug/L	<2.0	<2.0	1700	1100	240	2.0	4291928
Dissolved Molybdenum (Mo)	ug/L	36	34	8.2	19	<2.0	2.0	4291928
Dissolved Nickel (Ni)	ug/L	5.2	17	<2.0	<2.0	<2.0	2.0	4291928
Dissolved Phosphorus (P)	ug/L	<100	<100	<100	560	<100	100	4291928
Dissolved Potassium (K)	ug/L	13000	23000	39000	23000	15000	100	4291928
Dissolved Selenium (Se)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	4291928
Dissolved Silver (Ag)	ug/L	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	4291928
Dissolved Sodium (Na)	ug/L	36000	35000	98000	230000	29000	100	4291928
Dissolved Strontium (Sr)	ug/L	380	740	750	88	690	2.0	4291928
Dissolved Thallium (Tl)	ug/L	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	4291928
Dissolved Tin (Sn)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	4291928
Dissolved Titanium (Ti)	ug/L	<2.0	<2.0	<2.0	2.2	<2.0	2.0	4291928
Dissolved Uranium (U)	ug/L	<0.10	<0.10	2.4	0.18	0.80	0.10	4291928
Dissolved Vanadium (V)	ug/L	<2.0	29	<2.0	<2.0	<2.0	2.0	4291928
Dissolved Zinc (Zn)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	4291928

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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ELEMENTS BY ICP/MS (WATER)

Maxxam ID		BKN818	BKN819		
Sampling Date		2015/11/25	2015/11/25		
COC Number		538679	538679		
	UNITS	SCU18-010-MW	SCU18-011-MW	RDL	QC Batch
Metals					
Dissolved Aluminum (Al)	ug/L	8.6	9.8	5.0	4291928
Dissolved Antimony (Sb)	ug/L	2.9	<1.0	1.0	4291928
Dissolved Arsenic (As)	ug/L	5.8	3.2	1.0	4291928
Dissolved Barium (Ba)	ug/L	44	20	1.0	4291928
Dissolved Beryllium (Be)	ug/L	<1.0	<1.0	1.0	4291928
Dissolved Bismuth (Bi)	ug/L	<2.0	<2.0	2.0	4291928
Dissolved Boron (B)	ug/L	84	130	50	4291928
Dissolved Cadmium (Cd)	ug/L	<0.010	<0.010	0.010	4291928
Dissolved Calcium (Ca)	ug/L	140000	130000	100	4291928
Dissolved Chromium (Cr)	ug/L	3.7	<1.0	1.0	4291928
Dissolved Cobalt (Co)	ug/L	<0.40	<0.40	0.40	4291928
Dissolved Copper (Cu)	ug/L	2.2	<2.0	2.0	4291928
Dissolved Iron (Fe)	ug/L	94	110	50	4291928
Dissolved Lead (Pb)	ug/L	<0.50	<0.50	0.50	4291928
Dissolved Magnesium (Mg)	ug/L	1700	15000	100	4291928
Dissolved Manganese (Mn)	ug/L	<2.0	240	2.0	4291928
Dissolved Molybdenum (Mo)	ug/L	15	13	2.0	4291928
Dissolved Nickel (Ni)	ug/L	<2.0	2.0	2.0	4291928
Dissolved Phosphorus (P)	ug/L	<100	<100	100	4291928
Dissolved Potassium (K)	ug/L	11000	16000	100	4291928
Dissolved Selenium (Se)	ug/L	2.2	<1.0	1.0	4291928
Dissolved Silver (Ag)	ug/L	<0.10	<0.10	0.10	4291928
Dissolved Sodium (Na)	ug/L	19000	19000	100	4291928
Dissolved Strontium (Sr)	ug/L	640	720	2.0	4291928
Dissolved Thallium (Tl)	ug/L	<0.10	<0.10	0.10	4291928
Dissolved Tin (Sn)	ug/L	<2.0	<2.0	2.0	4291928
Dissolved Titanium (Ti)	ug/L	<2.0	<2.0	2.0	4291928
Dissolved Uranium (U)	ug/L	0.51	<0.10	0.10	4291928
Dissolved Vanadium (V)	ug/L	82	<2.0	2.0	4291928
Dissolved Zinc (Zn)	ug/L	<5.0	<5.0	5.0	4291928

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B5O2857
Report Date: 2015/12/03

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Maxxam ID		BKN794		BKN810		BKN811		
Sampling Date		2015/11/25		2015/11/25		2015/11/25		
COC Number		538679		538679		538679		
	UNITS	SCU20-017-MW	QC Batch	SCU20-018-MW	RDL	SCU20-013-MW	RDL	QC Batch
Polyaromatic Hydrocarbons								
1-Methylnaphthalene	ug/L	5.1	4293486	<0.050	0.050	40	0.050	4292024
2-Methylnaphthalene	ug/L	5.8	4293486	<0.050	0.050	66 (1)	0.50	4292024
Acenaphthene	ug/L	1.7	4293486	<0.010	0.010	8.3	0.010	4292024
Acenaphthylene	ug/L	3.6	4293486	<0.010	0.010	32	0.010	4292024
Anthracene	ug/L	1.2	4293486	<0.010	0.010	3.7	0.010	4292024
Benzo(a)anthracene	ug/L	0.76	4293486	<0.010	0.010	0.072	0.010	4292024
Benzo(a)pyrene	ug/L	0.55	4293486	<0.010	0.010	0.011	0.010	4292024
Benzo(b)fluoranthene	ug/L	0.47	4293486	<0.010	0.010	<0.010	0.010	4292024
Benzo(g,h,i)perylene	ug/L	0.27	4293486	<0.010	0.010	<0.010	0.010	4292024
Benzo(j)fluoranthene	ug/L	0.30	4293486	<0.010	0.010	<0.010	0.010	4292024
Benzo(k)fluoranthene	ug/L	0.28	4293486	<0.010	0.010	<0.010	0.010	4292024
Chrysene	ug/L	0.75	4293486	<0.010	0.010	0.060	0.010	4292024
Dibenz(a,h)anthracene	ug/L	0.090	4293486	<0.010	0.010	<0.010	0.010	4292024
Fluoranthene	ug/L	2.5	4293486	0.014	0.010	1.6	0.010	4292024
Fluorene	ug/L	3.7	4293486	0.011	0.010	18	0.010	4292024
Indeno(1,2,3-cd)pyrene	ug/L	0.25	4293486	<0.010	0.010	<0.010	0.010	4292024
Naphthalene	ug/L	29	4293486	<0.20	0.20	380 (1)	2.0	4292024
Perylene	ug/L	0.13	4293486	<0.010	0.010	<0.010	0.010	4292024
Phenanthrene	ug/L	5.1	4293486	<0.010	0.010	14	0.010	4292024
Pyrene	ug/L	1.9	4293486	0.011	0.010	0.92	0.010	4292024
Surrogate Recovery (%)								
D10-Anthracene	%	90	4293486	84		84		4292024
D14-Terphenyl	%	88 (2)	4293486	99		89		4292024
D8-Acenaphthylene	%	89	4293486	96		95		4292024

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Elevated PAH RDL(s) due to sample dilution.
(2) PAH sample contained sediment.

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Maxxam Job #: B5O2857
Report Date: 2015/12/03

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

Maxxam ID		BKN812		BKN813	BKN814	BKN815	BKN816		
Sampling Date		2015/11/25		2015/11/25	2015/11/25	2015/11/25	2015/11/25		
COC Number		538679		538679	538679	538679	538679		
	UNITS	SCU20-014-MW	RDL	SCU20-015-MW	SCU20-016-MW	SCU19-031-MW	SCU19-029-MW	RDL	QC Batch
Polyaromatic Hydrocarbons									
1-Methylnaphthalene	ug/L	9.8	0.050	1.5	4.3	<0.050	<0.050	0.050	4293486
2-Methylnaphthalene	ug/L	12	0.050	1.9	2.5	<0.050	<0.050	0.050	4293486
Acenaphthene	ug/L	2.2	0.010	0.57	2.6	<0.010	<0.010	0.010	4293486
Acenaphthylene	ug/L	6.2	0.010	0.71	2.8	<0.010	<0.010	0.010	4293486
Anthracene	ug/L	1.1	0.010	0.30	0.33	<0.010	<0.010	0.010	4293486
Benzo(a)anthracene	ug/L	0.093	0.010	0.070	0.011	<0.010	<0.010	0.010	4293486
Benzo(a)pyrene	ug/L	0.041	0.010	0.029	<0.010	<0.010	<0.010	0.010	4293486
Benzo(b)fluoranthene	ug/L	0.034	0.010	0.021	<0.010	<0.010	<0.010	0.010	4293486
Benzo(g,h,i)perylene	ug/L	0.019	0.010	0.013	<0.010	<0.010	<0.010	0.010	4293486
Benzo(j)fluoranthene	ug/L	0.023	0.010	0.017	<0.010	<0.010	<0.010	0.010	4293486
Benzo(k)fluoranthene	ug/L	0.020	0.010	0.014	<0.010	<0.010	<0.010	0.010	4293486
Chrysene	ug/L	0.094	0.010	0.066	0.014	<0.010	<0.010	0.010	4293486
Dibenz(a,h)anthracene	ug/L	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	0.010	4293486
Fluoranthene	ug/L	1.0	0.010	0.41	0.34	0.026	<0.010	0.010	4293486
Fluorene	ug/L	4.4	0.010	0.74	3.1	<0.010	<0.010	0.010	4293486
Indeno(1,2,3-cd)pyrene	ug/L	0.017	0.010	0.011	<0.010	<0.010	<0.010	0.010	4293486
Naphthalene	ug/L	110 (1)	2.0	9.6	9.3	<0.20	<0.20	0.20	4293486
Perylene	ug/L	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	0.010	4293486
Phenanthrene	ug/L	4.8	0.010	1.1	0.84	<0.010	<0.010	0.010	4293486
Pyrene	ug/L	0.76	0.010	0.29	0.29	0.025	<0.010	0.010	4293486
Surrogate Recovery (%)									
D10-Anthracene	%	102		109	90	113	88		4293486
D14-Terphenyl	%	89		97	84	100	85		4293486
D8-Acenaphthylene	%	93		103	104	99	90		4293486

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)

Maxxam ID		BKN817		BKN818	BKN819		
Sampling Date		2015/11/25		2015/11/25	2015/11/25		
COC Number		538679		538679	538679		
	UNITS	SCU19-030-MW	RDL	SCU18-010-MW	SCU18-011-MW	RDL	QC Batch
Polyaromatic Hydrocarbons							
1-Methylnaphthalene	ug/L	<0.050	0.050	0.12	0.061	0.050	4292024
2-Methylnaphthalene	ug/L	<0.050	0.050	<0.050	<0.050	0.050	4292024
Acenaphthene	ug/L	0.46	0.010	0.20	0.10	0.010	4292024
Acenaphthylene	ug/L	<0.020 (1)	0.020	0.22	0.031	0.010	4292024
Anthracene	ug/L	<0.050 (1)	0.050	0.088	0.015	0.010	4292024
Benzo(a)anthracene	ug/L	0.032	0.010	0.021	<0.010	0.010	4292024
Benzo(a)pyrene	ug/L	<0.010	0.010	0.019	<0.010	0.010	4292024
Benzo(b)fluoranthene	ug/L	<0.010	0.010	0.017	<0.010	0.010	4292024
Benzo(g,h,i)perylene	ug/L	<0.010	0.010	0.013	<0.010	0.010	4292024
Benzo(j)fluoranthene	ug/L	<0.010	0.010	0.012	<0.010	0.010	4292024
Benzo(k)fluoranthene	ug/L	<0.010	0.010	0.010	<0.010	0.010	4292024
Chrysene	ug/L	0.029	0.010	0.023	<0.010	0.010	4292024
Dibenz(a,h)anthracene	ug/L	<0.010	0.010	<0.010	<0.010	0.010	4292024
Fluoranthene	ug/L	0.70	0.010	0.21	0.030	0.010	4292024
Fluorene	ug/L	<0.060 (1)	0.060	0.35	0.11	0.010	4292024
Indeno(1,2,3-cd)pyrene	ug/L	<0.010	0.010	0.011	<0.010	0.010	4292024
Naphthalene	ug/L	<0.20	0.20	<0.20	<0.20	0.20	4292024
Perylene	ug/L	<0.010	0.010	<0.010	<0.010	0.010	4292024
Phenanthrene	ug/L	<0.010	0.010	0.22	0.016	0.010	4292024
Pyrene	ug/L	0.49	0.010	0.22	0.019	0.010	4292024
Surrogate Recovery (%)							
D10-Anthracene	%	83		80	87		4292024
D14-Terphenyl	%	96		88	100		4292024
D8-Acenaphthylene	%	96		82	94		4292024

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

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Maxxam Job #: B5O2857
Report Date: 2015/12/03

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

ATLANTIC RBCA HYDROCARBONS (WATER)

Maxxam ID		BKN794	BKN810	BKN811	BKN812	BKN813		
Sampling Date		2015/11/25	2015/11/25	2015/11/25	2015/11/25	2015/11/25		
COC Number		538679	538679	538679	538679	538679		
	UNITS	SCU20-017-MW	SCU20-018-MW	SCU20-013-MW	SCU20-014-MW	SCU20-015-MW	RDL	QC Batch
Petroleum Hydrocarbons								
Benzene	mg/L	0.0014	<0.0010	0.012	0.0034	0.0024	0.0010	4291950
Toluene	mg/L	0.0013	<0.0010	0.017	0.0029	<0.0010	0.0010	4291950
Ethylbenzene	mg/L	<0.0010	<0.0010	0.0081	<0.0010	<0.0010	0.0010	4291950
Total Xylenes	mg/L	<0.0020	<0.0020	0.062	0.0064	<0.0020	0.0020	4291950
C6 - C10 (less BTEX)	mg/L	<0.010	<0.010	0.082	<0.010	<0.010	0.010	4291950
>C10-C16 Hydrocarbons	mg/L	0.23	<0.050	2.2	0.48	0.089	0.050	4291941
>C16-C21 Hydrocarbons	mg/L	0.13	<0.050	1.0	0.43	0.092	0.050	4291941
>C21-<C32 Hydrocarbons	mg/L	0.14	<0.10	1.3	0.46	0.21	0.10	4291941
Modified TPH (Tier1)	mg/L	0.50	<0.10	4.6	1.4	0.39	0.10	4287621
Reached Baseline at C32	mg/L	Yes	NA	Yes	Yes	Yes	N/A	4291941
Hydrocarbon Resemblance	mg/L	COMMENT (1)	NA	COMMENT (2)	COMMENT (1)	COMMENT (3)	N/A	4291941
Surrogate Recovery (%)								
Isobutylbenzene - Extractable	%	94	105	108	105	105		4291941
n-Dotriacontane - Extractable	%	97	102	126	106	112		4291941
Isobutylbenzene - Volatile	%	103	103	102	101	101		4291950

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) One product in fuel / lube range. Unidentified compound(s) in fuel oil range.

(2) One product in fuel / lube range. Unidentified compound(s) in fuel / lube range.

(3) One product in fuel / lube range.

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Maxxam Job #: B5O2857
Report Date: 2015/12/03

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

ATLANTIC RBCA HYDROCARBONS (WATER)

Maxxam ID		BKN814	BKN815	BKN816		BKN817		
Sampling Date		2015/11/25	2015/11/25	2015/11/25		2015/11/25		
COC Number		538679	538679	538679		538679		
	UNITS	SCU20-016-MW	SCU19-031-MW	SCU19-029-MW	QC Batch	SCU19-030-MW	RDL	QC Batch
Petroleum Hydrocarbons								
Benzene	mg/L	<0.0010	<0.0010	<0.0010	4291950	<0.0010	0.0010	4291950
Toluene	mg/L	<0.0010	<0.0010	<0.0010	4291950	<0.0010	0.0010	4291950
Ethylbenzene	mg/L	<0.0010	<0.0010	<0.0010	4291950	<0.0010	0.0010	4291950
Total Xylenes	mg/L	<0.0020	<0.0020	<0.0020	4291950	<0.0020	0.0020	4291950
C6 - C10 (less BTEX)	mg/L	<0.010	<0.010	<0.010	4291950	<0.010	0.010	4291950
>C10-C16 Hydrocarbons	mg/L	0.30	<0.050	<0.050	4291941	0.12	0.050	4292314
>C16-C21 Hydrocarbons	mg/L	0.31	<0.050	<0.050	4291941	0.11	0.050	4292314
>C21-<C32 Hydrocarbons	mg/L	0.42	<0.10	<0.10	4291941	<0.10	0.10	4292314
Modified TPH (Tier1)	mg/L	1.0	<0.10	<0.10	4287621	0.23	0.10	4287621
Reached Baseline at C32	mg/L	Yes	NA	NA	4291941	Yes	N/A	4292314
Hydrocarbon Resemblance	mg/L	COMMENT (1)	NA	NA	4291941	COMMENT (2)	N/A	4292314
Surrogate Recovery (%)								
Isobutylbenzene - Extractable	%	101	99	98	4291941	97		4292314
n-Dotriacontane - Extractable	%	104	96	93	4291941	99		4292314
Isobutylbenzene - Volatile	%	102	100	102	4291950	102		4291950

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) One product in fuel / lube range. Unidentified compound(s) in fuel oil range.

(2) Weathered fuel oil fraction.

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Maxxam Job #: B5O2857
Report Date: 2015/12/03

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

ATLANTIC RBCA HYDROCARBONS (WATER)

Maxxam ID		BKN818	BKN819		BKN826		
Sampling Date		2015/11/25	2015/11/25		2015/11/25		
COC Number		538679	538679		538679		
	UNITS	SCU18-010-MW	SCU18-011-MW	QC Batch	TB-012	RDL	QC Batch
Petroleum Hydrocarbons							
Benzene	mg/L	<0.0010	<0.0010	4291950	<0.0010	0.0010	4291953
Toluene	mg/L	<0.0010	<0.0010	4291950	<0.0010	0.0010	4291953
Ethylbenzene	mg/L	<0.0010	<0.0010	4291950	<0.0010	0.0010	4291953
Total Xylenes	mg/L	<0.0020	<0.0020	4291950	<0.0020	0.0020	4291953
C6 - C10 (less BTEX)	mg/L	<0.010	<0.010	4291950	<0.010	0.010	4291953
>C10-C16 Hydrocarbons	mg/L	0.067	<0.050	4292314	<0.050	0.050	4292314
>C16-C21 Hydrocarbons	mg/L	<0.050	<0.050	4292314	<0.050	0.050	4292314
>C21-<C32 Hydrocarbons	mg/L	<0.10	<0.10	4292314	<0.10	0.10	4292314
Modified TPH (Tier1)	mg/L	<0.10	<0.10	4287621	<0.10	0.10	4287621
Reached Baseline at C32	mg/L	NA	NA	4292314	NA	N/A	4292314
Hydrocarbon Resemblance	mg/L	NA	NA	4292314	NA	N/A	4292314
Surrogate Recovery (%)							
Isobutylbenzene - Extractable	%	102	106	4292314	96		4292314
n-Dotriacontane - Extractable	%	104	104	4292314	99		4292314
Isobutylbenzene - Volatile	%	102	102	4291950	102		4291953

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

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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
4291925	BAN	Matrix Spike	Dissolved Aluminum (Al)	2015/11/30		107	%	80 - 120
			Dissolved Antimony (Sb)	2015/11/30		104	%	80 - 120
			Dissolved Arsenic (As)	2015/11/30		99	%	80 - 120
			Dissolved Barium (Ba)	2015/11/30		NC	%	80 - 120
			Dissolved Beryllium (Be)	2015/11/30		102	%	80 - 120
			Dissolved Bismuth (Bi)	2015/11/30		100	%	80 - 120
			Dissolved Boron (B)	2015/11/30		105	%	80 - 120
			Dissolved Cadmium (Cd)	2015/11/30		103	%	80 - 120
			Dissolved Calcium (Ca)	2015/11/30		NC	%	80 - 120
			Dissolved Chromium (Cr)	2015/11/30		99	%	80 - 120
			Dissolved Cobalt (Co)	2015/11/30		97	%	80 - 120
			Dissolved Copper (Cu)	2015/11/30		97	%	80 - 120
			Dissolved Iron (Fe)	2015/11/30		106	%	80 - 120
			Dissolved Lead (Pb)	2015/11/30		99	%	80 - 120
			Dissolved Magnesium (Mg)	2015/11/30		NC	%	80 - 120
			Dissolved Manganese (Mn)	2015/11/30		NC	%	80 - 120
			Dissolved Molybdenum (Mo)	2015/11/30		103	%	80 - 120
			Dissolved Nickel (Ni)	2015/11/30		100	%	80 - 120
			Dissolved Phosphorus (P)	2015/11/30		112	%	80 - 120
			Dissolved Potassium (K)	2015/11/30		106	%	80 - 120
			Dissolved Selenium (Se)	2015/11/30		100	%	80 - 120
			Dissolved Silver (Ag)	2015/11/30		78 (1)	%	80 - 120
			Dissolved Sodium (Na)	2015/11/30		NC	%	80 - 120
			Dissolved Strontium (Sr)	2015/11/30		NC	%	80 - 120
			Dissolved Thallium (Tl)	2015/11/30		100	%	80 - 120
			Dissolved Tin (Sn)	2015/11/30		107	%	80 - 120
			Dissolved Titanium (Ti)	2015/11/30		106	%	80 - 120
			Dissolved Uranium (U)	2015/11/30		105	%	80 - 120
			Dissolved Vanadium (V)	2015/11/30		100	%	80 - 120
			Dissolved Zinc (Zn)	2015/11/30		99	%	80 - 120
4291925	BAN	Spiked Blank	Dissolved Aluminum (Al)	2015/11/30		109	%	80 - 120
			Dissolved Antimony (Sb)	2015/11/30		101	%	80 - 120
			Dissolved Arsenic (As)	2015/11/30		97	%	80 - 120
			Dissolved Barium (Ba)	2015/11/30		100	%	80 - 120
			Dissolved Beryllium (Be)	2015/11/30		100	%	80 - 120
			Dissolved Bismuth (Bi)	2015/11/30		103	%	80 - 120
			Dissolved Boron (B)	2015/11/30		102	%	80 - 120
			Dissolved Cadmium (Cd)	2015/11/30		102	%	80 - 120
			Dissolved Calcium (Ca)	2015/11/30		105	%	80 - 120
			Dissolved Chromium (Cr)	2015/11/30		98	%	80 - 120
			Dissolved Cobalt (Co)	2015/11/30		98	%	80 - 120
			Dissolved Copper (Cu)	2015/11/30		97	%	80 - 120
			Dissolved Iron (Fe)	2015/11/30		107	%	80 - 120
			Dissolved Lead (Pb)	2015/11/30		102	%	80 - 120
			Dissolved Magnesium (Mg)	2015/11/30		108	%	80 - 120
			Dissolved Manganese (Mn)	2015/11/30		101	%	80 - 120
			Dissolved Molybdenum (Mo)	2015/11/30		102	%	80 - 120
			Dissolved Nickel (Ni)	2015/11/30		100	%	80 - 120
			Dissolved Phosphorus (P)	2015/11/30		110	%	80 - 120
			Dissolved Potassium (K)	2015/11/30		107	%	80 - 120
			Dissolved Selenium (Se)	2015/11/30		99	%	80 - 120
			Dissolved Silver (Ag)	2015/11/30		100	%	80 - 120
			Dissolved Sodium (Na)	2015/11/30		106	%	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 Strontium (Sr)	2015/11/30		101	%	80 - 120
			Dissolved Thallium (Tl)	2015/11/30		102	%	80 - 120
			Dissolved Tin (Sn)	2015/11/30		104	%	80 - 120
			Dissolved Titanium (Ti)	2015/11/30		105	%	80 - 120
			Dissolved Uranium (U)	2015/11/30		105	%	80 - 120
			Dissolved Vanadium (V)	2015/11/30		98	%	80 - 120
			Dissolved Zinc (Zn)	2015/11/30		100	%	80 - 120
4291925	BAN	Method Blank	Dissolved Aluminum (Al)	2015/11/30	<5.0		ug/L	
			Dissolved Antimony (Sb)	2015/11/30	<1.0		ug/L	
			Dissolved Arsenic (As)	2015/11/30	<1.0		ug/L	
			Dissolved Barium (Ba)	2015/11/30	<1.0		ug/L	
			Dissolved Beryllium (Be)	2015/11/30	<1.0		ug/L	
			Dissolved Bismuth (Bi)	2015/11/30	<2.0		ug/L	
			Dissolved Boron (B)	2015/11/30	<50		ug/L	
			Dissolved Cadmium (Cd)	2015/11/30	<0.010		ug/L	
			Dissolved Calcium (Ca)	2015/11/30	<100		ug/L	
			Dissolved Chromium (Cr)	2015/11/30	<1.0		ug/L	
			Dissolved Cobalt (Co)	2015/11/30	<0.40		ug/L	
			Dissolved Copper (Cu)	2015/11/30	<2.0		ug/L	
			Dissolved Iron (Fe)	2015/11/30	<50		ug/L	
			Dissolved Lead (Pb)	2015/11/30	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2015/11/30	<100		ug/L	
			Dissolved Manganese (Mn)	2015/11/30	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2015/11/30	<2.0		ug/L	
			Dissolved Nickel (Ni)	2015/11/30	<2.0		ug/L	
			Dissolved Phosphorus (P)	2015/11/30	<100		ug/L	
			Dissolved Potassium (K)	2015/11/30	<100		ug/L	
			Dissolved Selenium (Se)	2015/11/30	<1.0		ug/L	
			Dissolved Silver (Ag)	2015/11/30	<0.10		ug/L	
			Dissolved Sodium (Na)	2015/11/30	<100		ug/L	
			Dissolved Strontium (Sr)	2015/11/30	<2.0		ug/L	
			Dissolved Thallium (Tl)	2015/11/30	<0.10		ug/L	
			Dissolved Tin (Sn)	2015/11/30	<2.0		ug/L	
			Dissolved Titanium (Ti)	2015/11/30	<2.0		ug/L	
			Dissolved Uranium (U)	2015/11/30	<0.10		ug/L	
			Dissolved Vanadium (V)	2015/11/30	<2.0		ug/L	
			Dissolved Zinc (Zn)	2015/11/30	<5.0		ug/L	
4291925	BAN	RPD	Dissolved Aluminum (Al)	2015/11/30	NC		%	20
			Dissolved Antimony (Sb)	2015/11/30	NC		%	20
			Dissolved Arsenic (As)	2015/11/30	NC		%	20
			Dissolved Barium (Ba)	2015/11/30	0.47		%	20
			Dissolved Beryllium (Be)	2015/11/30	NC		%	20
			Dissolved Bismuth (Bi)	2015/11/30	NC		%	20
			Dissolved Boron (B)	2015/11/30	NC		%	20
			Dissolved Cadmium (Cd)	2015/11/30	NC		%	20
			Dissolved Calcium (Ca)	2015/11/30	0.38		%	20
			Dissolved Chromium (Cr)	2015/11/30	NC		%	20
			Dissolved Cobalt (Co)	2015/11/30	NC		%	20
			Dissolved Copper (Cu)	2015/11/30	NC		%	20
			Dissolved Iron (Fe)	2015/11/30	NC		%	20
			Dissolved Lead (Pb)	2015/11/30	NC		%	20
			Dissolved Magnesium (Mg)	2015/11/30	0.57		%	20
			Dissolved Manganese (Mn)	2015/11/30	0.15		%	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 Molybdenum (Mo)	2015/11/30	NC		%	20
			Dissolved Nickel (Ni)	2015/11/30	NC		%	20
			Dissolved Phosphorus (P)	2015/11/30	NC		%	20
			Dissolved Potassium (K)	2015/11/30	1.7		%	20
			Dissolved Selenium (Se)	2015/11/30	NC		%	20
			Dissolved Silver (Ag)	2015/11/30	NC		%	20
			Dissolved Sodium (Na)	2015/11/30	0.69		%	20
			Dissolved Strontium (Sr)	2015/11/30	0.053		%	20
			Dissolved Thallium (Tl)	2015/11/30	NC		%	20
			Dissolved Tin (Sn)	2015/11/30	NC		%	20
			Dissolved Titanium (Ti)	2015/11/30	NC		%	20
			Dissolved Uranium (U)	2015/11/30	NC		%	20
			Dissolved Vanadium (V)	2015/11/30	NC		%	20
			Dissolved Zinc (Zn)	2015/11/30	NC		%	20
4291926	VWA	Matrix Spike	Total Mercury (Hg)	2015/11/30		87	%	80 - 120
4291926	VWA	Spiked Blank	Total Mercury (Hg)	2015/11/30		103	%	80 - 120
4291926	VWA	Method Blank	Total Mercury (Hg)	2015/11/30	<0.013		ug/L	
4291926	VWA	RPD	Total Mercury (Hg)	2015/11/30	NC		%	20
4291928	BAN	Matrix Spike [BKN819-04]	Dissolved Aluminum (Al)	2015/11/30		105	%	80 - 120
			Dissolved Antimony (Sb)	2015/11/30		103	%	80 - 120
			Dissolved Arsenic (As)	2015/11/30		98	%	80 - 120
			Dissolved Barium (Ba)	2015/11/30		100	%	80 - 120
			Dissolved Beryllium (Be)	2015/11/30		100	%	80 - 120
			Dissolved Bismuth (Bi)	2015/11/30		101	%	80 - 120
			Dissolved Boron (B)	2015/11/30		NC	%	80 - 120
			Dissolved Cadmium (Cd)	2015/11/30		104	%	80 - 120
			Dissolved Calcium (Ca)	2015/11/30		NC	%	80 - 120
			Dissolved Chromium (Cr)	2015/11/30		97	%	80 - 120
			Dissolved Cobalt (Co)	2015/11/30		97	%	80 - 120
			Dissolved Copper (Cu)	2015/11/30		95	%	80 - 120
			Dissolved Iron (Fe)	2015/11/30		104	%	80 - 120
			Dissolved Lead (Pb)	2015/11/30		101	%	80 - 120
			Dissolved Magnesium (Mg)	2015/11/30		NC	%	80 - 120
			Dissolved Manganese (Mn)	2015/11/30		NC	%	80 - 120
			Dissolved Molybdenum (Mo)	2015/11/30		NC	%	80 - 120
			Dissolved Nickel (Ni)	2015/11/30		98	%	80 - 120
			Dissolved Phosphorus (P)	2015/11/30		110	%	80 - 120
			Dissolved Potassium (K)	2015/11/30		NC	%	80 - 120
			Dissolved Selenium (Se)	2015/11/30		101	%	80 - 120
			Dissolved Silver (Ag)	2015/11/30		86	%	80 - 120
			Dissolved Sodium (Na)	2015/11/30		NC	%	80 - 120
			Dissolved Strontium (Sr)	2015/11/30		NC	%	80 - 120
			Dissolved Thallium (Tl)	2015/11/30		101	%	80 - 120
			Dissolved Tin (Sn)	2015/11/30		105	%	80 - 120
			Dissolved Titanium (Ti)	2015/11/30		105	%	80 - 120
			Dissolved Uranium (U)	2015/11/30		105	%	80 - 120
			Dissolved Vanadium (V)	2015/11/30		98	%	80 - 120
			Dissolved Zinc (Zn)	2015/11/30		98	%	80 - 120
4291928	BAN	Spiked Blank	Dissolved Aluminum (Al)	2015/11/30		110	%	80 - 120
			Dissolved Antimony (Sb)	2015/11/30		99	%	80 - 120
			Dissolved Arsenic (As)	2015/11/30		99	%	80 - 120
			Dissolved Barium (Ba)	2015/11/30		100	%	80 - 120
			Dissolved Beryllium (Be)	2015/11/30		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 Bismuth (Bi)	2015/11/30		103	%	80 - 120
			Dissolved Boron (B)	2015/11/30		102	%	80 - 120
			Dissolved Cadmium (Cd)	2015/11/30		103	%	80 - 120
			Dissolved Calcium (Ca)	2015/11/30		105	%	80 - 120
			Dissolved Chromium (Cr)	2015/11/30		99	%	80 - 120
			Dissolved Cobalt (Co)	2015/11/30		98	%	80 - 120
			Dissolved Copper (Cu)	2015/11/30		98	%	80 - 120
			Dissolved Iron (Fe)	2015/11/30		107	%	80 - 120
			Dissolved Lead (Pb)	2015/11/30		103	%	80 - 120
			Dissolved Magnesium (Mg)	2015/11/30		108	%	80 - 120
			Dissolved Manganese (Mn)	2015/11/30		103	%	80 - 120
			Dissolved Molybdenum (Mo)	2015/11/30		102	%	80 - 120
			Dissolved Nickel (Ni)	2015/11/30		100	%	80 - 120
			Dissolved Phosphorus (P)	2015/11/30		110	%	80 - 120
			Dissolved Potassium (K)	2015/11/30		107	%	80 - 120
			Dissolved Selenium (Se)	2015/11/30		98	%	80 - 120
			Dissolved Silver (Ag)	2015/11/30		99	%	80 - 120
			Dissolved Sodium (Na)	2015/11/30		108	%	80 - 120
			Dissolved Strontium (Sr)	2015/11/30		103	%	80 - 120
			Dissolved Thallium (Tl)	2015/11/30		102	%	80 - 120
			Dissolved Tin (Sn)	2015/11/30		104	%	80 - 120
			Dissolved Titanium (Ti)	2015/11/30		106	%	80 - 120
			Dissolved Uranium (U)	2015/11/30		105	%	80 - 120
			Dissolved Vanadium (V)	2015/11/30		100	%	80 - 120
			Dissolved Zinc (Zn)	2015/11/30		101	%	80 - 120
4291928	BAN	Method Blank	Dissolved Aluminum (Al)	2015/11/30	<5.0		ug/L	
			Dissolved Antimony (Sb)	2015/11/30	<1.0		ug/L	
			Dissolved Arsenic (As)	2015/11/30	<1.0		ug/L	
			Dissolved Barium (Ba)	2015/11/30	<1.0		ug/L	
			Dissolved Beryllium (Be)	2015/11/30	<1.0		ug/L	
			Dissolved Bismuth (Bi)	2015/11/30	<2.0		ug/L	
			Dissolved Boron (B)	2015/11/30	<50		ug/L	
			Dissolved Cadmium (Cd)	2015/11/30	<0.010		ug/L	
			Dissolved Calcium (Ca)	2015/11/30	<100		ug/L	
			Dissolved Chromium (Cr)	2015/11/30	<1.0		ug/L	
			Dissolved Cobalt (Co)	2015/11/30	<0.40		ug/L	
			Dissolved Copper (Cu)	2015/11/30	<2.0		ug/L	
			Dissolved Iron (Fe)	2015/11/30	<50		ug/L	
			Dissolved Lead (Pb)	2015/11/30	<0.50		ug/L	
			Dissolved Magnesium (Mg)	2015/11/30	<100		ug/L	
			Dissolved Manganese (Mn)	2015/11/30	<2.0		ug/L	
			Dissolved Molybdenum (Mo)	2015/11/30	<2.0		ug/L	
			Dissolved Nickel (Ni)	2015/11/30	<2.0		ug/L	
			Dissolved Phosphorus (P)	2015/11/30	<100		ug/L	
			Dissolved Potassium (K)	2015/11/30	<100		ug/L	
			Dissolved Selenium (Se)	2015/11/30	<1.0		ug/L	
			Dissolved Silver (Ag)	2015/11/30	<0.10		ug/L	
			Dissolved Sodium (Na)	2015/11/30	<100		ug/L	
			Dissolved Strontium (Sr)	2015/11/30	<2.0		ug/L	
			Dissolved Thallium (Tl)	2015/11/30	<0.10		ug/L	
			Dissolved Tin (Sn)	2015/11/30	<2.0		ug/L	
			Dissolved Titanium (Ti)	2015/11/30	<2.0		ug/L	
			Dissolved Uranium (U)	2015/11/30	<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 Vanadium (V)	2015/11/30	<2.0		ug/L	
			Dissolved Zinc (Zn)	2015/11/30	<5.0		ug/L	
4291928	BAN	RPD [BKN819-04]	Dissolved Aluminum (Al)	2015/11/30	NC		%	20
			Dissolved Antimony (Sb)	2015/11/30	NC		%	20
			Dissolved Arsenic (As)	2015/11/30	NC		%	20
			Dissolved Barium (Ba)	2015/11/30	0.95		%	20
			Dissolved Beryllium (Be)	2015/11/30	NC		%	20
			Dissolved Bismuth (Bi)	2015/11/30	NC		%	20
			Dissolved Boron (B)	2015/11/30	NC		%	20
			Dissolved Cadmium (Cd)	2015/11/30	NC		%	20
			Dissolved Calcium (Ca)	2015/11/30	0.33		%	20
			Dissolved Chromium (Cr)	2015/11/30	NC		%	20
			Dissolved Cobalt (Co)	2015/11/30	NC		%	20
			Dissolved Copper (Cu)	2015/11/30	NC		%	20
			Dissolved Iron (Fe)	2015/11/30	NC		%	20
			Dissolved Lead (Pb)	2015/11/30	NC		%	20
			Dissolved Magnesium (Mg)	2015/11/30	1.4		%	20
			Dissolved Manganese (Mn)	2015/11/30	1.8		%	20
			Dissolved Molybdenum (Mo)	2015/11/30	0.38		%	20
			Dissolved Nickel (Ni)	2015/11/30	NC		%	20
			Dissolved Phosphorus (P)	2015/11/30	NC		%	20
			Dissolved Potassium (K)	2015/11/30	0.93		%	20
			Dissolved Selenium (Se)	2015/11/30	NC		%	20
			Dissolved Silver (Ag)	2015/11/30	NC		%	20
			Dissolved Sodium (Na)	2015/11/30	1.0		%	20
			Dissolved Strontium (Sr)	2015/11/30	0.95		%	20
			Dissolved Thallium (Tl)	2015/11/30	NC		%	20
			Dissolved Tin (Sn)	2015/11/30	NC		%	20
			Dissolved Titanium (Ti)	2015/11/30	NC		%	20
			Dissolved Uranium (U)	2015/11/30	NC		%	20
			Dissolved Vanadium (V)	2015/11/30	NC		%	20
			Dissolved Zinc (Zn)	2015/11/30	NC		%	20
4291941	BHR	Matrix Spike	Isobutylbenzene - Extractable	2015/12/01		102	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/01		89	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/01		94	%	70 - 130
			>C16-C21 Hydrocarbons	2015/12/01		89	%	70 - 130
			>C21-<C32 Hydrocarbons	2015/12/01		107	%	70 - 130
4291941	BHR	Spiked Blank	Isobutylbenzene - Extractable	2015/12/01		97	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/01		104	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/01		101	%	70 - 130
			>C16-C21 Hydrocarbons	2015/12/01		98	%	70 - 130
			>C21-<C32 Hydrocarbons	2015/12/01		128	%	70 - 130
4291941	BHR	Method Blank	Isobutylbenzene - Extractable	2015/12/01		90	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/01		93	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/01	<0.050		mg/L	
			>C16-C21 Hydrocarbons	2015/12/01	<0.050		mg/L	
			>C21-<C32 Hydrocarbons	2015/12/01	<0.10		mg/L	
4291941	BHR	RPD	>C10-C16 Hydrocarbons	2015/12/01	NC		%	40
			>C16-C21 Hydrocarbons	2015/12/01	NC		%	40
			>C21-<C32 Hydrocarbons	2015/12/01	NC		%	40
4291950	ASL	Matrix Spike	Isobutylbenzene - Volatile	2015/11/30		102	%	70 - 130
			Benzene	2015/11/30		110	%	70 - 130
			Toluene	2015/11/30		113	%	70 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Ethylbenzene	2015/11/30		114	%	70 - 130
			Total Xylenes	2015/11/30		116	%	70 - 130
4291950	ASL	Spiked Blank	Isobutylbenzene - Volatile	2015/11/30		104	%	70 - 130
			Benzene	2015/11/30		110	%	70 - 130
			Toluene	2015/11/30		113	%	70 - 130
			Ethylbenzene	2015/11/30		112	%	70 - 130
			Total Xylenes	2015/11/30		112	%	70 - 130
4291950	ASL	Method Blank	Isobutylbenzene - Volatile	2015/11/30		102	%	70 - 130
			Benzene	2015/11/30	<0.0010		mg/L	
			Toluene	2015/11/30	<0.0010		mg/L	
			Ethylbenzene	2015/11/30	<0.0010		mg/L	
			Total Xylenes	2015/11/30	<0.0020		mg/L	
			C6 - C10 (less BTEX)	2015/11/30	<0.010		mg/L	
4291950	ASL	RPD	Benzene	2015/11/30	NC		%	40
			Toluene	2015/11/30	NC		%	40
			Ethylbenzene	2015/11/30	NC		%	40
			Total Xylenes	2015/11/30	NC		%	40
			C6 - C10 (less BTEX)	2015/11/30	NC		%	40
4291953	MS3	Matrix Spike	Isobutylbenzene - Volatile	2015/11/30		100	%	70 - 130
			Benzene	2015/11/30		NC	%	70 - 130
			Toluene	2015/11/30		NC	%	70 - 130
			Ethylbenzene	2015/11/30		NC	%	70 - 130
			Total Xylenes	2015/11/30		101	%	70 - 130
4291953	MS3	Spiked Blank	Isobutylbenzene - Volatile	2015/11/30		101	%	70 - 130
			Benzene	2015/11/30		106	%	70 - 130
			Toluene	2015/11/30		108	%	70 - 130
			Ethylbenzene	2015/11/30		109	%	70 - 130
			Total Xylenes	2015/11/30		109	%	70 - 130
4291953	MS3	Method Blank	Isobutylbenzene - Volatile	2015/11/30		101	%	70 - 130
			Benzene	2015/11/30	<0.0010		mg/L	
			Toluene	2015/11/30	<0.0010		mg/L	
			Ethylbenzene	2015/11/30	<0.0010		mg/L	
			Total Xylenes	2015/11/30	<0.0020		mg/L	
			C6 - C10 (less BTEX)	2015/11/30	<0.010		mg/L	
4291953	MS3	RPD [BKN826-02]	Benzene	2015/11/30	NC		%	40
			Toluene	2015/11/30	NC		%	40
			Ethylbenzene	2015/11/30	NC		%	40
			Total Xylenes	2015/11/30	NC		%	40
			C6 - C10 (less BTEX)	2015/11/30	NC		%	40
4292024	HIN	Matrix Spike	D10-Anthracene	2015/11/30		70	%	30 - 130
			D14-Terphenyl	2015/11/30		83 (2)	%	30 - 130
			D8-Acenaphthylene	2015/11/30		78	%	30 - 130
			1-Methylnaphthalene	2015/11/30		86	%	30 - 130
			2-Methylnaphthalene	2015/11/30		98	%	30 - 130
			Acenaphthene	2015/11/30		102	%	30 - 130
			Acenaphthylene	2015/11/30		103	%	30 - 130
			Anthracene	2015/11/30		97	%	30 - 130
			Benzo(a)anthracene	2015/11/30		96	%	30 - 130
			Benzo(a)pyrene	2015/11/30		96	%	30 - 130
			Benzo(b)fluoranthene	2015/11/30		105	%	30 - 130
			Benzo(g,h,i)perylene	2015/11/30		95	%	30 - 130
			Benzo(j)fluoranthene	2015/11/30		99	%	30 - 130
			Benzo(k)fluoranthene	2015/11/30		98	%	30 - 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	2015/11/30		107	%	30 - 130
			Dibenz(a,h)anthracene	2015/11/30		93	%	30 - 130
			Fluoranthene	2015/11/30		108	%	30 - 130
			Fluorene	2015/11/30		105	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2015/11/30		95	%	30 - 130
			Naphthalene	2015/11/30		103	%	30 - 130
			Perylene	2015/11/30		95	%	30 - 130
			Phenanthrene	2015/11/30		95	%	30 - 130
			Pyrene	2015/11/30		105	%	30 - 130
4292024	HIN	Spiked Blank	D10-Anthracene	2015/11/30		89	%	30 - 130
			D14-Terphenyl	2015/11/30		103	%	30 - 130
			D8-Acenaphthylene	2015/11/30		89	%	30 - 130
			1-Methylnaphthalene	2015/11/30		102	%	30 - 130
			2-Methylnaphthalene	2015/11/30		116	%	30 - 130
			Acenaphthene	2015/11/30		113	%	30 - 130
			Acenaphthylene	2015/11/30		116	%	30 - 130
			Anthracene	2015/11/30		127	%	30 - 130
			Benzo(a)anthracene	2015/11/30		113	%	30 - 130
			Benzo(a)pyrene	2015/11/30		112	%	30 - 130
			Benzo(b)fluoranthene	2015/11/30		118	%	30 - 130
			Benzo(g,h,i)perylene	2015/11/30		117	%	30 - 130
			Benzo(j)fluoranthene	2015/11/30		114	%	30 - 130
			Benzo(k)fluoranthene	2015/11/30		117	%	30 - 130
			Chrysene	2015/11/30		121	%	30 - 130
			Dibenz(a,h)anthracene	2015/11/30		110	%	30 - 130
			Fluoranthene	2015/11/30		128	%	30 - 130
			Fluorene	2015/11/30		118	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2015/11/30		107	%	30 - 130
			Naphthalene	2015/11/30		116	%	30 - 130
			Perylene	2015/11/30		111	%	30 - 130
			Phenanthrene	2015/11/30		125	%	30 - 130
			Pyrene	2015/11/30		128	%	30 - 130
4292024	HIN	Method Blank	D10-Anthracene	2015/11/30		80	%	30 - 130
			D14-Terphenyl	2015/11/30		91	%	30 - 130
			D8-Acenaphthylene	2015/11/30		82	%	30 - 130
			1-Methylnaphthalene	2015/11/30	<0.050		ug/L	
			2-Methylnaphthalene	2015/11/30	<0.050		ug/L	
			Acenaphthene	2015/11/30	<0.010		ug/L	
			Acenaphthylene	2015/11/30	<0.010		ug/L	
			Anthracene	2015/11/30	<0.010		ug/L	
			Benzo(a)anthracene	2015/11/30	<0.010		ug/L	
			Benzo(a)pyrene	2015/11/30	<0.010		ug/L	
			Benzo(b)fluoranthene	2015/11/30	<0.010		ug/L	
			Benzo(g,h,i)perylene	2015/11/30	<0.010		ug/L	
			Benzo(j)fluoranthene	2015/11/30	<0.010		ug/L	
			Benzo(k)fluoranthene	2015/11/30	<0.010		ug/L	
			Chrysene	2015/11/30	<0.010		ug/L	
			Dibenz(a,h)anthracene	2015/11/30	<0.010		ug/L	
			Fluoranthene	2015/11/30	<0.010		ug/L	
			Fluorene	2015/11/30	<0.010		ug/L	
			Indeno(1,2,3-cd)pyrene	2015/11/30	<0.010		ug/L	
			Naphthalene	2015/11/30	<0.20		ug/L	
			Perylene	2015/11/30	<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
			Phenanthrene	2015/11/30	<0.010		ug/L	
			Pyrene	2015/11/30	<0.010		ug/L	
4292024	HIN	RPD	1-Methylnaphthalene	2015/11/30	2.0		%	40
			2-Methylnaphthalene	2015/11/30	1.9		%	40
			Acenaphthene	2015/11/30	0.16		%	40
			Acenaphthylene	2015/11/30	NC (3)		%	40
			Anthracene	2015/11/30	3.7		%	40
			Benzo(a)anthracene	2015/11/30	8.3		%	40
			Benzo(a)pyrene	2015/11/30	NC		%	40
			Benzo(b)fluoranthene	2015/11/30	NC		%	40
			Benzo(g,h,i)perylene	2015/11/30	NC		%	40
			Benzo(j)fluoranthene	2015/11/30	NC (3)		%	40
			Benzo(k)fluoranthene	2015/11/30	NC (3)		%	40
			Chrysene	2015/11/30	4.3		%	40
			Dibenz(a,h)anthracene	2015/11/30	NC		%	40
			Fluoranthene	2015/11/30	1.0		%	40
			Fluorene	2015/11/30	1.7		%	40
			Indeno(1,2,3-cd)pyrene	2015/11/30	NC		%	40
			Naphthalene	2015/11/30	7.3		%	40
			Perylene	2015/11/30	NC		%	40
			Phenanthrene	2015/11/30	4.3		%	40
			Pyrene	2015/11/30	7.7		%	40
4292314	AJS	Matrix Spike	Isobutylbenzene - Extractable	2015/12/01		96	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/01		107	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/01		92	%	70 - 130
			>C16-C21 Hydrocarbons	2015/12/01		90	%	70 - 130
			>C21-<C32 Hydrocarbons	2015/12/01		98	%	70 - 130
4292314	AJS	Spiked Blank	Isobutylbenzene - Extractable	2015/12/01		74	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/01		110	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/01		91	%	70 - 130
			>C16-C21 Hydrocarbons	2015/12/01		91	%	70 - 130
			>C21-<C32 Hydrocarbons	2015/12/01		100	%	70 - 130
4292314	AJS	Method Blank	Isobutylbenzene - Extractable	2015/12/02		94	%	30 - 130
			n-Dotriacontane - Extractable	2015/12/02		82	%	30 - 130
			>C10-C16 Hydrocarbons	2015/12/02	<0.050		mg/L	
			>C16-C21 Hydrocarbons	2015/12/02	<0.050		mg/L	
			>C21-<C32 Hydrocarbons	2015/12/02	<0.10		mg/L	
4292314	AJS	RPD	>C10-C16 Hydrocarbons	2015/12/01	NC		%	40
			>C16-C21 Hydrocarbons	2015/12/01	NC		%	40
			>C21-<C32 Hydrocarbons	2015/12/01	NC		%	40
4293486	HIN	Matrix Spike	D10-Anthracene	2015/12/02		95	%	30 - 130
			D14-Terphenyl	2015/12/02		89 (2)	%	30 - 130
			D8-Acenaphthylene	2015/12/02		86	%	30 - 130
			1-Methylnaphthalene	2015/12/02		NC	%	30 - 130
			2-Methylnaphthalene	2015/12/02		NC	%	30 - 130
			Acenaphthene	2015/12/02		NC	%	30 - 130
			Acenaphthylene	2015/12/02		NC	%	30 - 130
			Anthracene	2015/12/02		NC	%	30 - 130
			Benzo(a)anthracene	2015/12/02		NC	%	30 - 130
			Benzo(a)pyrene	2015/12/02		NC	%	30 - 130
			Benzo(b)fluoranthene	2015/12/02		NC	%	30 - 130
			Benzo(g,h,i)perylene	2015/12/02		NC	%	30 - 130
			Benzo(j)fluoranthene	2015/12/02		NC	%	30 - 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(k)fluoranthene	2015/12/02		NC	%	30 - 130
			Chrysene	2015/12/02		NC	%	30 - 130
			Dibenz(a,h)anthracene	2015/12/02		NC	%	30 - 130
			Fluoranthene	2015/12/02		NC	%	30 - 130
			Fluorene	2015/12/02		NC	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2015/12/02		NC	%	30 - 130
			Naphthalene	2015/12/02		NC	%	30 - 130
			Perylene	2015/12/02		NC	%	30 - 130
			Phenanthrene	2015/12/02		NC	%	30 - 130
			Pyrene	2015/12/02		NC	%	30 - 130
4293486	HIN	Spiked Blank	D10-Anthracene	2015/12/02		97	%	30 - 130
			D14-Terphenyl	2015/12/02		87	%	30 - 130
			D8-Acenaphthylene	2015/12/02		88	%	30 - 130
			1-Methylnaphthalene	2015/12/02		97	%	30 - 130
			2-Methylnaphthalene	2015/12/02		106	%	30 - 130
			Acenaphthene	2015/12/02		113	%	30 - 130
			Acenaphthylene	2015/12/02		113	%	30 - 130
			Anthracene	2015/12/02		114	%	30 - 130
			Benzo(a)anthracene	2015/12/02		107	%	30 - 130
			Benzo(a)pyrene	2015/12/02		109	%	30 - 130
			Benzo(b)fluoranthene	2015/12/02		127	%	30 - 130
			Benzo(g,h,i)perylene	2015/12/02		114	%	30 - 130
			Benzo(j)fluoranthene	2015/12/02		116	%	30 - 130
			Benzo(k)fluoranthene	2015/12/02		114	%	30 - 130
			Chrysene	2015/12/02		118	%	30 - 130
			Dibenz(a,h)anthracene	2015/12/02		106	%	30 - 130
			Fluoranthene	2015/12/02		127	%	30 - 130
			Fluorene	2015/12/02		116	%	30 - 130
			Indeno(1,2,3-cd)pyrene	2015/12/02		107	%	30 - 130
			Naphthalene	2015/12/02		110	%	30 - 130
			Perylene	2015/12/02		110	%	30 - 130
			Phenanthrene	2015/12/02		120	%	30 - 130
			Pyrene	2015/12/02		126	%	30 - 130
4293486	HIN	Method Blank	D10-Anthracene	2015/12/02		98	%	30 - 130
			D14-Terphenyl	2015/12/02		91	%	30 - 130
			D8-Acenaphthylene	2015/12/02		95	%	30 - 130
			1-Methylnaphthalene	2015/12/02	<0.050		ug/L	
			2-Methylnaphthalene	2015/12/02	<0.050		ug/L	
			Acenaphthene	2015/12/02	<0.010		ug/L	
			Acenaphthylene	2015/12/02	<0.010		ug/L	
			Anthracene	2015/12/02	<0.010		ug/L	
			Benzo(a)anthracene	2015/12/02	<0.010		ug/L	
			Benzo(a)pyrene	2015/12/02	<0.010		ug/L	
			Benzo(b)fluoranthene	2015/12/02	<0.010		ug/L	
			Benzo(g,h,i)perylene	2015/12/02	<0.010		ug/L	
			Benzo(j)fluoranthene	2015/12/02	<0.010		ug/L	
			Benzo(k)fluoranthene	2015/12/02	<0.010		ug/L	
			Chrysene	2015/12/02	<0.010		ug/L	
			Dibenz(a,h)anthracene	2015/12/02	<0.010		ug/L	
			Fluoranthene	2015/12/02	<0.010		ug/L	
			Fluorene	2015/12/02	<0.010		ug/L	
			Indeno(1,2,3-cd)pyrene	2015/12/02	<0.010		ug/L	
			Naphthalene	2015/12/02	<0.20		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
			Perylene	2015/12/02	<0.010		ug/L	
			Phenanthrene	2015/12/02	<0.010		ug/L	
			Pyrene	2015/12/02	<0.010		ug/L	
4293486	HIN	RPD	1-Methylnaphthalene	2015/12/02	0.27		%	40
			2-Methylnaphthalene	2015/12/02	0.49		%	40
			Acenaphthene	2015/12/02	1.9		%	40
			Acenaphthylene	2015/12/02	2.3		%	40
			Anthracene	2015/12/02	1.7		%	40
			Benzo(a)anthracene	2015/12/02	NC		%	40
			Benzo(a)pyrene	2015/12/02	NC		%	40
			Benzo(b)fluoranthene	2015/12/02	NC		%	40
			Benzo(g,h,i)perylene	2015/12/02	NC		%	40
			Benzo(j)fluoranthene	2015/12/02	NC		%	40
			Benzo(k)fluoranthene	2015/12/02	NC		%	40
			Chrysene	2015/12/02	NC		%	40
			Dibenz(a,h)anthracene	2015/12/02	NC		%	40
			Fluoranthene	2015/12/02	20		%	40
			Fluorene	2015/12/02	1.8		%	40
			Indeno(1,2,3-cd)pyrene	2015/12/02	NC		%	40
			Naphthalene	2015/12/02	3.0		%	40
			Perylene	2015/12/02	NC		%	40
			Phenanthrene	2015/12/02	9.9		%	40
			Pyrene	2015/12/02	NC		%	40
4293495	VWA	Matrix Spike [BKN814-05]	Total Mercury (Hg)	2015/12/01		111	%	80 - 120
4293495	VWA	Spiked Blank	Total Mercury (Hg)	2015/12/01		109	%	80 - 120
4293495	VWA	Method Blank	Total Mercury (Hg)	2015/12/01	<0.013		ug/L	
4293495	VWA	RPD [BKN813-05]	Total Mercury (Hg)	2015/12/01	NC		%	20

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.

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 spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of 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 (one or both samples < 5x RDL).

(1) Recovery within QC acceptance limits. < 10 % of compounds in multi-component analysis in violation.

(2) PAH sample contained sediment.

(3) Elevated PAH RDL(s) due to matrix / co-extractive interference.

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Maxxam Job #: B5O2857
Report Date: 2015/12/03

Dillon Consulting Limited
Client Project #: 4104251070
Site Location: HARBOURSIDE COMMERCIAL PARK

VALIDATION SIGNATURE PAGE

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

Kevin MacDonald, Inorganics Supervisor

Phil Deveau

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Appendix D

Mann-Kendall Tables

MANN-KENDALL PLUME STABILITY ANALYSIS

Sydney HCP
Nova Scotia Lands Incorporated
14-1360 - 2015 LTMM GROUNDWATER MONITORING EVENT

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: SCU10-004-MW										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Acenaphthylene	0.0022	0.0075	0.01	0.034	0.02	0.41					
	19-Nov-08	10-Nov-10	31-Oct-11	23-Nov-12	2-Dec-13	11-Dec-15					
Row 1: Compare to Event 1:		1	1	1	1	1	0	0	0	0	5
Row 2: Compare to Event 2:			1	1	1	1	0	0	0	0	4
Row 3: Compare to Event 3:				1	1	1	0	0	0	0	3
Row 4: Compare to Event 4:					-1	1	0	0	0	0	0
Row 5: Compare to Event 5:						1	0	0	0	0	1
Row 6: Compare to Event 6:							0	0	0	0	0
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 0.01 mg/L

Mann-Kendall (S) Statistic = **13**

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			X				
± 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

	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

Sydney HCP
Nova Scotia Lands Incorporated
14-1360 - 2015 LTMM GROUNDWATER MONITORING EVENT

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: SCU10-004-MW										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Anthracene	0.0017	0.0024	0.013	0.038	0.004	1.1					
	19-Nov-08	10-Nov-10	31-Oct-11	13-Nov-12	2-Dec-13	11-Dec-15					
Row 1: Compare to Event 1:		1	1	1	1	1	0	0	0	0	5
Row 2: Compare to Event 2:			1	1	1	1	0	0	0	0	4
Row 3: Compare to Event 3:				1	-1	1	0	0	0	0	1
Row 4: Compare to Event 4:					-1	1	0	0	0	0	0
Row 5: Compare to Event 5:						1	0	0	0	0	1
Row 6: Compare to Event 6:							0	0	0	0	0
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 0.01 mg/L

Mann-Kendall (S) Statistic = **11**

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			X				
± 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

	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

Sydney HCP
Nova Scotia Lands Incorporated
14-1360 - 2015 LTMM GROUNDWATER MONITORING EVENT

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: SCU20-013-MW										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Acenaphthylene	0.026	0.018	0.029	0.034	0.029	0.032					
	17-Nov-10	27-Oct-11	21-Nov-12	26-Nov-13	16-Dec-14	25-Nov-15					
Row 1: Compare to Event 1:		-1	1	1	1	1	0	0	0	0	3
Row 2: Compare to Event 2:			1	1	1	1	0	0	0	0	4
Row 3: Compare to Event 3:				1	0	1	0	0	0	0	2
Row 4: Compare to Event 4:					-1	-1	0	0	0	0	-2
Row 5: Compare to Event 5:						1	0	0	0	0	1
Row 6: Compare to Event 6:							0	0	0	0	0
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 0.00001 mg/L

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

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			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

	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

Sydney HCP
Nova Scotia Lands Incorporated
14-1360 - 2015 LTMM GROUNDWATER MONITORING EVENT

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: SCU20-013-MW										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Anthracene	0.0027	0.0031	0.002	0.004	0.0022	0.0037					
	17-Nov-10	27-Oct-11	21-Nov-12	26-Nov-13	16-Dec-14	25-Nov-15					
Row 1: Compare to Event 1:		1	-1	1	-1	1	0	0	0	0	1
Row 2: Compare to Event 2:			-1	1	-1	1	0	0	0	0	0
Row 3: Compare to Event 3:				1	1	1	0	0	0	0	3
Row 4: Compare to Event 4:					-1	-1	0	0	0	0	-2
Row 5: Compare to Event 5:						1	0	0	0	0	1
Row 6: Compare to Event 6:							0	0	0	0	0
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 0.00001 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

Sydney HCP
Nova Scotia Lands Incorporated
14-1360 - 2015 LTMM GROUNDWATER MONITORING EVENT

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: SCU20-014-MW										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Acenaphthylene	0.0034	0.0072	0.0046	0.0057	0.0093	0.0062					
	17-Nov-10	27-Oct-11	22-Nov-12	26-Nov-13	16-Dec-14	25-Nov-15					
Row 1: Compare to Event 1:		1	1	1	1	1	0	0	0	0	5
Row 2: Compare to Event 2:			-1	-1	1	-1	0	0	0	0	-2
Row 3: Compare to Event 3:				1	1	1	0	0	0	0	3
Row 4: Compare to Event 4:					1	1	0	0	0	0	2
Row 5: Compare to Event 5:						-1	0	0	0	0	-1
Row 6: Compare to Event 6:							0	0	0	0	0
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 0.00001 mg/L

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

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			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

Sydney HCP
Nova Scotia Lands Incorporated
14-1360 - 2015 LTMM GROUNDWATER MONITORING EVENT

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: SCU20-016-MW										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Acenaphthylene	0.0012	0.0037	0.0022	0.0031	0.0024	0.0028					
	17-Nov-10	27-Oct-11	22-Nov-12	26-Nov-13	16-Dec-14	25-Nov-15					
Row 1: Compare to Event 1:		1	1	1	1	1	0	0	0	0	5
Row 2: Compare to Event 2:			-1	-1	-1	-1	0	0	0	0	-4
Row 3: Compare to Event 3:				1	1	1	0	0	0	0	3
Row 4: Compare to Event 4:					-1	-1	0	0	0	0	-2
Row 5: Compare to Event 5:						1	0	0	0	0	1
Row 6: Compare to Event 6:							0	0	0	0	0
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 0.00001 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

Sydney HCP
Nova Scotia Lands Incorporated
14-1360 - 2015 LTMM GROUNDWATER MONITORING EVENT

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: SCU20-017-MW										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Acenaphthylene	0.0064	0.0044	0.00098	0.0037	0.0029	0.0036					
	7-Nov-10	27-Oct-11	21-Nov-12	26-Nov-13	16-Dec-14	25-Nov-15					
Row 1: Compare to Event 1:		-1	-1	-1	-1	-1	0	0	0	0	-5
Row 2: Compare to Event 2:			-1	-1	-1	-1	0	0	0	0	-4
Row 3: Compare to Event 3:				1	1	1	0	0	0	0	3
Row 4: Compare to Event 4:					-1	-1	0	0	0	0	-2
Row 5: Compare to Event 5:						1	0	0	0	0	1
Row 6: Compare to Event 6:							0	0	0	0	0
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 0.00001 mg/L

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

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			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

Sydney HCP
Nova Scotia Lands Incorporated
14-1360 - 2015 LTMM GROUNDWATER MONITORING EVENT

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: SCU27-002-MW										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Barium	15	8.7	7.3	23	30	30					
	26-Jul-03	4-Jul-12	26-Nov-12	5-Dec-13	17-Dec-14	27-Nov-15					
Row 1: Compare to Event 1:		-1	-1	1	1	1	0	0	0	0	1
Row 2: Compare to Event 2:			-1	1	1	1	0	0	0	0	2
Row 3: Compare to Event 3:				1	1	1	0	0	0	0	3
Row 4: Compare to Event 4:					1	1	0	0	0	0	2
Row 5: Compare to Event 5:						0	0	0	0	0	0
Row 6: Compare to Event 6:							0	0	0	0	0
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 0.1 mg/L

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

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			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

	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

Sydney HCP
Nova Scotia Lands Incorporated
14-1360 - 2015 LTMM GROUNDWATER MONITORING EVENT

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: SCU27-002-MW										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Sodium	5100	5700	4900	5200	4900	4900					
	26-Jul-03	4-Jul-12	26-Nov-12	5-Dec-13	17-Dec-14	27-Nov-15					
Row 1: Compare to Event 1:		1	-1	1	-1	-1	0	0	0	0	-1
Row 2: Compare to Event 2:			-1	-1	-1	-1	0	0	0	0	-4
Row 3: Compare to Event 3:				1	0	0	0	0	0	0	1
Row 4: Compare to Event 4:					-1	-1	0	0	0	0	-2
Row 5: Compare to Event 5:						0	0	0	0	0	0
Row 6: Compare to Event 6:							0	0	0	0	0
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 1 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

Sydney HCP
Nova Scotia Lands Incorporated
14-1360 - 2015 LTMM GROUNDWATER MONITORING EVENT

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: SCU32-001-MWA										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Anthracene	0.00084	0.0074	0.0014	0.0018							
	24-Nov-11	5-Dec-13	17-Dec-14	27-Nov-15							
Row 1: Compare to Event 1:		1	1	1	0	0	0	0	0	0	3
Row 2: Compare to Event 2:			-1	-1	0	0	0	0	0	0	-2
Row 3: Compare to Event 3:				1	0	0	0	0	0	0	1
Row 4: Compare to Event 4:					0	0	0	0	0	0	0
Row 5: Compare to Event 5:						0	0	0	0	0	0
Row 6: Compare to Event 6:							0	0	0	0	0
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 0.0001 mg/L

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

Confidence Level Chart

S Value	Total No. of Sampling Events						
	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

Sydney HCP
Nova Scotia Lands Incorporated
14-1360 - 2015 LTMM GROUNDWATER MONITORING EVENT

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: SCU32-003-MW										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Acenaphthylene	0.00056	0.0013	0.0019	0.0018							
	25-Nov-11	5-Dec-13	18-Dec-14	30-Nov-15							
Row 1: Compare to Event 1:		1	1	1	0	0	0	0	0	0	3
Row 2: Compare to Event 2:			1	1	0	0	0	0	0	0	2
Row 3: Compare to Event 3:				-1	0	0	0	0	0	0	-1
Row 4: Compare to Event 4:					0	0	0	0	0	0	0
Row 5: Compare to Event 5:						0	0	0	0	0	0
Row 6: Compare to Event 6:							0	0	0	0	0
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 0.00001 mg/L

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

Confidence Level Chart

S Value	Total No. of Sampling Events						
	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4	X						
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
± 13							
± 14							
± 15							
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± 18							
± 19							
± 20							
± 21							
± 22							
± 23							
± 24	Not Physically possible						
± 25							
± 26							
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± 37							
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± 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

Sydney HCP
Nova Scotia Lands Incorporated
14-1360 - 2015 LTMM GROUNDWATER MONITORING EVENT

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: SCU32-003-MW										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Anthracene	0.00076	0.0087	0.00089	0.0012							
	25-Nov-11	5-Dec-13	18-Dec-14	30-Nov-15							
Row 1: Compare to Event 1:		1	1	1	0	0	0	0	0	0	3
Row 2: Compare to Event 2:			-1	-1	0	0	0	0	0	0	-2
Row 3: Compare to Event 3:				1	0	0	0	0	0	0	1
Row 4: Compare to Event 4:					0	0	0	0	0	0	0
Row 5: Compare to Event 5:						0	0	0	0	0	0
Row 6: Compare to Event 6:							0	0	0	0	0
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 0.00001 mg/L

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

Confidence Level Chart

S Value	Total No. of Sampling Events						
	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

Sydney HCP
Nova Scotia Lands Incorporated
14-1360 - 2015 LTMM GROUNDWATER MONITORING EVENT

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: SCU32-003-MW										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Selenium	0.028	0.0071	0.068	0.077							
	25-Nov-11	5-Dec-13	18-Dec-14	30-Nov-15							
Row 1: Compare to Event 1:		-1	1	1	0	0	0	0	0	0	1
Row 2: Compare to Event 2:			1	1	0	0	0	0	0	0	2
Row 3: Compare to Event 3:				1	0	0	0	0	0	0	1
Row 4: Compare to Event 4:					0	0	0	0	0	0	0
Row 5: Compare to Event 5:						0	0	0	0	0	0
Row 6: Compare to Event 6:							0	0	0	0	0
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 0.01 mg/L

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

Confidence Level Chart

S Value	Total No. of Sampling Events						
	4	5	6	7	8	9	10
0							
± 1							
± 2							
± 3							
± 4	X						
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
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± 14							
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± 23							
± 24	Not Physically possible						
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± 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

Sydney HCP
Nova Scotia Lands Incorporated
14-1360 - 2015 LTMM GROUNDWATER MONITORING EVENT

MANN-KENDALL ANALYSIS OF PLUME	MONITORING WELL NO: SCU32-003-MW										
	Event 1	Event 2	Event 3	Event 4	Event 5	Event 6	Event 7	Event 8	Event 9	Event 10	Sum Rows
Sodium	98	90	780	680							
	25-Nov-11	5-Dec-13	18-Dec-14	30-Nov-15							
Row 1: Compare to Event 1:		-1	1	1	0	0	0	0	0	0	1
Row 2: Compare to Event 2:			1	1	0	0	0	0	0	0	2
Row 3: Compare to Event 3:				-1	0	0	0	0	0	0	-1
Row 4: Compare to Event 4:					0	0	0	0	0	0	0
Row 5: Compare to Event 5:						0	0	0	0	0	0
Row 6: Compare to Event 6:							0	0	0	0	0
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 1 mg/L

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

Confidence Level Chart

S Value	Total No. of Sampling Events						
	4	5	6	7	8	9	10
0							
± 1							
± 2	X						
± 3							
± 4							
± 5							
± 6							
± 7							
±8							
± 9							
± 10							
± 11							
± 12							
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± 24	Not Physically possible						
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± 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

References

- Nova Scotia Environment Tier I Environmental Quality Standards for Groundwater (Coarse Grained Soil, Non-potable Groundwater Commercial/Industrial Site) 2013.
- Ontario Ministry of Environment, Table 3 Full Depth Generic Site Condition Standards in a Non-potable Groundwater (Coarse Grained Soil) 2011.
- Harbourside Commercial Park, Sydney, NS, 2013 Groundwater Monitoring Program, SLR Consulting (Canada) Ltd., dated November 2014.